If you talk to an area employer about their key challenges, they will likely tell you that finding qualified workers is near the top of the list. In some cases, they may explain that it is the single most significant barrier to expansion and growth. This is in stark contrast to the situation just a few years ago in the midst of the “Great Recession” when many employers were scaling back. Like many areas, Northwest Wisconsin’s working age population is shrinking relative to the overall population. This has been reflected in a steady decline in unemployment rates and increased competition for skilled workers in a variety of fields.

Why is this important to you? If you are reading this, you are likely considering furthering your education at Wisconsin Indianhead Technical College (WITC). It is important for you to know that there are career opportunities waiting upon achieving your educational goals. You can contribute to our regional economy and workforce shortage by lending your abilities and talents to one of those employers who are limited by the availability of qualified workers.

Whether you are considering your first career or a mid-life career change, WITC can help you achieve your goals. We are Northwest Wisconsin’s leader in providing Career and Technical Education, and the majority of the jobs in our economy require the kind of training, skills, and experience that our College delivers every day. Our students include people with a broad and diverse set of experiences and backgrounds. Our employees are committed to our students’ success. We are confident that the information in these pages will provide you with what you need to get started on your next step in pursuing your educational and career goals.

If you have questions about any of the information you find in our 2015-2016 Catalog, please contact us. We are here to help and we look forward to serving you.

John Will
President
Wisconsin Indianhead Technical College

Accredited by the Higher Learning Commission.
www.ncahlc.org
WITC 2015-2016 Catalog

This catalog contains general information about WITC’s programs and services, course descriptions, tuition and fees, and policies in existence at the time of this publication’s deadline, March 2015.

WITC reserves the right, without prior notice, to change, delete, supplement or otherwise amend at any time the information, policies, curriculum or program requirements contained in this catalog, whether during a student’s enrollment or otherwise.

A student’s or prospective student’s reliance upon information contained within the catalog, when making academic decisions does not constitute, and should not be construed as, a contract with the College. Students should consult with the appropriate academic division or department for further information.
Opportunity Changes Everything

Welcome to Wisconsin Indianhead Technical College, Northwest Wisconsin’s leader in technical education. At WITC, we promise you a hands-on college experience tailored to fit your needs. Our goals are to help you gain the practical skills and valuable knowledge to succeed wherever you go.

We are not only caring and responsive, but down-to-earth, skilled, and confident. We care about you as the learner, and want to make your academic experience at WITC one that is memorable, as well as enjoyable. Faculty and staff embrace and support your goals to enhance the quality of your life through career success strategies.

WITC has continued to rank very high on the Community College Survey of Student Engagement (CCSSE) for the past several years. The survey measures the engagement and satisfaction of our students and is therefore an important indicator of the college’s performance. We are proud of these survey results and the contribution WITC is making to student learning and career preparation.

In today’s job market, you need to be the best qualified and the best prepared. Wisconsin Indianhead Technical College helps you realize success by offering lifelong learning opportunities designed to develop needed skills and build upon the experiences that you already have to meet the expectations of employers. As a result of experiencing the high quality of education offered at WITC, you will benefit from more rewarding career opportunities.

Wisconsin Indianhead Technical College is committed to the ideals of great citizenry and community. Community members who gain learning experiences offered at WITC develop confidence and acquire important skills that will not only improve their life, but also impact the quality of life in Northwest Wisconsin.

Making WITC your college of choice is the right decision, and we are committed to making it a successful one.

Respectfully,

WITC Administration, Faculty, and Staff
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Mission, Vision, and Values

Mission
Learning First
Learning is our passion. As Northwest Wisconsin’s leader in technical education, WITC creates dynamic opportunities for career preparation and personal effectiveness. We are committed to making each and every experience with us meaningful and professional.

Vision
An Innovative Journey
Education is a lifelong journey of learning and discovery. We embrace innovative theories, techniques, and technologies to ensure success in a changing world.

Values
Empowerment – We value an engaging and supportive environment that inspires learners to achieve their personal and professional goals.

Excellence – We value high-quality training, professional development, and customer service in a dynamic learning environment.

Innovation – We value flexible delivery options and embrace the latest theories and technologies to meet individual learners’ needs.

Integrity – We value honesty, accountability, and diversity in an open and ethical environment.

Collaboration – We value partnerships that enhance learning, promote economic development, and improve the quality of life.

Strategic Goals
To accomplish these purposes, the WITC Board of Trustees has adopted the following strategic goals for special emphasis:

1. Provide support and opportunities for student learning and success.
2. Create and strengthen partnerships that benefit our stakeholders.
3. Foster a learning, working environment that nurtures professional growth.
4. Demonstrate trust, respect, and effective leadership through collaboration with clear and consistent communication.
5. Improve planning processes, decision making, and use of resources.

Wisconsin Indianhead Technical College Purposes
As an accredited public postsecondary educational institution serving Northwest Wisconsin, Wisconsin Indianhead Technical College is committed to achieving our mission of “Learning First” by:

- Providing comprehensive programming to include certificates, diplomas, and associate degrees in occupational fields.
- Providing general studies courses to empower learners to become active and productive members of society.
- Providing support services to assist learners in achieving occupational, educational, and personal enrichment goals.
- Providing basic education to prepare learners for successful transition into employment or postsecondary programs.

The WITC District
One of 16 districts in the Wisconsin Technical College System, WITC began serving Northwest Wisconsin in 1912 in Superior, and now has locations in Ashland (since 1921), Rice Lake (1941), and New Richmond (1967). WITC also has outreach centers in Hayward and Ladysmith. The Administrative Office has been located in Shell Lake since 1973.

The WITC district encompasses 10,500 square miles with over 300,000 residents. Of over 21,000 students served each year, 54 percent are female, 6 percent are ethnic minorities, and 80 percent are 20 years old or older.

The College is accredited through the Academic Quality Improvement Program (AQIP) of the Higher Learning Commission (www.ncahlc.org). The College offers a variety of associate degrees, technical diplomas, short-term certificate programs, continuing education courses, and customized business training designed to help start or advance a career.

Operating under the direction of the Board of Trustees and the state technical college system, the College generates its revenue through student tuition and other student fees, local government, state and federal aids, and institutional revenue. The WITC Foundation also supports the College with scholarships, staff development training, and equipment donations.

The College works closely with local businesses, other educational institutions, and government and service agencies to develop partnerships. The Career Prep initiative, interactive television (ITV) networks, the Northwest Wisconsin Manufacturing Outreach Center (NWMOC), and the local Workforce Investment Boards (WIB) are just a few examples of WITC’s collaboration for the benefit of its students and the community.
Student Academic Achievement at WITC

WITC’s “Learning First” mission establishes a strong commitment to learner success. Course competencies, program outcomes, and collegewide outcomes identify the college's expectations for successful learning. The documentation and assessment of learning outcomes provide a basis for WITC's continuous improvement.

Course Competencies
Major skills, knowledge, attitudes, or abilities needed to perform a task effectively and efficiently.

Program Outcomes
Field-specific skills, attitudes, and abilities expected to be mastered by learners completing a program. Program outcomes go beyond a specific course and pertain to the entire program.

Collegewide Outcomes and Indicators
Collegewide outcomes are universal in nature and intended to develop personal awareness, career effectiveness, and professionalism.

A. Communicate Effectively
1. Read for information gathering, appreciation, and enjoyment.
2. Write clearly, concisely, and accurately in a variety of contexts and formats.
3. Speak clearly, concisely, and accurately in a variety of contexts and formats.
4. Practice active listening.

B. Demonstrate Critical-Thinking Skills
1. Analyze situations.
2. Evaluate assumptions.
3. Design solutions.

C. Apply Mathematics
1. Perform basic computation (add, subtract, multiply, and divide) to solve applied problems.
2. Extract relevant numerical data from problems.
3. Demonstrate numerical and logical reasoning to correctly solve problems.

D. Use Science/Technology
1. Apply scientific concepts or current technology to solve problems.
2. Demonstrate a working knowledge of modern technology as it applies to the program of study.

E. Interact Socially
1. Demonstrate respectful behavior toward individuals with different opinions and ideas.
2. Demonstrate constructive feedback skills.
3. Function effectively as part of a team.
4. Resolve interpersonal conflicts effectively.

F. Enhance Local/Global Perspectives
1. Analyze the impact of actions on local and global issues.
2. Explain how the program of study is influenced by local and global markets/issues.

Assessment of Student Learning

The purpose of student learning assessment is to improve students’ learning and faculty teaching methods. The assessment process should help to identify the following:

- What students should be learning
- The ways students are growing intellectually
- The gaps in the learning process
- What the college should be doing to facilitate student learning and growth
- What the college should be measuring to determine student learning and growth

WITC Assessment of Student Learning includes the following:

- Course Level Assessment (program courses and general studies courses)
  - Course level assessment results will be used to improve student learning in the classroom, as well as improve teaching practices

- Program Outcome Assessment
  - Assessment of program outcomes will ensure that continuous improvement is taking place and will demonstrate accountability to constituents (students, employers, accrediting bodies, etc.)

- Collegewide Outcome Assessment
  - Assessment of the Collegewide Outcomes (CWOs) and use of the results to make improvements will ensure that WITC graduates will have the skills necessary to be effective in career and personal effectiveness

Please visit WITC's Assessment Web site for further resources and information related to Assessment of Student Learning:
http://www.witc.edu/staff/assessment.
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<td>* Residential Construction and Cabinetmaking <em>(unique in Wisconsin)</em></td>
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* Indicates financial aid eligible. ** Program duration is less than one year. ^ Program duration is three terms. General Studies is central to all programs. GED/HSED® and Basic Education offerings are available at all locations.
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Select certificate courses are offered at the WITC-Hayward and WITC-Ladysmith outreach centers. Please contact the outreach center manager for details.
NEW programs this fall at WITC

Gerontology-Aging Services Professional (Associate Degree)
Offered at WITC's Ashland and Superior campuses

The Gerontology-Aging Services Professional program is designed to meet the emerging and rapidly growing demand for service providers needed to work with the aging population. Students will acquire comprehensive and interdisciplinary training to prepare them to work with older adults in a variety of positions in diverse settings. This program is ideal for people entering the job market or choosing to enhance their current careers in service delivery or leadership roles within the gerontology field.

Graduates may find employment in:
- community, non-profit and government agencies
- aging housing and transportation services
- adult day care, senior centers and recreation services
- home health care, assisted living, long-term care, nursing homes and group homes
- client/patient navigation services
- small business and self-employment

This innovative and flexible program blends online and in-person experiential learning with community-based fieldwork experience and is designed to fit into busy life schedules. Students can choose part-time or full-time program options and mix and match coursework. Graduates will be added to the Wisconsin Community-Based Residential Facility (CBRF) Employee Registry and will receive a Red Cross First Aid and Choking certification card.

E-Connect - Child Care Services (Technical Diploma)

WITC campuses at Ashland, New Richmond, Rice Lake, and Superior and Online
In-Person or Online + Community-Based Student Teaching

Now students can benefit from an innovative one-year technical diploma that incorporates the first year of the Early Childhood Education associate degree with Wisconsin Professional Preschool Credential coursework. Graduates of this program will be recognized as Wisconsin Registry Career Ladder - Career Level 11. Coursework is available in both online and in-person formats to accommodate a variety of life schedules and individual learning styles.

- Earn Your Technical Diploma in One Year
- Online, Daytime and Evening Classes-Mix and Match
- Incorporates Wisconsin Preschool Credential and Early Childhood Associate Degree Coursework
- Financial Aid & T.E.A.C.H. Scholarship Eligible

Also new for the fall

Criminal Justice Studies (Associate Degree)

WITC campuses at Ashland, New Richmond, Rice Lake, and Superior
In-Person and/or Online delivery

Introducing Criminal Justice Studies, a hybrid of the college's Criminal Justice Law Enforcement Program and Criminal Justice Corrections programs, which provides a broader education for more career possibilities.

Today’s protective services employees need to be knowledgeable, ethical, demonstrate strong communication skills, and be adaptable to ever-changing technology along with changes in society. The Criminal Justice Studies program prepares students for various positions in the criminal justice system in the fields of law enforcement and corrections. The program also prepares the graduate to pursue work as a juvenile detention officer, police dispatcher, or security officer. The program's focus also provides a foundation for graduates to pursue associated careers such as public defense lawyer, probation/parole agent, FBI agent, or other law enforcement positions requiring a bachelor’s degree and beyond.

After completing the associate degree program, graduates may apply for WITC’s 160 Jail Officer Academy or 720 Law Enforcement Academy.
Auto Collision Repair and Refinish Technician

WITC Campuses and Online Opportunities

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   WITC Outreach Centers
   Learning Center
Online learning at WITC is growing! There are many learning options that include online courses and programs. Use this link to view the online opportunities at WITC, [www.witc.edu/online/index.htm](http://www.witc.edu/online/index.htm).

The College is proud to be offering the following programs/certificates completely online:

- Accounting
- Administrative Professional
- E-CHILD
- E-Connect - Child Care Services
- Health Information Technology
- Information Technology – Web and Software Developer
- Marketing
- Medical Coding Specialist
- C# Programming certificate
- Computerized Accounting certificate
- Java Developer certificate
- Marketing Specialist certificate
- Marketing/Desktop Publishing certificate
- Professional Credential for Childcare Administrators (Wisconsin) certificate
- Professional Credential for Infants/Toddlers (Wisconsin) certificate
- Sustainable Design certificate
- Web Developer (eDeveloper) certificate

WITC Hardware/Software Specifications

The computer hardware, software, and the Internet connection that is used for accessing coursework are the primary means of participating in online courses and therefore are significant contributors to academic success in online courses and/or programs at Wisconsin Indianhead Technical College. It is essential that students own or have ready access to a computer that meets the following minimum specifications.

Wisconsin Indianhead Technical College is primarily Windows PC-based and, therefore, we are not able to actively support documents from Macintosh- or Linux-based computers.

**HARDWARE REQUIREMENTS**

- Minimum 2GHz processor
- 4 GB recommended
- High-speed DSL or cable Internet connection
- Web camera and microphone/headset

**SOFTWARE REQUIREMENTS**

- Microsoft Office 365 is provided through WITC e-mail

**SUPPORTED OPERATING SYSTEMS**

- Microsoft® Vista, Windows 7, and Windows 8

*Requirements subject to change.

For additional information on specific software requirements for online programs, go to: [www.witc.edu/online/technology.htm](http://www.witc.edu/online/technology.htm).

Individual Success Factors

To be successful, students should determine if they would be a good candidate for online courses or programs. The following characteristics and skills are perceived as being prerequisites to the success of the online learner:

- Having a strong academic self-concept
- Exhibiting fluency in the use of online learning technologies
- Possessing interpersonal and communication skills
- Understanding and valuing interaction and collaborative learning
- Exhibiting self-directed learning skills

In addition, before taking a WITC online program or course:

- Students must be familiar with WITC’s Learning Management System, Blackboard. Use the following link to become familiar with Blackboard: [www.witc.edu/academics/online/orientation/blackboard.htm](http://www.witc.edu/academics/online/orientation/blackboard.htm)
- Students must be motivated and responsible for their own learning. Online classes are very different from traditional face-to-face classes in terms of how material is presented, nature of interaction with class members and instructor, and can be much more work. There is less structure than a face-to-face class, so it is up to students to pace themselves and keep up with assignments.
Students must be fluent in the use of online technologies. Students will need to send e-mails with attachments, navigate the Internet, download browser plug-ins to view multimedia enhanced Web pages, participate in threaded discussions, and troubleshoot computer or connectivity problems.

Students need to know the difference between “Online” and “Web-Enhanced” courses. Courses labeled “Web-Enhanced” will require scheduled face-to-face campus meeting times with additional work to be completed in Blackboard. Courses labeled “Online” provide all learning materials and assignments over the Internet. However, in some instances, students may be required to attend a campus site to have an exam proctored.

Students must realize that “Online” is not “Independent Study”? In Online courses, students will be required to participate in a learning community with other students as student engagement and participation is critical to the success of the class. Students should also value interaction and collaborative learning.

To be a successful online student:

- Be proactive. Students should know what they are getting into and have conversations with a counselor and/or advisor to ensure that online is right for them.
- Test your readiness. Complete the SmarterMeasure Learning Readiness Indicator at: www.witc.edu/online/smartermeasure.htm. The free Web-based tool assesses the likelihood for student success in an online and/or technology-rich learning program. Smarter Measure indicates the degree to which students possess attributes, skills, and knowledge that contribute to online success.
- Be self-directed in learning skills. Do not procrastinate with assignments. Use time management skills. Set aside time each week to complete the required assignments and submit them in a timely manner.
- Be collaborative. Read the threaded discussion at least three times a week and respond to the discussions as appropriate and as required by the instructor. This is collaborative learning – an essential part of online instruction.
- Be confident. If having problems, ask questions, send an e-mail to fellow students or the instructor, and use the discussion board to post questions. Chances are if one student has a question, others may as well.
- Contact the Learning Resource Center, Educational Technology Center, or Student Success Center at the local campuses for additional assistance. Also, online at: www.witc.edu/commons/index.htm.

Use this link to access online orientation information:
www.witc.edu/academics/online/orientation/index.htm

Included in this online orientation is a self-assessment to determine if a student is a candidate for online learning. Use this link to self-assess readiness to enroll in online classes:
www.witc.edu/academics/online/orientation/selfassess.php.

Students that decide they are not prepared to take an online course or program, should contact a counselor for more information and suggestions for additional assistance.
WITC-Ashland, situated on the shores of Lake Superior in a progressive community of almost 9,000 residents, is known for its commitment to academic excellence and personalized instruction. The campus is surrounded by inland lakes, streams, and forests; just minutes from the Apostle Islands National Lake Shore and about an hour from the Twin Ports of Superior/Duluth.

The Ashland Campus offers career programs in:

**Agriculture, Food and Natural Resources**
- Farm Business and Production Management

**Business, Management and Administration**
- Administrative Professional
- Business Management
- Human Resource Management
- Medical Administrative Specialist
- Medical Office Specialist
- Office Support Specialist
- Supervisory Management

**Finance**
- Accounting
- Accounting Assistant
- Finance

**Health Sciences**
- Medical Assistant
- Nursing Assistant
- Nursing - Associate Degree
- Occupational Therapy Assistant

**Hospitality and Tourism**
- Dietary Manager

**Human Services**
- Early Childhood Education
- E-Connect - Child Care Services
- Gerontology - Aging Services Professional

**Information Technology**
- Information Technology - Network Specialist
- Information Technology - Systems Administration Specialist

**Law, Public Safety and Security**
- Criminal Justice Studies
- Emergency Medical Technician
- Emergency Medical Technician - Paramedic
- Paramedic Technician

**Manufacturing**
- Machine Tool Operation
- Welding

**Transportation, Distribution and Logistics**
- Marine Repair Technician

**Individualized Studies**
- Individualized Technical Studies
- Technical Studies - Journeyworker
Certificates
Advanced Marine Repair Technician
Business Graphics
Cosmetology Manager
Customer Service
General Studies
Medical Transcription
Microsoft Office
Networking Professional
Personal Care Worker
Professional Credential for Preschool Teachers (Wisconsin)
Supervisory Leadership
Supervisory Management Lean Quality
Sustainable Design

Apprenticeship
Plumbing

Other Offerings
GED/HSED completion
Basic Education - academic preparation and support
General Studies - coursework central to all programs
English Language Learning (ELL)

2100 Beaser Avenue, Ashland, WI 54806
715.682.4591, Fax 715.682.8040
WITC-New Richmond is in the center of an expanding, prosperous business and residential area. Located in the beautiful St. Croix Valley, New Richmond offers an abundance of recreational and cultural activities. Scenic farmlands, wooded hills, and clean lakes accent the amenities that New Richmond has to offer. The Minneapolis/St. Paul metropolitan area is only a 30- to 40-minute drive. Many people like having the benefits of an urban center nearby while also enjoying the comforts offered by small-town living.

The New Richmond Campus offers career programs in:

**Agriculture, Food and Natural Resources**
- Agricultural Power and Equipment Technician
- Farm Business and Production Management

**Architecture and Construction**
- Architectural Commercial Design

**Business, Management and Administration**
- Business Management
- Human Resource Management
- Medical Administrative Specialist
- Medical Office Specialist
- Office Support Specialist
- Supervisory Management

**Finance**
- Accounting
- Accounting Assistant
- Finance

**Health Sciences**
- Medical Assistant
- Nursing Assistant
- Nursing - Associate Degree
- Occupational Therapy Assistant

**Hospitality and Tourism**
- Dietary Manager

**Human Services**
- Early Childhood Education
- E-Connect - Child Care Services
- Human Services Associate

**Information Technology**
- Information Technology - Network Specialist
- Information Technology - Systems Administration Specialist
- Information Technology - Web and Software Developer

**Law, Public Safety and Security**
- Advanced EMT
- Criminal Justice Studies
- Emergency Medical Technician
- Emergency Medical Technician - Paramedic
- Paramedic Technician

**Manufacturing**
- Automated Packaging Systems Technician
- Industrial Automation, Controls, and Networking
- Machine Tooling Technics
- Welding

**Transportation, Distribution and Logistics**
- Motorcycle, Marine, and Outdoor Power Products Technician

**Individualized Studies**
- Individualized Technical Studies
- Technical Studies - Journeyworker
Certificates
- Business Administration Specialist
- Business Graphics
- C# Programming
- Computerized Accounting
- Cosmetology Manager
- Customer Service
- General Studies
- Industrial Controls and Automation
- Java Developer
- Medical Transcription
- Microsoft Office
- Networking Professional
- Personal Care Worker
- Personal Income Tax Specialist
- Professional Credential for Preschool Teachers (Wisconsin)
- Safety Management
- Supervisory Leadership
- Supervisory Management Lean Quality
- Sustainable Design
- Web Developer (eDeveloper)

Apprenticeship
- Plumbing

Other Offerings
- GED/HSED completion
- Basic Education - academic preparation and support
- General Studies - coursework central to all programs
- English Language Learning (ELL)

1019 South Knowles Avenue, New Richmond, WI 54017
715.246.6561, Fax 715.246.2777
The Rice Lake area is packed with exciting attractions and recreational opportunities. From shopping and historic sites to bike trails and parks, Rice Lake has it all. The town and surrounding area is a great natural beauty: the waters of Rice Lake and the Red Cedar River, plus the beautiful Blue Hills have been attracting visitors for decades. Friendly people and genuine hospitality make everyone feel welcome.

The Rice Lake Campus offers career programs in:

**Agriculture, Food and Natural Resources**
- Dairy Herd Management
- Farm Business and Production Management

**Architecture and Construction**
- Architectural Commercial Design
- Residential Construction and Cabinetmaking

**Business, Management and Administration**
- Administrative Professional
- Business Management
- Human Resource Management
- Medical Administrative Specialist
- Medical Office Specialist
- Office Support Specialist
- Supervisory Management

**Finance**
- Accounting
- Accounting Assistant
- Finance

**Health Sciences**
- Dental Assistant
- Medical Assistant
- Nursing Assistant
- Nursing - Associate Degree
- Occupational Therapy Assistant

**Hospitality and Tourism**
- Dietary Manager

**Human Services**
- Cosmetology
- Early Childhood Education
- E-Connect - Child Care Services

**Information Technology**
- Broadband Technologies (previously Telecommunication Technologies)
- Information Technology - Network Specialist
- Information Technology - Systems Administration Specialist

**Law, Public Safety and Security**
- Advanced EMT
- Criminal Justice - Law Enforcement 720 Academy
- Criminal Justice Studies
- Emergency Medical Technician
- Emergency Medical Technician - Paramedic
- Paramedic Technician

**Manufacturing**
- CNC Machine Tool Operation
- Welding

**Transportation, Distribution and Logistics**
- Auto Collision Repair and Refinish Technician
- Automotive Maintenance Technician

**Individualized Studies**
- Individualized Technical Studies
- Technical Studies - Journeyworker
Certificates *
Business Administration Specialist
Business Graphics
Computerized Accounting
Cosmetology Instructor
Cosmetology Manager
Customer Service
General Studies
Medical Transcription
Microsoft Office
Networking Professional
Personal Care Worker
Professional Credential for Preschool Teachers (Wisconsin)
Supervisory Leadership
Supervisory Management Lean Quality
Sustainable Design

* Select certificate courses are offered at the WITC-Hayward and WITC-Ladysmith outreach centers. Please contact the outreach center manager for details.

Apprenticeship
Cosmetology
Maintenance Mechanic/Millwright
Plumbing

Other Offerings
GED/HSED completion
Basic Education - academic preparation and support
General Studies - coursework central to all programs
English Language Learning (ELL)

1900 College Drive, Rice Lake, WI 54868
715.234.7082, Fax 715.234.5172
The staff at WITC-Superior is dedicated to meeting the needs of today's students and employers, ensuring students are completely satisfied with their learning experience. The education is dynamic and hands-on, offering focused career preparation with a variety of courses, career programs, and delivery options.

Founded in 1912, the Superior campus offers top-notch faculty and state-of-the-art technology, as well as breathtaking landscapes. Students will benefit from the classes and enjoy the area.

In addition to the inland lakes, rivers, streams, waterfront trails, and the state's largest waterfall, there are endless shopping opportunities, concerts, expos, marathons, plays, sporting events, rodeos, festivals, outdoor recreational opportunities, and more. This is the ideal environment for learning and for living.

The Superior Campus offers career programs in:

**Architecture and Construction**
- Heating, Ventilation, and Air Conditioning/
  Refrigeration (HVAC/R)

**Business, Management and Administration**
- Business Management
- Human Resource Management
- Medical Administrative Specialist
- Medical Office Specialist
- Office Support Specialist
- Supervisory Management

**Finance**
- Accounting
- Accounting Assistant
- Finance

**Health Sciences**
- Medical Assistant
- Nursing Assistant
- Nursing - Associate Degree

**Hospitality and Tourism**
- Dietary Manager

**Human Services**
- Cosmetology
- Early Childhood Education
- E-Connect - Child Care Services
- Gerontology - Aging Services Professional
- Human Services Associate

**Information Technology**
- Information Technology - Network Specialist
- Information Technology - Systems Administration Specialist

**Law, Public Safety and Security**
- Criminal Justice Studies
- Emergency Medical Technician
- Emergency Medical Technician - Paramedic
- Paramedic Technician

**Manufacturing**
- Composite Technology
- Industrial Maintenance Technician
- Machine Tool Technician
- Welding

**Transportation, Distribution and Logistics**
- Automotive Maintenance Technician

**Individualized Studies**
- Individualized Technical Studies
- Technical Studies - Journeyworker
Certificates
- Business Administration Specialist
- Business Graphics
- Computer Numerical Control (CNC) Machining
- Computerized Accounting
- Cosmetology Instructor
- Cosmetology Manager
- Customer Service
- Ethical Leadership
- General Studies
- Medical Transcription
- Microsoft Office
- Networking Professional
- Personal Care Worker
- Professional Credential for Preschool Teachers (Wisconsin)
- Supervisory Leadership
- Supervisory Management Lean Quality
- Sustainable Design

Other Offerings
- GED/HSED completion
- Basic Education - academic preparation and support
- General Education - coursework central to all programs
- English Language Learning (ELL)

600 North 21st Street, Superior, WI 54880
715.394.6677, Fax 715.394.3771
Continuing Education and Outreach Centers
Credit and noncredit courses are offered through continuing education on campus and at community outreach locations throughout the WITC District.

WITC Outreach Centers
Hayward and Ladysmith - Outreach Centers of Rice Lake Campus
WITC-Hayward and WITC-Ladysmith offer credit and noncredit courses to area residents as well as customized training to business and industry customers.

Select certificate courses are offered at the WITC-Hayward and WITC-Ladysmith outreach centers. Please contact the outreach center manager for details.

WITC-Hayward
715.634.5167, Ext. 5500
800.243.9482
Fax: 715.634.8387

WITC-Ladysmith
715.532.3399, Ext. 5600
800.243.9482
Fax: 715.532.5483

Learning Center
Classes are also available at the WITC Learning Center.
Washburn County Learning Center
715.635.9120
# What Is It Like at WITC?

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Criminal Justice - Corrections
What Are the Benefits of a WITC Degree?

Graduate Survey
Each fall, the College surveys recent graduates to find out how well their degree or diploma prepared them for a career in their chosen field. Using their input, WITC is able to continuously improve and adjust programs. The skills students learn at WITC are the skills employers want.

The Graduate Follow-Up Study
The six-month study of 2012-2013 graduates included 1,560 associate degree and technical diploma graduates from WITC campuses and outreach centers. Out of that total, 1,307 graduates either responded to the mailed questionnaire or the follow-up telephone contact. The response rate was 84 percent.

What We Found:
• WITC graduates get hired quickly – 91 percent of graduates were hired within just six months of graduating. Seventy-three percent of WITC graduates were able to start a career in an occupation related to their training.
• Alumni make great starting salaries – annual starting salaries of WITC graduates right after graduation average $35,072 annually.
• Ninety-seven percent of graduates are satisfied with the training they received at WITC and 98 percent would recommend WITC to a friend or family member.
• Students come to WITC because they are career-minded. Seventy-two percent of our graduates said they chose WITC to prepare them for their future career, help them make a career change, or to improve their existing job skills.

Employer Satisfaction Survey
The Employer Satisfaction Survey gives the College feedback on the success of WITC graduates and the effectiveness of the concepts and skills provided in technical education. Conducted every four years by WITC, the study asks employers to rate WITC graduates as entry-level employees in the following areas:
• Mastery of skill and knowledge in the field
• Ability to perform technical skills of the profession
• Ability to communicate effectively with co-workers and/or customers
• Relevancy of graduates’ skill and/or knowledge base in relationship to real world applications within the industry
• Mastery of science, technology, engineering, or math skills needed in the field
• Overall preparedness for employment at a company

The information is used as a valuable tool for continuously improving and evaluating the college’s educational programs and services to enhance learning.

What We Found:
• Employers are very satisfied with graduates’ technical education
• Employers would recommend graduates to other employers
• WITC provides top service to employers

Find Out More
Visit our Web site at witc.edu/witc/reports.htm to view the Graduate Follow-up Study or the Employer Satisfaction Report. Anyone wanting a copy of the report or more information about how the survey was conducted, should call Jennifer Kunselman in the Office of Research and Data at the WITC Administrative Office in Shell Lake at 800.243.9482, Extension 2257.

Student Services
A variety of student services are offered on campus – including career planning assistance – to help students make realistic decisions about their educational future. WITC’s student services include counseling, advising, career exploration, and employability skills training. Students are also encouraged to meet with a Student Success Center instructor to create a personalized success plan and enroll in free reading, writing, math, and study skills courses. Students may enter success center courses at any time and leave when they attain their educational objectives. Day and evening classes are available at the four campuses and at other outreach centers in Northwest Wisconsin. Services include:
• General Education Development (GED) Certificate and High School Equivalency Diploma (HSED) preparation and testing
• Career assessment
• Computer literacy
• Counseling services
• Employment assistance
• English Language Learning (ELL) classes
• Foundational Academic Skills
• Pre-Technical courses
• Tutoring (Peer)
• Student success workshops: individual development, employability skills, and student success skills

Student services are partially funded through the federal Perkins Vocational and Technical Education Act, the Adult Education and Family Literacy Title II of the Workforce Investment Act, and the state’s General Purpose Revenue (GPR) grants of approximately three million dollars on a collegewide basis. These funding sources contribute over 50 percent of the district’s budget for these services.
**Learning Commons**

The Learning Commons combines the resources and services students need into one place where they can interact with technology, collaborate with each other, and obtain support for their academic efforts. The Learning Commons contains three centers that work together to provide the full-breadth of assistance students may need outside of the classroom – it truly is a one-stop-shop for help from the Learning Resource Center, the Technology Center, and the Student Success Center.

**Learning Resource Center (LRC)**

The LRC is the answer place. It contains the books, journals/magazines, audio visual materials, and technology equipment that students will need to accomplish their coursework. More importantly, Resource Center staff are available to guide the student’s discovery of these materials, and assist them in navigating the rich collection of electronic resources provided by the Resource Center at [www.witc.edu/library](http://www.witc.edu/library).

**Student Success Center**

A Student Success Center (SSC) is located at each campus. Services include academic support programming, such as:

- GED/HSED preparation
- College preparation coursework for students who are not yet enrolled in college
- Academic support and peer tutoring for students who are currently enrolled in credit courses at WITC

Resources and materials are matched to individual skill levels as students progress toward their goals. Both individualized and group instruction are offered.

**Educational Technology Center**

A Technology Center is located at each campus. Services include technological support such as:

- Basic computer assistance
- Online learning support
- Open computer labs
- Test proctoring capabilities

**Area Housing**

**Ashland Campus Area Housing Information**

Area housing for WITC students is available through Northland College. For more information regarding area housing, contact the Student Services office.

**New Richmond Campus Area Housing Information**

A list of available rentals in the area is available. For more information on student housing, contact the Student Services office.

**Rice Lake Campus Area Housing Information**

Housing for students is available through Glenwood Commons adjacent to campus, please stop by the building, or contact: West CAP at 715.265.4271 or 800.606.9227 for additional information.

**Superior Campus Area Housing Information**

Housing for students is available through the University of Wisconsin-Superior. Information regarding housing can be obtained in the Student Services office or by contacting the University of Wisconsin-Superior Resident Life Office: 715.394.8438; e-mail: reslife@uwsuper.edu.

**Student Life**

Employers look for more than a degree on a résumé when hiring. They want a person who will go the extra mile, volunteer to help out, and benefit the company. This experience, leadership, creativity, and teamwork for a common goal are qualities that will help graduates get hired. Students develop these skills by becoming involved in WITC’s co- and extra-curricular organizations and by participating in leadership training. For more information, visit [witc.edu](http://www.witc.edu) and click on Future Students; click on Student Life; select the appropriate campus; and then click on Clubs and Organizations.

A wide range of extracurricular, social, cultural activities, and intramural sports are conducted at campuses throughout the year. The College believes that when students participate in activities, they build good relationships with peers, gain valuable experience in leadership and teamwork, and enhance career advancement potential. Students will have the opportunity to select activities which are best suited to their individual interests, needs, and schedule.

**Social Events**

Most social and special events held on campus are coordinated by the Campus Activities Board in conjunction with other clubs and organizations. The broad scope of activities includes special event and holiday parties, bowling, seasonal activities, breakfasts and dinners, sports tournaments, and other events.

Professional entertainers, including musicians, hypnotists, and others, are scheduled to perform on campus throughout the year. See each campus Web page for current events at [witc.edu](http://www.witc.edu).

**Campus Activities Board (CAB)**

The Campus Activities Board (CAB) works to enhance and unify the campus community by providing a variety of entertainment and co-curricular programming. CAB is a subsidiary organization of the Student Senate and its membership is open to all students. CAB members gain valuable experiences in selecting, contracting, planning and promoting events. CAB values: the image of CAB and producing quality events; the talents and gifts of our committee members; the ability to develop leaders and enhance individual skills; and the diversity and ideas of all members of the campus community.

**Student Organizations**

Student organizations help develop leadership skills and gain competence and experience in the student's career area. Students will also learn to apply democratic procedures and gain professional enrichment. Some co-curricular organizations are affiliated with state and national technical student groups such as the Business Professionals of America (BPA), Collegiate DECA, and Vocational Industrial Clubs of America (Skills USA-VICA). Other organizations are associated with professional groups in a variety of occupational fields. Examples include the National Association of Home Builders (NAHB), Wisconsin Association of Architects (WSA-AIA), Society of Packaging Engineers (SPHE), and Electronics, Student Occupational Therapy Association (SOTA), Health Occupations, Nursing, Early Childhood Association, Cosmetology, Corrections, and others. Student
organizations are active throughout the year in a variety of activities such as conferences, workshops, business and industry tours, skill competition events, self-improvement projects, fund raising, guest speakers, and social functions. All students have the equal opportunity to participate in student organizations.

**Student Senate**
Students will have an opportunity to become involved in student government at their WITC campus through participation in the Student Senate. The senate is comprised of student members who have been elected to represent their program. The Student Senate Association or SSA meets once or twice a month to plan and organize events and activities on campus and to improve the quality of life for the students they represent.

This is the social, political, and educational organization that represents the student body. This organization serves as the voice of the students. It is affiliated with the state organization, Wisconsin Student Government (WSG). The Student Senate Association partners with WITC administration in decision making at WITC, plans and sponsors a variety of student activities, provides financial support to student organizations on campus, and listens to the concerns of fellow classmates.

Students who seek a broader leadership opportunity may choose to participate in Wisconsin Student Government. This organization meets several times a year with representatives from other colleges to promote the interests and concerns of students throughout the Wisconsin Technical College System.

**Accommodations for Persons With Disabilities**
Reasonable accommodations for persons with disabilities will be made to ensure access to academic programs, activities, services, and employment in accordance with sections 504 and 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. If accommodations are needed, the student should visit [http://www.witc.edu/stusvcs/disability.htm](http://www.witc.edu/stusvcs/disability.htm). Students can also contact the campus Accommodations Specialist or WITC Affirmative Action Officer/Title IX, Section 504, and Title VII Coordinator, at 715.468.2815, Ext. 2225, 30 days in advance of needed assistance. Examples of services available:

- Adaptive technology
- Admissions coordination
- Academic assessment
- Division of Vocational Rehabilitation (DVR) coordination
- Tutoring (Peer)
- Transitioning

**Accommodations for Religious Beliefs**
WITC will reasonably accommodate the religious beliefs of students in its attendance, examination, and other academic practices. Notify faculty member seven (7) calendar days in advance to discuss and work out a solution for the needed accommodation.

**Day Care Services**
Though the college does not provide day care services, the campus Student Services office can provide the student with the name, number, or Web site of local resources to obtain information on day care facilities.

### Campus Crime Statistics
WITC prides itself on maintaining a safe environment for its students, faculty, and staff and provides the following information and statistics on the frequency of crime, known and reported, on- and off-campus on an annual basis and in compliance with the federal Student Right to Know and Campus Security Act of 1990.

Please contact Human Resources, WITC Administrative Office, 505 Pine Ridge Drive, Shell Lake, WI 54871, phone 715.468.2815, Ext. 2225, with any questions.

<table>
<thead>
<tr>
<th>Offense</th>
<th>Number of Offenses at WITC Location*</th>
<th>Number of Offenses within vicinity of WITC Location*</th>
<th>Number of Crimes reported by Law Enforcement in Cities Where Campuses are Located **</th>
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<tbody>
<tr>
<td></td>
<td>ASH</td>
<td>NR</td>
<td>RL</td>
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<tr>
<td>Murder/ Non-negligent Manslaughter</td>
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<tr>
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<tr>
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<tr>
<td>Sex Offenses-Non-fr Forcible</td>
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<tr>
<td>Drug Abuse Violations</td>
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<tr>
<td>Dating Violence</td>
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</tr>
<tr>
<td>Stalking</td>
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<td>0</td>
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</tbody>
</table>

*Source: County Sheriff/City Police Departments

**Wisconsin Uniform Crime Rate Program, Office of Justice Assistance, Madison, Wisconsin

#Vicinity defined as all public property, including thoroughfares, streets, sidewalks, and parking facilities, that are within the campus, or immediately adjacent to and accessible from the campus.
What Is It Like at WITC?

Parking
WITC provides free parking to students, staff, and visitors. Students are expected to understand and honor all campus parking regulations found in the Student Handbook. Parking tickets will be issued for noncompliance.

Handicapped parking is clearly marked and reserved for individuals with a state disabled license or permit. Students may obtain disabled parking permits with proper documentation from the Wisconsin Department of Transportation.

Visiting WITC
Visitors to WITC are always welcome. Students are encouraged to invite friends, parents, and students from area high schools to visit the campus. Please park in designated visitor parking and check in with Student Services. Please contact the admissions advisor to make guided tour arrangements for individuals or groups at: 800.243.9482

- Ashland - Extension 3195
- New Richmond - Extension 4339
- Rice Lake - Extension 5220
- Superior - Extension 6243

Health and Wellness Services
The College Health Nurse provides and/or coordinates a variety of essential health/safety/wellness services to both students and staff. College health services are directed toward enhancing the educational process by modifying or removing health-related barriers to learning, promoting optimal wellness, enabling individuals to make decisions about health-related concerns, and empowering students and staff to be self-directed and well-informed consumers of healthcare service. ATODA (Alcohol, Tobacco, and Other Drug Abuse) information is available from the College Health Nurses, Campus Counselors, and in the Learning Resource Centers.

Alcohol, Tobacco, and Other Drug Abuse (ATODA) Prevention
Whether a student personally abuses chemicals or is affected by someone who does, alcohol, tobacco, and other drug abuse education, referral, and recovery support assistance is available at WITC. Students can learn about chemical dependency using materials in the Learning Resource Center (LRC) or by contacting the local campus health nurse.

Tobacco-Free College
The State of Wisconsin, through the passage of Act 12, has enacted a statewide smoking ban that prohibits smoking in all public places. The ban went into effect on July 5, 2010. WITC recognizes its responsibility to comply with state law and provide a safe and healthy learning environment. Because of this commitment, the use of tobacco in any form is prohibited in all campus facilities, near entryways, and in College vehicles.

Weapons Possession
WITC will uphold all local, state, and federal laws concerning the use, concealment, creation, manufacture, or possession of weapons, and/or potentially dangerous devices, as such weapons and devices are defined by Wisconsin Statutes, as amended, including but not limited to Chapter 941 of Wisconsin Statutes or any facsimile weapon that could reasonably be expected to alarm, intimidate, threaten or terrify another person, and/or potentially dangerous devices at any campus facility and College special events. To that end, the College prohibits the possession of weapons as allowed under State Statutes.

Student Handbook
The College publishes a Student Handbook designed to provide students with information about college policies, procedures, and services for students. It also contains the academic calendar, and calendar of events. Every student is responsible for abiding by the rules and regulations of the College as published in the handbook. A copy may be obtained from student services or the college Web Site at www.witc.edu/academics/stuhndbk.htm. The College reserves the right, without prior notice, to make changes in policy and procedure as deemed necessary.

What Does WITC Offer?
WITC is the college of choice for students who wish to pursue associate degrees, technical diplomas or certificates, GED/HSED completion, and for those presently employed who wish to advance in their careers. Area employers contract with the college for customized training consisting of specific courses that are developed and taught by WITC instructors at an employer’s work site. WITC also provides instruction for apprentices in cooperation with employers and the state of Wisconsin.

Types of Degrees/Offerings
Associate Degrees (Applied Science)
WITC’s associate in applied science (A.A.S.) degrees lead students to employment in a specified career or career advancement. An associate degree may also be the first step towards a bachelor’s degree. These programs generally take two years to complete when pursued on a full-time basis.

Technical Diplomas
If students wish to prepare for specific jobs or upgrade their job skills, WITC offers specialized programs that lead to a diploma in the chosen field. Diploma programs vary in length from less than one year to two years and provide extensive career training.

Certificates
WITC awards certificates for the successful completion of a group of courses targeted toward a specialty area.
**Apprenticeship**

**What Is It?**
An apprenticeship is a state-certified training program that combines paid, on-the-job, supervised experience with 300 to 600 hours of classroom instruction. Apprenticeships are offered in three occupational areas: construction, industrial, and service. All require a minimum of 2,000 hours of on-the-job work experience. As an apprentice, students will sign a contract between themselves, an employer, and the state that says the student will work for that employer for a specified length of time, if the employer agrees to teach the student a trade. The student will then start the apprenticeship at 40 to 60 percent of the trade's journeyworker salary and even receive a salary for daytime classroom hours.

**How Do Students Qualify?**
The student must have a high school diploma or equivalent, be physically fit, and have the aptitude for the trade. Most employers or joint apprenticeship committees have approved selection standards with more specific requirements. In some trades, the requirements for applicants include up to two years of high school math. Some trades require that the applicant also take an aptitude test while others require a TABE test for math computation, applied math, and reading comprehension.

**What Is Offered?**
The apprenticeship courses offered at WITC include:
- Cosmetology
- Maintenance Mechanic/Millwright
- Plumbing

For a complete list of more than 300 state-certified apprenticeships, visit the Wisconsin Department of Workforce Development Web site at dwd.state.wi.us or call the Bureau of Apprenticeship Standards Office in Chippewa Falls at 800.511.9095 or 715.738.3853.

**How to Get Started?**
Looking for an apprenticeship is like looking for a job. Applications should be made directly with employers or Joint Apprenticeship Committees. Students should start by learning what they can about the trade by talking to people who are in the occupation: employers, employees, high school counselors, WITC instructors and counselors, employers’ associations, and labor unions.

For more information, contact Randy Deli, WITC Apprenticeship Coordinator at 800.243.9482, Extension 5113 or the Apprenticeship Assistant, Extension 5289 or go to [witic.edu/programs/apprenticeship](http://witic.edu/programs/apprenticeship).

**GED/HSED Completion**
GED/HSED preparation is available at WITC Student Success Centers in these communities: Ashland, New Richmond, Rice Lake, Superior, Hayward, Ladysmith, and Spooner. For other current locations, visit [witic.edu](http://witic.edu). Services to adult students are generally free, however, some courses may require a $4 material fee.

**What Is the GED?**
The GED requires a student to complete a battery of four tests: Reasoning through Language Arts, Mathematical Reasoning, Science and Social Studies.

**What Is the HSED?**
The High School Equivalency Diploma (HSED) is more comprehensive than the GED. The HSED requires all of the GED tests, plus:
- Verifying one-half Health credit earned in grades 7-12 or passing the additional Health test.
- Verifying three Social Studies credits earned in grades 9-12, passing the additional Civics test, or completing a 36-hour Civics course on campus.
- Completion of Career Exploration Activities.

**Who Can Take the GED?**
The GED/HSED tests may be taken if a student is a Wisconsin resident who is at least 18 1/2 years of age, or if the class with which the student entered 9th grade has graduated from high school.

**Program Sequencing**
Courses are scheduled to enable full-time students, who enter the fall term (first semester) and carry a full program credit load, to complete all graduation requirements within two, three, or four semesters, depending on their program. WITC cannot guarantee that specific courses will be available as needed to students entering programs at mid-year, enrolling part-time, and/or students with non-sequenced academic schedules; nor can WITC guarantee that a program will not be suspended or discontinued prior to a student’s completion. For the most current curriculum checklists documenting specific courses needed to satisfy program requirements, go to [witic.edu/currentstudents/registration.htm](http://witic.edu/currentstudents/registration.htm).

**Types of Courses**

**Technical Studies/Occupational-Specific Courses (Credit)**
WITC offers hundreds of career-related courses, workshops, and conferences that can be taken for credit to enhance skills, renew certification, or lead to associate or technical degree program completion.

WITC also offers Service Learning and Work-Based Learning options. Service Learning is experiential learning that integrates community service and educational learning objectives. Work-Based Learning opportunities may include: job shadowing, internships, and clinicals, etc.

**General Studies Courses (Credit)**
The General Studies courses in all of our programs are designed to ensure well-rounded college graduates. These courses include communications, math, science, and social and behavioral sciences.

Note: many courses have prerequisite and/or corequisite requirements. To advance to a higher level course, a grade point of 2.0 or higher must be earned in the prerequisite course. For select courses, a grade point higher than a 2.0 is required and is noted on program and certificate pages.
Professional Development and Continuing Education Courses (Noncredit)
These courses provide students the opportunity to update their job skills, maintain licensure or certification, and gain valuable interpersonal and leadership skills. In addition, students explore non-career related interests through a wide variety of personal enrichment courses offered throughout Northwest Wisconsin. Additional information and course offerings are available online at witc.edu, or students can request a printed Catalog from any campus Continuing Education office.

Customized Training for Business and Industry
WITC offers customized training solutions and technical assistance to help businesses stay competitive. Training can be scheduled at times and locations that are convenient.

For more information, go to witc.edu/business or contact:

- **Ashland** and **Superior**: Associate Dean
  800.243.9482 Ext. 6341
- **New Richmond** and **Rice Lake**: Associate Dean
  800.243.9482 Ext. 5246

Course Numbering System
WITC has an eight-digit course numbering system for all courses offered. The first two digits are the Aid Code, the next three digits identify the instructional area, and the last three digits identify the specific course.

For example, course number 10801195 breaks down as: 10 equals associate degree, 801 equals communications, and 195 equals Written Communications; course number 32420332 breaks down as: 32 equals two-year technical diploma, 420 equals machine shop, and 332 equals Semi-Precision Machining.

Associate Degree programs and their courses are identified with an Aid Code of 10.

Technical Diploma programs and respective courses are identified with an Aid Code of 32 (two-year), 31 (one-year), and 30 (less than one year).

Non-credit courses are identified with aid codes of 42, 47, or 60. Apprenticeship courses are identified with an Aid Code of 50. Basic Education courses are identified by Aid Codes of 73, 74, 76, 77, and 78.

Instruction Modes
WITC offers coursework in a variety of instructional delivery formats. Following are definitions of the various instruction modes.

**In Person**
This class is scheduled to meet for all state required hours. Students are expected to attend all scheduled class meetings in person.

**Online**
Online courses are defined as instruction offered exclusively via the Internet and accessed by the student using a Web browser. Off-line supervised tests/exams at the specified sites may be conducted in conjunction with these courses.

**Interactive Television (ITV)**
Courses which involve real-time live video/audio instruction via network or broadcast technology where classes include students at one or more remote sites and interaction between the instructor and students is synchronous. The ITV class may be composed of students at the same site as the instructor and students at one or more remote sites. The video signals may be one-way or two-way; audio interaction is two-way.

**Independent Study**
This is a self-paced format. Students are responsible for meeting with the instructor the first week of class for orientation and contract signing and must be highly organized and self-motivated to succeed. (Instructor can use Lync, telephone, etc.) Instructor(s), however, may require students to meet on a one-on-one basis at some time. Class notes are used to provide additional details for students.

**Accelerated**
Accelerated courses are offered in condensed format utilizing adult and whole brain learning theories. These courses are limited to students who are in an accelerated program, such as Supervisory Management. Students need to contact the instructor or academic/divisional dean to enroll in these classes if they are not part of an accelerated program.

**Work-Based Learning**
Work-Based Learning is a work-based educational experience that provides students opportunities to attain work that is correlated with program instruction.

**Web Enhanced**
For scheduling purposes, the class and rooms are scheduled for all state required hours. Students are expected to attend all scheduled class meetings in person and will need to use a computer and the Internet to access course content and materials from Blackboard.

**Hybrid**
For scheduling purposes, rooms are scheduled for in-person class meetings as noted in the class notes. Synchronous class meetings will be reflected on the student schedule. Students are expected to attend all scheduled class meetings in person. The remainder of the class will be conducted online. Students will need to use a computer and the Internet to access course content and materials from Blackboard.

**ITV Hybrid**
Courses which involve real-time live video/audio instruction via network or broadcast technology where classes include students at one or more remote sites and interaction between the instructor and students is synchronous. The ITV class may be composed of students at the same site as the instructor and students at one or more remote sites. The video signals may be one-way or two-way; audio interaction is two-way.
High School Opportunities
Wisconsin Youth Options
The youth options program allows high school students to attend a Wisconsin technical college and earn both high school and technical college credit. Students are eligible if they go to a public high school and have completed tenth grade with good academic standing, met any course prerequisites, have written approval from a parent or guardian, and have no history of disciplinary problems. Students will need:

1. A completed DPI PI8700A form signed by the school board.
2. A completed Wisconsin Technical College application for admission.
3. A letter from the school board stating which classes, books, and fees are the school district's tuition responsibility.

The program opens the door to greater learning opportunities for those who are motivated to get started on their careers and who are ready to try a new learning environment. Those interested must notify their local school board — using the PI8700A form — by March 1 for the fall semester or October 1 for the spring semester. Forms are available from high school guidance offices, or, for more information, contact a high school counselor. Youth options information is also available on the WITC Web site at witc.edu/highschool/earncredit.

Transcripted Credit
An actual technical college course, using college textbooks and materials, is taught to high school students in a high school setting. An agreement between the technical college and high school spells out conditions the student must meet to successfully complete the course. The course is taught by the student’s high school instructor and college credits are awarded and recorded on a technical college transcript upon successful completion of the course.

Transfer From WITC to Another Institution
Since the transfer and acceptance of credits is determined by each receiving college, WITC cannot guarantee that a student’s WITC credits will transfer. If a WITC student would like to transfer to another college or university, they will need to contact that institution for information on course transferability.

Transfer Opportunities
WITC has developed transfer agreements with four-year private colleges and universities in the University of Wisconsin System. Transfer agreements may contain course-to-course equivalencies, while others provide for a total program transfer. The Transfer Information System (TIS) Web site (http://tis.wus.edu) has been developed by the University of Wisconsin System in cooperation with the Wisconsin Technical College System. The purpose of the TIS is to help students understand their options and provide information about transferring credits and programs between the two systems.

Most colleges review transcripts on an individual basis to determine which credits will transfer. Students planning to attend a four-year college or university after attending WITC should contact an admissions counselor or academic advisor at the four-year college of their choice. Requirements vary from institution to institution and an admissions counselor or academic advisor can help students plan their coursework to optimize their transfer of credit into a major.

WITC’s transfer equivalency site is intended to provide prospective transfer students with information on how courses taken previously at private Wisconsin colleges and out of state colleges will transfer to WITC. When using the course Transfer Equivalency Service (TES) students should remember: (UW Colleges are listed on a separate site named Transfer Information System [TIS])

- The information on the TES system is provided as a guide to how classes from a student’s current or former school may transfer to WITC.
- The course equivalency site lists commonly transferred courses to WITC from other institutions; the site is organized alphabetically by institution, and courses are grouped by subject area. If students do not find a course from their school listed on the site, the course may still transfer to WITC. Students should contact the campus credit for prior learning contact for assistance.
- Final determination of transfer credit acceptance is ultimately made by the campus credit for prior learning contact or registrar once admitted to a program and official transcripts of all completed coursework have been received.
- Additional schools and courses will be added on a regular basis, as students request transfer credit reviews.
- The catalog dates for each institution reflect the latest revision date for transfer equivalencies from that school.

For more information visit witc.edu/academics/transfer/tes.

Online Degree Transfer Opportunities
By combining a student’s associate degree credits with online courses, they can complete their bachelor’s degree through unique alliances with a number of colleges and universities.

For more information, visit witc.edu.
How to Become a WITC Student

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How to Become a WITC Student

Students should use the guide below to complete the admissions process. The process should be started as soon as possible as space is limited. Students should remember fall semester begins August 17, 2015, and spring semester begins January 11, 2016. To explore career options, students should contact an admissions advisor at one of WITC’s four campuses (Ashland, New Richmond, Rice Lake, and Superior) at 800.243.9482.

**START**

Students should contact an admissions advisor to schedule an admissions appointment to:
- Request program information
- Book a tour
- Sit in on a class
- Meet the instructor

**Apply**

A printable application form may be downloaded at [witc.edu](http://witc.edu) and is available at a WITC campus or from a high school counselor. Applications with a $30 fee may be mailed or brought to a WITC campus. Applications can also be submitted online.

**Assess**

Students should request high school/college transcripts (recommended).

Students should schedule an appointment to take the admissions assessment. They may be excused from the assessment process if, in the past 3 years, they have received satisfactory scores on college entrance tests such as the ACT, ACCUPLACER, ASSET, COMPASS, or TABE.

If not previously submitted, students should bring a completed application form, high school/college transcripts and $30 application fee to their appointment. Personal check, money order, or credit card (Visa, Master Card, Discover Card, China UnionPay, JCB, and Diners Club) are accepted.

**Interview**

To complete the admissions process, students should meet with a counselor following the assessment to review program choice and assessment scores.

Some programs will have additional program-specific requirements. Those requirements will be discussed with the counselor during the scheduled interview after the admissions assessment has been completed.

**Move Forward to a Career**

Complete the Free Application for Federal Student Aid to determine financial aid eligibility. Go to [fafsa.gov](http://fafsa.gov).

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30 800.243.9482  witc.edu  2015-2016
Explore the College and Careers
One of the best ways to see if WITC is a good fit is for a student to set up an appointment with an admissions advisor. They can help a student decide on a career path, explore the campus, visit program classrooms, meet instructors and current students, and much more. While not required, many students find the following experiences valuable to their career decision:

Campus Tours
Students are invited to call and set up an appointment with a campus admissions advisor for a tour of the Ashland, Rice Lake, New Richmond, or Superior campuses.
Call 800.243.9482.
Ashland - Extension 3195
New Richmond - Extension 4339
Rice Lake - Extension 5220
Superior - Extension 6243

Program Shadowing
Program shadowing is the opportunity to visit a campus and experience a program. Contact the admissions advisor at the campus of choice:
Call 800.243.9482.
Ashland - Extension 3195
New Richmond - Extension 4339
Rice Lake - Extension 5220
Superior - Extension 6243

Career Planning and Assessment
In today’s world, every person’s career journey follows a different path. This path is guided by an individual’s past experiences and also by decisions that were made throughout their life. The staff at WITC will work to guide students down the path that will lead to the program or career that is most appropriate.

WITC offers three options to begin the career exploration journey:
1) An online career assessment questionnaire to identify which career areas might be the best fit. Explore program offerings and other career resources at witc.edu/career
2) WITC offers a free One-on-One Career Exploration to help you evaluate career options. This consists of: self-assessments, personality tests, Career Clusters interest inventory, labor market trends, employability skills, goal setting, and career decision making.
3) A WITC career counselor will provide guidance in determining which careers are best suited for each individual student. Schedule an appointment with a counselor at the campus of choice. Students will be given the opportunity to complete the Myers-Briggs Type Indicator® and the Strong Interest Inventory® for a minimal fee. The counselors will discuss the results of assessments, past employment, education, personal experiences, interests, and anything else that will help students make a career choice.

Financial Aid Events
Each year in February or March, several campuses host a Financial Aid Event. This community service event is designed to answer questions about applying for financial aid. These informational sessions are open to anyone interested in attending any postsecondary institution. For upcoming event dates and locations, contact a financial aid advisor at the Ashland, New Richmond, Rice Lake, or Superior campus.

Admissions Process
If a student would like to enroll as a full- or part-time student in a degree or technical diploma, they must first complete the following admissions process. Enrolling in a degree or diploma program will qualify students to be considered eligible for financial aid.

Complete Application for Admission
While there is no set application deadline, October 1 is the date WITC begins taking applications for the following fall term. February 1 is the date for the following spring term, and July 1 is the date for the following summer term. Students should apply early since applications are processed in the order in which they are received.

Application acceptance is based on the state technical college system’s Administrative Code, Section 10.06 and 10.07. The code ensures that all district residents (persons residing in counties within the WITC district) receive priority admission over nondistrict state residents, reciprocity students, and nonresidents.

District residents who apply on or before the following dates shall have admission priority:
• For programs commencing any time during the fall semester, the preceding January 1
• For programs commencing any time during the spring semester, the preceding May 1
• For programs commencing any time during the summer semester, the preceding October 1

After the dates specified above, district residents shall have priority equal to non-district state residents for admission to programs.

Send in, apply online, or take an application and a $30 nonrefundable fee payable by credit card (Visa, Master Card, Discover Card, ChinaUnionPay, JCB, and DinersClub), debit card, or electronic check.

Cash is accepted when applying in person. The application fee is a one-time charge.

For application, see page 38 or visit witc.edu/admissions/apply.htm.

Schedule Assessment and Counselor Interview
Students will need to schedule a time to complete an assessment and meet with a counselor by calling the Student Services office at the campus they plan to attend. It is recommended that students bring an Application for Admission and copies of high school and/or college transcripts when meeting with a counselor.
Assessment and Preparation for Admission

The college uses the ACCUPLACER assessment, along with high school and other postsecondary transcripts, to measure skill levels and to help place students in courses and programs where they will succeed academically.

Students are placed into one of the following levels of writing and math coursework based on identified placement scores: 1) Basic Education, 2) General College, or 3) Associate Degree. Basic Education courses focus on the fundamentals in a discipline. General College courses focus on building skills to prepare students for associate degree-level coursework. Associate degree courses are college level both in content and rigor.

Students will be admitted into the program of their choice dependent upon placement scores required for program admission and space availability (some programs will have additional requirements). Program placement is dependent on meeting established program assessment scores in writing, reading, and math. Program placement scores may be different than course placement scores.

Students may be excused from the assessment process if in the past three years they have received satisfactory scores on college entrance tests such as the ACT, ACCUPLACER, ASSET, COMPASS, or TABE. Students who have earned an associate or a baccalaureate degree (with the exception of a degree earned in a foreign country) do not need to complete an assessment. The student should bring score report(s) and/or official transcripts to the counselor interview.

Note: accommodations for assessment are available for persons with disabilities. They will need to fill out a request for accommodations and provide appropriate documentation. Students should also make an appointment to meet with the accommodations specialist on campus.

Counselor Admissions Interview

During the admissions interview, students will meet with a counselor to discuss skills, strengths, expectations for college, time management, resources available, and answer any questions the student may have about program(s) and their goals. If the student has completed all admissions requirements, they will be accepted into their program.

Transcripts and Documentation

Students are encouraged to supply official copies of all prior academic transcripts (high school, GED/HSED, college, and university) or other documents that indicate abilities since some programs require specific courses or experience. Contact each institution and have official transcripts mailed to the Student Services office on the WITC campus the student will be attending. If the student is still in high school, send a transcript of the courses completed along with the courses that will be taken prior to graduation. High school students who have completed tenth grade and are participating in the Wisconsin Youth Options program may also be eligible for WITC admission. Students should check with their high school counselor or a WITC counselor for more information.

Special Licensing Requirements

Students will need to meet additional admission requirements for technical diplomas and associate degrees connected to state or national licensing or governed by specific state regulations. Call a campus admissions advisor for details.

Success Strategies Courses

Success Strategies 1, a one-credit elective (a requirement in some programs) recommended for beginning students, teaches the eight On Course Success Principles for promoting greater academic and personal achievement. These timeless principles empower students to become active, responsible partners in their own education. Success Strategies 2, a one-credit elective recommended for graduating students, applies the principles to the workplace.

Waiting Lists

Waiting lists are established when the number of accepted students for a program exceeds the capacity of the program. Only students who meet a program’s admissions requirements are offered a place on the waiting list. Students will be offered the option of being placed on a waiting list during the counselor interview. WITC’s policy regarding waiting lists complies with the Wisconsin Technical College System Board policy. Students may begin general studies coursework and other available classes required for a program as a pre-program student.

Declared Program Major

Students have officially declared a major if they have paid their $30 application fee, have applied to a program, and have been accepted. When a student declares a program, they receive a variety of services that are not available to students who do not declare a program. Students with a declared program can test out of courses that are required, receive credit for prior learning, transfer credits from other institutions, and receive assistance from program advisors. Students also qualify to apply for financial aid.

Double Program Major

Combining two degrees or diplomas is a good way to expand a student’s career options. Students can add a second degree by filling out an application in the Student Services office. There is no additional application fee. As students complete their double major, courses in common will apply to both programs.

Undeclared Program Major

Students wanting to enroll in credit classes without entering a program of study will be classified in an undeclared program. Students in an undeclared program will only be allowed to enroll in courses if space is available after students with declared programs have enrolled. Students with an undeclared program do not qualify for financial aid. There is no application fee. Students will not be allowed to graduate from a program unless they have officially completed an application, paid a $30 application fee, successfully completed the admissions assessment, and interviewed with a counselor.

Auditing Courses

A student may audit a course to gain a general understanding of a subject matter, but only with approval from the respective instructor (or academic dean if the instructor is not available). This is dependent on the student meeting necessary prerequisites or other course requirements.
A student must decide whether to audit a course at the time of registration and must also complete the Intent to Audit form (can be found on the student portal in a downloadable format or in hard copy from the Student Services office). A student wanting to audit a course must pay the same tuition and fees as a student enrolled for credit. Any course prerequisites must be met before registering and enrolling in an audited course. Under the 1999 Wisconsin Act 154, individuals who are 60 years of age or older are exempt from paying tuition when auditing courses, excluding community service courses and apprenticeship courses on a space-available basis. Any auditor age 60 or over must be a resident of Wisconsin and will be required to pay course material fees and all other applicable student fees.

A student does not earn course credit for auditing a course, nor is an achievement grade awarded at course end. Audited courses may not be used to satisfy the prerequisites or requirements for other courses. Courses taken on an audit basis are not part of the student’s credit load for financial aid, veterans’ benefits, or for any other purpose for which the college is asked to certify a student’s full- or part-time enrollment status.

A student auditing a course is expected to meet attendance requirements, participate in classroom and lab work, and complete all assignments, but is not required to take examinations. At course end, an audited course will reflect a “G” notation on the student’s official record and transcript for that course. A student may not change his or her course enrollment status at a later date to receive credit for an audited course.

The college administration reserves the right to restrict the auditing of any course. Audit options are provided in courses on a space-available basis. Additional course sections do not need to be created to accommodate groups of student auditors.

A course may be dropped for audit and added for credit or dropped for credit and added for audit during the first 7 calendar days from the start of the course. Courses added for audit require students to complete an Intent to Audit form.

**International Student**

Wisconsin Indianhead Technical College (WITC) is authorized under United States Federal Law, Immigration and Nationality Act, Section (101)(a)(15)(F) to enroll non-immigrant alien students. Students are required to follow the regular admission procedures, provide a TOEFL (Test of English as a Foreign Language) score if a non-native speaker, a certificate of health and accident insurance, statement of financial resources to support education costs, and request a Certificate of Eligibility (Form I-20) from the college. International students must also take the College’s admission assessment.

International students will be admitted to associate degree or technical diploma programs on a space available basis. Wisconsin residents will be given preference in admissions to all programs. The process takes at least 120 days. Plan ahead and refer to the WITC Web site for international student details.

**Requirements for Admission**

WITC has an open admissions policy to enroll in the college. Additional requirements vary by program. Students should check with an admissions advisor at the appropriate campus. For more information, go to witc.edu.

**Grade Point Average (GPA) Requirements**

WITC does not require a specific GPA for admission, however, an admissions assessment is required. Resources are available to develop needed skills for completion of the admissions assessment. In addition, the Student Success Center on each campus has a variety of refresher courses that students can take before enrolled or while enrolled to enhance their academic and study skills.

**Credit for Prior Learning**

Credit for prior learning is the term used to describe receiving credit for prior skills and knowledge in the following categories:

- Postsecondary credits earned at WTCS (Wisconsin Technical College System) colleges
- Postsecondary credits earned at non-WTCS colleges
- High school credits for which students later seek college credit
- Credits earned completing a WITC program of apprentice-related technical instruction
- Subject area competency demonstrated by passing a district or national examination
- Previous work experience, education or training, or other prior learning comparable in content and rigor to a specific technical college course(s)
- Advanced sequential coursework
- Course substitution for WITC coursework

The criterion for awarding credit for prior learning is set on competencies previously attained and equivalent to WITC course competencies. These credits may be used in place of selected WITC course requirements if the competencies gained are equivalent to the WITC curriculum outcomes. Students may apply for credit for prior learning after they are admitted to a specific program.

At least 25 percent of technical studies credits in an associate degree program or 25 percent of occupational-specific credits in a technical diploma program must be earned at WITC. The college has developed policies and procedures governing the evaluation of credit for prior learning. Students are responsible for requesting credit and providing official transcripts prior to enrollment. For more information, contact a counselor at the appropriate campus.

Transfer credit guidelines and program curriculum requirements in effect at the time a student is admitted (defined as requirement term) are followed when making transfer credit evaluations. If a student does not begin taking coursework or has more than one term (excluding summer) without enrollment, a transfer credit evaluation will be recomputed using current transfer credit guidelines and program curriculum requirements as defined by the new requirement term.

Transferred courses that no longer meet program curriculum requirements or transfer credit guidelines as defined by the student’s requirement term will be removed from the student’s academic record.

**Postsecondary Credits Earned at WTCS Colleges**

WITC affirms the transferability of similar courses and those courses adopted as part of systemwide curricula among the WTCS colleges appropriate to a student’s associate degree, technical diploma, or certificate program.
For a student transferring from one WTCS college to another, credit awarded for courses designated as fulfilling the general education requirement at one WTCS institution will fulfill the same general education requirement at WITC.

WITC will reevaluate credits awarded as fulfilling program course requirements to determine their applicability to new program requirements other than those considered as general education. Additional documentation to assist in the reevaluation of the prior learning experiences may be required.

WITC will evaluate occupational-specific and general education credits earned as part of a technical diploma program or career pathway based on course competencies if students seek to transfer these credits as counting toward completion of an associate degree program.

Postsecondary Credits Earned at Non-WTCS Colleges
WITC awards credit for prior learning coursework from a nationally or regionally accredited institution. Coursework will be evaluated to determine the extent the credits apply to program requirements, general studies requirements, or other WITC program-specific graduation requirements.

Students who have a postsecondary or professional degree from a nationally or regionally accredited institution will receive credit for WITC associate degree general studies requirements. Students who qualify for 21 general studies credits may need to complete some additional general studies requirements based on documented program-specific general studies requirements. For example, a student with a business degree seeking to enroll in a WITC health occupations program may need to complete additional general studies science courses.

Students with credits earned at WTCS or non-WTCS colleges:

- Must request an official transcript be sent to the Student Services office.
- Will not be assessed additional fees for credit evaluation.
- Will only be awarded credit for coursework with a minimum grade point of 2.0 on a 4.0 scale.
- Will be awarded credit on a semester credit basis (quarter credits will be evaluated for competency and equivalency and granted accordingly).
- Associate degree students must complete 25% of technical studies and technical diploma students must complete 25% of occupational-specific credits through coursework taken at WITC.

Experiential Learning
A student will be awarded credit for a WITC course(s) for previous work experience, business and industry training, military education or experience, or other prior learning judged by the academic dean as comparable in content and level of rigor.

- Students must provide a portfolio that documents experience or education or a combination thereof that meets the competencies of the specific WITC course(s).
- Portfolio must be developed following WITC Experiential Learning/Portfolio Evaluation Procedures and Portfolio Format and Guidelines.
- There is a nonrefundable $20 per credit fee for each evaluation. If a challenge exam for a course exists, experiential learning is not acceptable for credit. This is not an option for a course previously attempted and unsuccessfully completed. Students currently enrolled in the course in which they are seeking experiential credit will have 7 calendar days from the start of the class to receive a full (100 percent) tuition refund. Requests for tuition refunds made after this date will be refunded using the state-mandated Fee Refund Policy.

Credit by Exam
WITC Challenge Exams

- WITC will award credit for prior learning to students who demonstrate subject-area competency through written, oral, performance, or practical exam, as well as an interview or any combination of these methods; mastery of course competencies is defined as 80 percent.
- Students will be assessed the current per credit non-refundable exam fee ($20) prior to taking the exam.
- Students not enrolled in the course may take the exam at any time.
- Students currently enrolled in the course may only take the challenge exam during the first seven calendar days from the start of the course; if successful, student must request a withdrawal from the course and will be given a full (100 percent) refund.
- Students may retake the same exam after one year from the date of the first attempt.
- Students are ineligible to take a challenge exam for a course in which they have previously received a final grade.
- WITC is not required to have challenge exams for all courses.

National Examination

- Credit may be awarded for nationally-recognized testing including, but not limited to, the College Board Advanced Placement (AP) exams, the International Baccalaureate exams, CLEP, DSST (formerly DANTES), and nationally recognized exams in specific occupational areas.
- Students must request official exam scores be sent directly to WITC Student Services.
- For Advanced Placement exams, a student must obtain a score of three (3) or higher to be awarded credit for the completion of the equivalent WITC course(s).
- For other national exams, WITC has identified acceptable scores required to award credit for equivalent courses.
- Students will not be assessed a fee for this service.

High School Credits
High school students will be awarded WITC college credit by successfully completing high school courses, including coursework completed by home-school students, that WITC deems comparable in scope and content to a specific WITC course(s) as follows:

High School Articulated Coursework
A student will be awarded credit for a specific WITC course(s) under the following conditions:

- The high school courses have been identified through an articulation agreement as comparable to the specific WITC course(s).
- The student presents appropriate documentation of high school course(s) completed with a minimum of 3.0 on a 4.0 scale.
• WITC will award credit for high school coursework articulated between a high school and WTCS colleges covered by an articulation agreement toward completion of a comparable WITC course(s) for students transferring from one technical college to another, credit awarded for high school coursework covered by an articulation agreement at the originating technical college will be accepted as credit toward completion of a comparable course(s) by the receiving technical college.

Youth Apprenticeship
A student who has completed a state-approved youth apprenticeship will be awarded credit for a specific WITC course(s) under the following conditions:
• The student presents appropriate documentation of successful completion of the youth apprenticeship program
• Associate degree students must complete 25% of technical studies and technical diploma students must complete 25% of occupational-specific credits through coursework taken at WITC.

Other Advanced High School Coursework (includes home-school)
A student may be awarded credit from WITC for a specific course(s) by presenting appropriate documentation of completion of one or more advanced high school courses, with a 3.0 on a 4.0 scale, that have not been identified through an articulation agreement; WITC deems the coursework comparable to a specific WITC course(s).

Registered Apprenticeship
When a student enrolls, WITC will award credit for the successful completion of a WTCS program of apprentice-related technical instruction and possession of Certificate of Apprenticeship issued by the Wisconsin Department of Workforce Development Bureau of Apprenticeship Standards (DWD-BAS) as fulfilling the 39-credit minimum Technical Studies requirement of the Technical Studies – Journey Worker Associate of Applied Science degree. The WTCS apprentice program must include at least 400-hours of prescribed apprentice-related technical instruction to fulfill the 39-credit minimum.

Advanced Sequential Courses
Credit for prior learning may be awarded for prerequisite coursework based on successful completion of advanced sequential courses.
• At the student’s request and approval of the academic dean, permission may be given to enroll in an advanced sequential course
• Prerequisite credit will be posted to the student’s academic record and will appear on the student transcript only after successful completion of the advanced sequential course
• Fees are not charged for credit granted through advanced sequential courses.

Course Substitution
A student may be awarded substitution credit for coursework completed at WITC in a prior term to substitute for comparable coursework in current plan or by requesting approval to enroll in a different course than required in the approved program plan.
• Student must be admitted to a program plan (cannot be preplan)
• Academic deans review and approve course substitution requests
• Course substitutions are processed after a grade is received
• Course substitutions are only reflected on the advisement transcript; the official transcript reflects actual coursework completed.

Registration/Enrollment
Registration is the process of signing up for classes. Whether students are enrolled in a program or not, they must complete the registration process. All WITC students must be in good financial standing with the college to register. Registration procedures vary depending on the following circumstances:

Students new to a degree or diploma program, must first complete the admissions process. When they have been admitted into a program, they will be notified if they need to attend an orientation for their program. Registration information is available on the student’s portal at MyWITC.

Students continuing in a program are encouraged to meet with their advisor, at which time the advisor will help them select courses. Enrollment appointment and registration instructions will be on the student’s portal at MyWITC.

A student that is continuing in a program but has not been active for a semester or longer, should contact an admissions advisor to be readmitted to the program.

If a student is NOT pursuing a degree or diploma, registration times and dates will vary depending on whether classes are for day or evening/credit or noncredit. See witc.edu and click on “Classfinder” for more information.

Late Registration
Students can register within seven calendar days from the start date of a 16-week course (includes Online and ITV) if vacancies still exist. Students that register late will be required to make up any missed work. All fees are due at time of late registration.

New Student Orientation
New students are strongly encouraged to attend new student orientation. New student orientation provides incoming students a chance to find out about campus activities, educational opportunities, student services, student activities, rules, policies and procedures, housing, insurance, employment services, and occupational outlooks. Meet with the college staff, meet academic advisors and meet fellow students. This singular event can provide students with a strong base of information that will assist in making the college experience successful!

Online Learning Orientation
The Online Learning Orientation is designed to acquaint students with the technologies and resources needed to successfully complete their program plan. This information is useful to students as they begin their coursework at WITC. Students should allow ample time to complete this orientation prior to the start of classes. To complete the orientation, visit www.witc.edu/academics/online/orientation/.
Class Expectations
At the beginning of each course, instructors will provide each student with a syllabus outlining the course requirements and expectations. Each syllabus will provide the following information:
• Course information (title, number, and credits/hours)
• Course description
• Course competencies and related collegewide and program outcomes
• Instructor contact information and office hours
• Required textbooks and supplies
• Assessment procedures and grading information
• College policies
• Course-specific policies

Student Academic Appeals
Students attending Wisconsin Indianhead Technical College may appeal a variety of decisions made by the college that directly impact their academic standing or progress, such as:
• Final grades in course(s)
• Credit for prior learning (including transfer credit, challenge exams, and work/life experiences)
• Satisfaction of graduation requirements

The relationship between a student and faculty member in the classroom is the most important relationship within the college structure. The student and the faculty member are expected to first attempt to resolve the issue on an informal basis.

Student Rights
• The right to appeal institutional decisions that affect their academic standing or progress.
• The right to present information relevant to the appeal.
• The right to appear with an advisor. No legal representation is allowed. The appeals process is an educational process, not judicial. The student’s advisor must be chosen from WITC staff. This advisor may be a counselor, instructor, dean, or other staff member. The advisor may attend informal and formal appeal proceedings to counsel the student and suggest questions.

Time Frame
• If no satisfactory resolution is achieved informally, the student must complete the Academic Appeal Request Form no later than six weeks after the end of the term when the grade was posted.
• For issues related to credit for prior learning and satisfaction of graduation requirements, decisions must be appealed no later than six weeks after the action was communicated to the student.

Informal Review
• Before any formal grade appeal is filed, it is required that the student meet with the faculty member to clarify and to attempt to resolve the disputed grade; if credits for prior learning or graduation requirements are an issue, the student should contact the registrar to discuss the situation
• In the event that a final grade issue cannot be resolved with the faculty member, the student must contact and meet with the faculty member’s academic dean to attempt to resolve the situation; if credit for prior learning or satisfaction of graduation is the issue, move directly to Formal Review

Formal Review
If the issue is still not resolved, the student may file a formal appeal (see student handbook for more information):
• The student must submit a formal, written appeal within six weeks after the end of the term utilizing the WITC Academic Appeals Request Form with any appropriate supporting documentation to the college registrar
• An Academic Appeals Committee will then review the appeal to determine if it merits further consideration. The Academic Appeals Committee is appointed by the vice president, Academic Affairs; the membership should include one collegewide director from Academic Affairs, one Student Affairs representative, one academic dean, two faculty, and the registrar who chairs the committee - committee members will be selected to provide objectivity and/or relevant knowledge or experience
  a. If the appeal has no merit, all persons involved in the appeal will be notified within two weeks of receipt of written appeal. The appeal will be dropped at this stage. The decision will be final.
  b. If the appeal has merit, the committee will:
   1) Act on the appeal within 30 days of the decision to investigate the appeal. The committee will schedule a hearing at the student’s campus to make it convenient for the student to attend part of the review. This scheduled date is communicated to all involved parties.
   2) The committee reviews the appeal and conducts a hearing with the student and other appropriate staff (if necessary).
   3) The committee will deliberate and make the final decision on the matter, preferably by group consensus. If consensus cannot be reached, a vote will be taken. A majority vote decides the appeal. All discussions will be kept confidential by group members.
   4) Within five (5) business days of the committee’s action, the student will be mailed a letter from the registrar outlining the final decision.
INSTRUCTIONS FOR COMPLETING THE APPLICATION FOR ADMISSION

This application form is the first step toward admission to any program (major) in the Wisconsin Technical College System. Once the college receives the form and appropriate fee, it will send you further information on requirements and/or procedures.

General Instructions
- Complete all sections of the form.
- Please print clearly.
- Consult the college of your choice for application dates, specific program (major) information and other details.
- If you wish to apply for admission to more than one Wisconsin technical college, submit a separate application form and application fee directly to each college.
- Apply early!

Application Fee
- Confirm the college’s application fee. Attach the nonrefundable application fee to each application you complete. Send a check or money order made out to the college; do not send cash.
- Each application must include the application fee. Confirm the total required by the college.

Transcripts
- Request official copies of all academic transcripts, including high school, Tests of General Educational Development (GED® Test), HSED, college or university. Contact each institution and ask to have your official transcripts mailed directly to the Admissions Office of the college(s) to which you are applying.
- If you are still enrolled in high school, send a transcript of the courses you have completed, along with a list of the courses to be taken prior to graduation.

Testing/Assessment
- Many Wisconsin technical colleges require testing for acceptance into specific programs. Test results are generally used to place you in courses and/or programs where you can succeed academically.
- If you have taken the ACT or SAT, please send your score report to the college.
- Contact the college for testing requirements.
- Accommodations are available for students with special needs.

Your Social Security Number:
The Wisconsin Technical College System may request and use your social security number for record keeping and statistical purposes related to auditing, enforcing and evaluating federally supported education programs (Federal law 20 U.S.C. § 1232q (1999)). You are required to provide your social security number if you are, or will be, applying for financial aid. If you will not be applying for financial aid, then providing your social security number is optional. However, there may be a delay associated with processing your application while an alternate number is assigned.

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Commitment to Equal Opportunity and Non-Discrimination
The Wisconsin Technical College System is committed to providing equal educational opportunity and non-discriminatory treatment without regard to race, color, national origin, sex, disability or other applicable legislated categories in all areas including, but not limited to recruitment, course and program access, admissions, curriculum, student policies and application, counseling, pre-vocational and job placement services, physical education and athletics, student financial assistance, apprentice training, housing, employment and extracurricular activities. The Affirmative Action Officer in each technical college is designated to handle inquiries and/or complaints regarding discrimination matters.

800.243.9482  witc.edu  2015-2016
APPLICATION FOR ADMISSION

PLEASE PRINT CLEARLY IN INK

1. Legal name: Last ___________________________ First ___________________________ Middle ___________________________

2. Former last name(s) (if applicable) ___________________________

3. Current mailing address ___________________________

4. City ___________________________ State ___________________________ Zip Code ___________________________

5. Permanent address (if different) ___________________________

6. City ___________________________ State ___________________________ Zip Code ___________________________

   Primary phone number ___________________________ Secondary phone number ________ Home ________ Cell ________ Work ________

7. E-mail address ___________________________

8. Social Security Number ___________________________

The following questions are confidential. Your responses will help the technical college evaluate recruitment and retention practices and will not affect admission to the college.

16. Select highest degree earned by either parent: [ ] High school diploma [ ] Associate degree [ ] Bachelor's degree [ ] Master's or beyond

17. The following questions relate to racial and ethnic identity. Please respond to both questions.

   17a. Are you Hispanic or Latino (a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race)? [ ] Yes [ ] No

   17b. Select any other group or groups that apply to you:

      [ ] American Indian or Alaska Native. A person whose ancestors include native peoples of North and South America (including Central America), and who maintains a tribal affiliation or community attachment.

      [ ] Asian. A person whose ancestors include native peoples of the Far East, Southeast Asia or the Indian subcontinent (including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippines, Thailand and Vietnam).

      [ ] Black or African American. A person whose ancestors include any of the black racial groups of Africa.

      [ ] Native Hawaiian or other Pacific Islander. A person whose ancestors include the native peoples of Hawaii, Guam, Samoa or other Pacific Islands.

      [ ] White. A person whose ancestors include native peoples of Europe, the Middle East or North Africa.

18. I wish to attend ___________________________ Technical College at ___________________________ Campus ___________________________

19. Have you attended this college before? [ ] Yes [ ] No

20. Semester you wish to begin: [ ] Fall [ ] Spring [ ] Summer (if applicable) If yes, last year and semester attended ___________________________ Year ___________________________

21. Program/major choice ___________________________ Program number (if known) ___________________________

22. Name of last high school attended ___________________________ City ___________________________ State ___________________________

   Are you a high school graduate? [ ] Yes [ ] No [ ] If yes, please enter your graduation date (month/year) ___________________________

23. If you did not complete high school and receive a diploma, have you completed either the GED Tests [ ] Yes [ ] No or HSED? [ ] Yes [ ] No

   If yes, date completed (MM/YY) ___________________________ Test center ___________________________

24. Circle or identify highest grade completed: 8 9 10 11 12 13 14 15 16 17 (Other) ___________________________

25. Select highest credential received:

   [ ] Some college (postsecondary credit) [ ] Associate degree

   [ ] Short-term diploma [ ] Associate degree plus additional credential

   [ ] 1-year diploma [ ] Baccalaureate

   [ ] 2-year diploma [ ] More than baccalaureate

26. List previous colleges and universities attended (official transcript will be required for credit transfer)

   College/University Name ___________________________ City ___________________________ State/Province ___________________________

   Date attended ___________________________ Date graduated ___________________________

27. I certify that the information on this application is true and complete to the best of my knowledge

   Date ___________________________ Signature ___________________________

STATEAPP 06/14

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# Programs

**Programs**

(Associate Degrees and Technical Diplomas)

Campuses add or discontinue programs periodically. Please contact the Admissions office for information on current program availability. Curricula may change at any time to assure that instruction is keeping pace with changing technology and workplace requirements.

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General Information

General Studies offers courses in communication, mathematics, science, social science, and behavioral science that provide the foundation for degree, certificate, and diploma programs at WITC. A General Studies certificate is also offered.

Prepared Learner courses equip students with the skills necessary to master college-level curricula. Accuplacer test scores, academic history, self-awareness, and/or length of time away from formal education steer students to these courses. Prepared Learner courses carry college credits and are eligible for financial aid. They cannot be counted for degree credit. Students whose placement scores require Prepared Learner enrollment must complete each required class with a grade of C or higher before registering for the subsequent General Studies course.

Basic Education offers individualized and group instruction in English, social studies, science, reading, mathematics, English Language Learning (ELL), civics, health, career exploration, and employability skills. Persons may attend classes to prepare for entry into specific WITC courses, to receive academic support with current program course materials, to prepare for employment, to increase knowledge of oral and written communication, and to fulfill personal goals. GED/HSED preparation and testing services are also available.

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<td><strong>Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better unless otherwise specified by program requirements.</strong></td>
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General Studies Course Descriptions

Communication

10801195 Written Communication - Credits: 3
Develops writing skills which include prewriting, drafting, reviewing, and editing. A variety of writing assignments are designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through the analysis of a variety of written documents.
PREREQUISITE: Successful scores on placement test or 10831103 Intro to College Writing.

10801196 Oral/Interpersonal Communication - Credits: 3
Focuses on developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects.

10801197 Technical Reporting - Credits: 3
The student will prepare and present oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course. PREREQUISITE: 10801195 Written Communication.

Mathematics

10804017 College Mathematics - Credits: 3
This course is designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities, solving absolute value equations and inequalities, quadratic equations, radical equations, exponential and logarithmic functions and equations, and applications. Emphasis will be placed on using calculators. Successful completion of College Technical Mathematics 1A and 1B is the equivalent of College Technical Mathematics 1. COREQUISITE: Successful scores on placement test or 10834109 Pre-Algebra.

10804011 College Technical Mathematics 1A - Credits: 3
Topics include: solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percent; proportions; and operations of polynomials. Emphasis will be on the application of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1. COREQUISITE: Successful scores on placement test or 10834109 Pre-Algebra.

10804014 College Technical Mathematics 1B - Credits: 2
This course is a continuation of College Technical Mathematics 1A. This course includes: measurement systems; computational geometry, right and oblique triangle trigonometry; and trigonometric functions on the unit circle. Emphasis will be on the application of skills to technical problems. Successful completion of concurrent enrollment in College Technical Mathematics 1A is required for course enrollment. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1. COREQUISITE: 10804113 College Technical Mathematics 1.

10804015 College Technical Mathematics 2A - Credits: 3
Topics include: solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percent; proportions; measurement systems; computational geometry; right and oblique triangle trigonometry; trigonometric functions on the unit circle; and operations on polynomials. Emphasis will be on the application of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 2A. COREQUISITE: Successful scores on placement test or 10834109 Pre-Algebra.

10804016 College Technical Mathematics 2B - Credits: 4
Topics include: vectors; velocity; trigonometric functions and their graphs; identities; exponential and logarithmic functions and equations; radical equations; equations with rational exponents; dimension of a circle; identities; sine and cosine graphs; complex numbers in polar and rectangular form; trigonometric equations; conic sections; and analysis of statistical data. Emphasis will be on the application of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 2B. COREQUISITE: Successful scores on placement test or 10834109 Pre-Algebra.

10804023 Math with Business Applications - Credits: 3
This course integrates algebraic concepts, proportions, percents, simple interest, compound interest, annuities, and basic statistics with business/consumer scenarios. It also applies math concepts to the purchasing/buying and selling processes. PREREQUISITE: Successful scores on placement test or 10834109 Pre-Algebra.

10804033 Mathematics and Logic - Credits: 3
Students will apply mathematical problem solving techniques. Topics will include symbolic logic, set, algebra, Boolean algebra, and number bases. PREREQUISITE: Successful score on placement test or 10834109 Pre-Algebra.

10804138 Math for Health Professionals - Credits: 2
Following an arithmetic review, this course emphasizes those mathematical skills necessary for success in the nursing field and related health occupations. Emphasis will be placed on computational skills and applications of rational numbers; problem solving skills with ratios, proportions, and percents; basic principles and application of algebra, graphing, and statistics; measurement skills in U.S. Customary and Metric systems as well as apothecary and household systems; and the use of calculators as a tool. PREREQUISITE: Successful scores on placement test or 10834109 Pre-Algebra.

10804119 Introductory Statistics - Credits: 3
Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about populations including ANOVA. Recommended Prerequisite: Introductory computer skills to include spreadsheets. PREREQUISITE: Successful score on placement test or successful completion of 10824100 Pre-Algebra or any associate degree or college parallel level WIC's mathematics course.

10824035 Math 355 - Credits: 3
This technical diploma course begins with a short review of basic arithmetic skills and continues with the application of these skills. Problem solving involving fractional and decimal dimensions is emphasized. The course also includes introductory algebra with emphasis on utilization of formulae including work with signed numbers. First-degree equation solution is also emphasized.

10824036 Math 364 - Credits: 2
This technical diploma course is a continuation of Math 355. Topics covered include the basic geometry of plane and solid figures, right-triangle trigonometry, oblique-triangle trigonometry, and applications of these topics to trade and industry programs. PREREQUISITE: 10824035 Math 355.

10824035 Math 365 - Credits: 3
This technical diploma course is a continuation of Math 355. Topics covered include the basic geometry of plane and solid figures, right-triangle trigonometry, oblique-triangle trigonometry, and applications of these topics to trade and technical programs. Additional topics covered in this course are program specific. These topics include applications to machine shop formulas, Cartesian coordinates, point-to-point programming, land-surveying mathematics, and framing-square calculations. PREREQUISITE: 10824035 Math 355.

10824037 Math 373 - Credits: 2
This course covers practical applications of whole numbers, fractions, decimals, percent, proportion, and formula evaluation. The course also includes measurement, U.S. and metric systems of measurement, and basic geometry.

10824038 Math 383 - Credits: 2
This course is a continuation of Math 373. A more thorough coverage of solving equations and rearranging formulas with special applications to formulas used in the mechanical technician programs. Other topics include a study of solid geometry and direct and inverse proportions for work with hydraulics and transmission studies. The course is team-taught with the core instructor and direct application of math skills taught will be assessed in the math class and during time spent with the core instructor. PREREQUISITE: 10824037 Math 373.
Science

10806112 Principles of Sustainability - Credits: 3
Prepares the student to develop sustainable literacy, analyze the interconnections among the physical and biological sciences and environmental systems, summarize the effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce the use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal and recycling in the U.S., and analyze approaches used by your community to promote and implement sustainability.

10806122 Natural Sciences in Society - Credits: 3
Focuses on the history, philosophy, common concepts and current issues of natural science which has impacted the United States and global society. Explores processes required to analyze natural science issues. Learners correlate science issues to personal and professional experiences.

10806134 General Chemistry - Credits: 4
Covers the fundamentals of chemistry. Topics include the metric system, problem solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws. PREREQUISITE: 10804113 College Technical Math 1A or other college-level algebra course.

10806140 Chemistry - Credits: 1
This is a combined lecture/laboratory course for those entering health occupations programs. You will study chemical bonds and the solution process; chemical reactions and chemical equilibria; and acids and bases. You will participate in labs where appropriate. No previous background in chemistry is required. Good math skills are helpful.

10806175 Pathophysiology - Credits: 3
This introductory course in pathophysiology covers topics related to alterations of homeostasis and the associated pathophysiological processes. Course studies include the processes involved that generate illness; signs and symptoms of commonly occurring illness states; and effects of disease processes on the cell. Review of normal homeostatic mechanisms is included. Study of these fundamental processes in relation to the pathophysiological processes can enable the students to apply this knowledge to clinical situations. PREREQUISITES: 10806179 Advanced Anatomy and Physiology and 10806197 Microbiology.

10806177 General Anatomy and Physiology - Credits: 4
Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision-making and professional communication with colleagues and patients. This course includes a one-credit lab component that supports the course objectives. (This course also provides the foundation, and is prerequisite to, Advanced Anatomy and Physiology.) PREREQUISITE: One year of High School Chemistry or one semester of lab-based college Chemistry, preferably within the last five years.

10806179 Advanced Anatomy and Physiology - Credits: 4
Advanced Anatomy and Physiology is the second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body systems approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery within a classroom and laboratory setting. Experimental work in the science lab. Corequisite analysis of cellular metabolism, the individual components of body systems such as the nervous, neumatocellular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance and blood. Integration of genetics to human reproduction and development are also included in this course. PREREQUISITE: 10806177 General Anatomy and Physiology, preferably within the last five years.

10806197 Microbiology - Credits: 4
Examines microbial structure, metabolism, genetics, growth and the relationship between humans and microorganisms. Addresses disease production, epidemiology, host defense mechanisms and the medical impact of microbes. Examines the role of microbes in the environment and biotechnology. This course includes a one-credit lab component that supports the course objectives. PREREQUISITE: 10806177 General Anatomy and Physiology, preferably within the last five years.

10806198 Human Biology - Credits: 4
This is an introductory course that emphasizes the structure of the human body and the functional interrelationships of the body's systems. Consideration is given to the human body and disease, human genetics, human ecology, and the role that humans play in the environment. The course consists of three hours of lecture and two hours of lab per week. Note: this course does not meet requirements for or substitute for General Anatomy and Physiology or Anatomy & Physiology 1 and II.

31806310 Science for Cosmetologists - Credits: 3
This course explores the fundamental concepts of physics, chemistry, human anatomy, physiology, and disease. Students examine and learn to apply scientific methods and reasoning to develop problem-solving skills. This course provides the student with a broad, integrated understanding of the impact of the various sciences on cosmetology processes, and prepares the participant to apply scientific principles in the cosmetology field.

31806352 Applied Physical Science - Credits: 2
Course contains a variety of applied physical science principles including light, color, chemistry, material properties, and direct current electricity. These principles will be applied to applications within the trades.

32806300 Applied Materials Science - Credits: 2
This is a one-semester course consisting of a study of the chemical and physical properties of industrial materials. Areas of study include properties of metals, plastics, and ceramics with the primary emphasis being on metals.

32806351 Applied Science - Credits: 2
Applied Science is a basic science course that applies concepts from physics and chemistry to the trades and industry. Topics include work, power, energy, the principles of fluids applied to hydraulics and pneumatics, and the basic properties of solids.

Social Science

10809122 Introduction to American Government - Credits: 3
Introduces American political processes and Institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

10809166 Introduction to Ethics: Theory and Application - Credits: 3
This course provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations.

10809172 Introduction to Diversity Studies - Credits: 3
Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, religion are explored.

10809174 Social Problems - Credits: 3
Explores the causes of and possible solutions to selected social problems, such as inequality, crime and deviance, and poverty. Students will examine the interrelationships of social problems and their roots in fundamental societal institutions. PREREQUISITE: 10809196 Introduction to Sociology.

10809195 Economics - Credits: 3
This course is designed to give an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

10809196 Introduction to Sociology - Credits: 3
Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.
Behavioral Science

10809159
Abnormal Psychology - Credits: 3
The course in Abnormal Psychology surveys the essential features, possible causes, and assessment and treatment of the various types of abnormal behavior from the viewpoint of the major theoretical perspectives in the field of abnormal psychology. Students will be introduced to the diagnosis system of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). In addition, the history of the psychology of abnormality will be traced. Cultural and social perspectives in understanding and responding to abnormal behavior will be explored as well as current topics and issues within abnormal psychology. PREREQUISITE: 10809198 Introduction to Psychology.

10809188
Developmental Psychology - Credits: 3
Developmental Psychology is the study of human development throughout the lifespan. This course explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills will enable students to gain an increased knowledge and understanding of themselves and others.

10809198
Introduction to Psychology - Credits: 3
This introductory course in psychology is a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings.

32890371
Applied Human Relations - Credits: 2
A course designed to give students insight into how their own personality and abilities affect their own relationships with others at work, in the family, and in society. Areas stressed include presenting a professional image in seeking employment, developing a positive work attitude, and an awareness of personal adjustments needed to succeed on any new job.

Interdisciplinary

10890100
Success Strategies 1 - Credits: 1
This course is designed to facilitate greater learner success affecting the academic, professional, and personal lives of students.

10890101
Success Strategies 2 - Credits: 1
This course is designed to facilitate greater learner success affecting the academic, professional, and personal lives of students. PREREQUISITE: 10890100 Success Strategies 1.

10890105
Job Quest - Credits: 1
This course is designed to enhance the student’s ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

10890120
Service Learning - Credits: 3
This course is designed to provide students with work experience in community settings. Students plan and participate in activities that address community needs and develop their academic, program, and core ability skills. Students will log and journal experiences to reflect their learning and may develop a portfolio to document skill development.

32890300
Contemporary Workplace - Credits: 2
This course prepares you to enter the contemporary workplace with a variety of skills needed in today’s rapidly changing world of work. You will explore aspects of professionalism, management and leadership styles, the impact of diversity, and aspects of customer service. In addition, legal issues, health, safety, and security concerns, employee/employer relationships, employee compensation options; and effective interpersonal relationships will be examined. Interpersonal skill building will be a focus throughout with hands-on, practical experiences and exercises designed to reinforce learning.

32890305
Applied Information Resources - Credits: 2
This course will allow the learner to develop skills in research, evaluation, selection, and preparation of information resources useful to their career area. Learners will use various information resources, including computer software applications to develop sound information research strategies. Learners will be exposed to ethical use of information, information provided by various methods and stored in various management formats, communicating by e-mail, developing search and selection of information resources, analysis, and use of results. This discussion- and lab-based course will use individual and group work to search and share information resources. Competencies learned in this course will be able to be applied in other courses within your program and will continue to be valuable in lifelong learning. You should have experience in keyboarding and basic computer skills for this course.

Prepared Learner

10831103
Intro to College Writing - Credits: 3
This transitional course prepares the student for enrollment in Written Communication and introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. PREREQUISITE: Successful scores on placement test or Basic Education coursework.

10831409
Pre-Algebra - Credits: 3
Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra related courses. PREREQUISITE: Successful scores on placement test or Basic Education coursework.

10835103
Study Skills - Credits: 1
This course provides learners with strategies to develop study skills for success in college. Through hands-on experiences, learners will apply study skills, learn how to think critically, and use information resources and technology.

10838104
Intro to College Reading - Credits: 2
Provides learners with opportunities to develop and expand reading skills including comprehension and vocabulary. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.
Program Overview
Accounting is an important tool of business. This Accounting program is a two-year associate degree that will prepare students to assemble, analyze, interpret, and forecast essential information about the operation of an organization. Accountants prepare financial statements, cost studies, and tax reports.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Accounting two-year associate degree includes an embedded technical diploma option as documented below:

• 31-101-1 Accounting Assistant (page 46)

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
• Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm.

Student Profile
Students in the Accounting program should:
• Be organized, accurate, and detail oriented
• Possess good communication skills
• Be comfortable using computers and 10-key calculators
• Enjoy working alone and with others

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Accounting
• Consumer Math
• Keyboarding
• Basic computer skills
• English/Basic grammar

Key to the student’s success in the program is to enjoy working with numbers and facts and to strive for accuracy.

Program Outcomes
Employers will expect Accounting graduates to be able to:
• Process financial transactions throughout the accounting cycle
• Analyze financial and business information to support planning and decision making
• Perform payroll preparation, reporting, and analysis tasks
• Perform cost accounting preparation, reporting, and analysis tasks
• Perform individual and/or organizational tax accounting preparation, reporting, and analysis tasks
• Identify internal controls to reduce risk

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Accounting has been called the “language of business.” Associate degree graduates typically fill entry-level accounting positions and may move into mid-management. Typical positions available to students after graduation include:
• Accountant
• Accounts Payable Specialist
• Accounts Receivable Specialist
• Bookkeeper
• Cost Accountant
• Payroll Accountant
• Tax Accountant

Some graduates also continue their education in the field of Accounting at a four-year institution.

Curriculum
Number Course Title Credits

Technical Studies Courses
10101101 Financial Accounting 1 4
10101103 Financial Accounting 2 ▲ 4
10101105 Intermediate Accounting 1 ▲ 4
10101107 Intermediate Accounting 2 ▲ 4
10101121 Cost and Managerial Accounting ▲ 4
10101123 Income Tax Accounting 4
10101124 Payroll Systems and Accounting ▲ 3
10101135 Government Accounting ▲ 3
10101172 Accounting Applications Using Excel ▲ 1
10101174 QuickBooks Accounting - Beginning ▲ 2
10101175 Accounting Systems ▲ 2
10101178 QuickBooks Accounting - Advanced ▲ 1
10103146 MS Word A 1
10103151 MS Excel A 1
10103152 MS Excel B ▲ 1
10105125 Business Law 3
10196191 Supervision 3
10890105 Job Quest 1 ▲ 1

General Studies Courses ▲
10801195 Written Communication ▲ 3
10801197 Technical Reporting ▲ 3
10801198 Speech or ▲ 3
10801196 Oral/Interpersonal Communication
10804123 Math with Business Applications ▲ 3
10809195 Economics 3
10809196 Introduction to Sociology 3
10809198 Introduction to Psychology ▲ 3
21

ELECTIVES
2

PROGRAM REQUIREMENTS 69

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41-43 for course descriptions.

Students must earn a grade point of 2.0 or better in all required (10101XXX) courses.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10101101 Financial Accounting 1 - Credits: 4
Complete accounting cycle, special journals, payroll tax principles, special procedures, and financial statements. Accounting applications through practice set approach.

10101103 Financial Accounting 2 - Credits: 4
Students will be introduced to corporate accounting. Students will have an understanding of corporate transactions with an emphasis on stocks and bonds. The student will analyze financial statements, including the statement of cash flows. Managerial accounting is also introduced in this class. PREREQUISITE: 10101101 Financial Accounting 1.

10101105 Intermediate Accounting 1 - Credits: 4
Intermediate Accounting course (in sequence with 10101107 Intermediate Accounting 2) covering complex accounting theory, financial statement preparation, and analysis of an in-depth nature. PREREQUISITES: 10101103 Financial Accounting 2 and 10103152 MS Excel B.

10101107 Intermediate Accounting 2 - Credits: 4

10101121 Cost and Managerial Accounting - Credits: 4
This course addresses cost accounting principles, procedures, and managerial applications of cost data; theory of job order cost, process cost, and standard cost; and managerial cost decision making. Though not required, 10101103 Financial Accounting 2 is also recommended prior to taking this course. PREREQUISITES: 10101101 Financial Accounting 1 and 10103152 MS Excel B.

10101123 Income Tax Accounting - Credits: 4
This course will prepare you to complete and file individual federal and Wisconsin income tax returns including the 1040EZ, W2, 1099A, and 1040 with most common supporting schedules. This course is lecture- and project-based with most returns done manually and some comprehensive problems being computerized.

10101124 Payroll Systems and Accounting - Credits: 3

10101135 Government Accounting - Credits: 3
An introductory study of generally accepted accounting principles and practices found in nonprofit organizations. Comparisons are made between principles and practices applicable to government, institutions, hospitals, and other nonprofit organizations and those that are generally accepted in business. PREREQUISITE: 10101103 Financial Accounting 2.

10101172 Accounting Applications Using Excel - Credits: 1
Students will learn to use MS Excel as it pertains mainly to accounting related functions. Activities will include working with pivot tables, exporting/importing information, continuing with advanced formulas and macros, using analytical options, and developing creativity/application skills in building spreadsheets to replace and enhance manual record keeping, calculations, and reporting. PREREQUISITES: 10101103 Financial Accounting 2 and 10103152 MS Excel B.

10101174 QuickBooks Accounting - Beginning - Credits: 2
Students will learn the QuickBooks accounting software by performing tasks that involve the general ledger, accounts payable, accounts receivable, inventory, payroll, and financial statements. Students will be responsible for finding and correcting errors in the QuickBooks program. PREREQUISITE: 10101101 Financial Accounting 1 or 10101176 Financial Accounting 1A.

10101175 Accounting Systems - Credits: 2
Accounting Systems examines the role of the subsystems within the accounting model. Efficiency in the use of forms, methods of processing data (both manually and electronically), internal control concepts/concepts, and how management uses output is included. Coursework includes the use of commercially available accounting software to manipulate data and perform basic accounting functions. COREQUISITE: 10101107 Intermediate Accounting 2.

10101176 QuickBooks Accounting - Advanced - Credits: 1
Using knowledge gained in QuickBooks Accounting - Beginning, students will develop further skills in importing/exporting MS Word/Excel office documents, document management, budgets, estimations, audit trails, presentation of documents, analysis of accounting controls, customizing reports/forms, and possible QuickBooks Mobile Apps. PREREQUISITE: 10101174 QuickBooks Accounting - Beginning.

10103146 MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103151 MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10103152 MS Excel B - Credits: 1
Students will learn to use MS Excel. Credit B activities will include using advanced features of formulas, object linking and embedding, multiple worksheets, 3-D references, macro basics and database basics. COREQUISITE: 10103151 MS Excel A.

10105125 Business Law - Credits: 3
Business Law provides the student with a working knowledge of the legal system, business ethics, and essentials of contracts. Students gain knowledge in logical and analytical thinking, and are encouraged to challenge legal issues and defend their point of view.

10106191 Supervision - Credits: 3
In Supervision, the learner applies the skills and tools necessary to perform the functions of a frontline leader. Each learner will demonstrate the application of strategies and transition to a contemporary supervisory role including day-to-day operations, analysis, delegation, controlling, staffing, leadership, problem solving, team skills, motivation, and training.

10890105 Job Quest - Credits: 1
This course is designed to enhance the student's ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witic.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number employed</td>
<td>31</td>
</tr>
<tr>
<td>% Employed in WITC</td>
<td>67%</td>
</tr>
<tr>
<td>Number of responses</td>
<td>40</td>
</tr>
<tr>
<td>Percent employed</td>
<td>84%</td>
</tr>
<tr>
<td>Number available for employment</td>
<td>37</td>
</tr>
<tr>
<td>Employed in related field</td>
<td>21</td>
</tr>
<tr>
<td>Range of yearly salary</td>
<td>$20,798-$53,324</td>
</tr>
<tr>
<td>Average yearly salary</td>
<td>$32,208</td>
</tr>
</tbody>
</table>

Average yearly salary $32,208

800.243.9482
witic.edu
2015-2016
Program Overview
Accounting is an important tool of business. Accounting assistants maintain accounting records such as receivables, payables, purchasing, billing (sales), inventory, and payroll.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
• Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm.

Student Profile
Accounting Assistant students should:
• Be organized, accurate, and detail oriented
• Possess good communication skills
• Be comfortable using computers and 10-key calculators
• Enjoy working alone and with others

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Accounting
• Consumer Math
• Keyboarding
• Basic computer skills
• English/Basic grammar

Program Outcomes
Employers will expect Accounting Assistant graduates to be able to:
• Process financial transactions throughout the accounting cycle
• Analyze basic financial and business information to support planning and decision making
• Perform payroll preparation, reporting, and analysis tasks
Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Positions available to students after graduation may include:
• Bookkeeper
• Accounts Receivable Specialist
• Accounts Payable Specialist
• Inventory Specialist
• Payroll Accountant
The Accounting Assistant program is the first year of the two-year Accounting associate degree program.

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10101101</td>
<td>Financial Accounting 1</td>
<td>4</td>
</tr>
<tr>
<td>10101103</td>
<td>Financial Accounting 2 ▲</td>
<td>4</td>
</tr>
<tr>
<td>10101124</td>
<td>Payroll Systems and Accounting ▲</td>
<td>3</td>
</tr>
<tr>
<td>10101174</td>
<td>QuickBooks Accounting - Beginning ▲</td>
<td>2</td>
</tr>
<tr>
<td>10103146</td>
<td>MS Word A</td>
<td>1</td>
</tr>
<tr>
<td>10103151</td>
<td>MS Excel A</td>
<td>1</td>
</tr>
<tr>
<td>10103152</td>
<td>MS Excel B ▲</td>
<td>1</td>
</tr>
<tr>
<td>10804123</td>
<td>Math with Business Applications ▲</td>
<td>3</td>
</tr>
<tr>
<td>10890105</td>
<td>Job Quest</td>
<td>1</td>
</tr>
</tbody>
</table>

Occupational Supportive/ General Studies Courses ▲
- 10801195 Written Communication ▲ | 3       |
- 10801198 Speech or               | 3       |
- 10801196 Oral/Interpersonal Communication | 3       |
- 10809198 Introduction to Psychology | 3       |

PROGRAM REQUIREMENTS | 29

Graduates may choose to continue with the second year of the Accounting associate degree program.
▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▼ See pages 41-43 for course descriptions.
Students must earn a grade point of 2.0 or better in all required (10101XXX) courses.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10101101
Financial Accounting 1 - Credits: 4
Complete accounting cycle, special journals, payroll tax principles, special procedures, and financial statements. Accounting applications through practice set approach.

10101103
Financial Accounting 2 - Credits: 4
Students will be introduced to corporate accounting. Students will have an understanding of corporate transactions with an emphasis on stocks and bonds. The student will analyze financial statements including the statement of cash flows. Managerial accounting is also introduced in this class. PREREQUISITE: 10101101 Financial Accounting 1.

10101124
Payroll Systems and Accounting - Credits: 3

10101174
QuickBooks Accounting - Beginning - Credits: 2
Students will learn the QuickBooks accounting software by performing tasks that involve the general ledger, accounts payable, accounts receivable, inventory, payroll, and financial statements. Students will be responsible for finding and correcting errors in the QuickBooks program. PREREQUISITE: 10101101 Financial Accounting 1 or 10101176 Financial Accounting 1A.

10103146
MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103152
MS Excel B - Credits: 1
Students will learn to use MS Excel. Credit B activities will include using advanced features of formulas, object linking and embedding, multiple worksheets, 3-D references, macro basics and database basics. COREQUISITE: 10103151 MS Excel A.

10804123
Math with Business Applications - Credits: 3
This course integrates algebraic concepts, proportions, percents, simple interest, compound interest, annuities, and basic statistics with business/consumer scenarios. It also applies math concepts to the purchasing/buying and selling processes. PREREQUISITE: Successful scores on placement test or 10834109 Pre-Algebra.

10890105
Job Quest - Credits: 1
This course is designed to enhance the student’s ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

Number of graduates 13
Number of responses 11
Number available for employment 10
Number employed 7
Percent employed 70%
Number employed in related field 3
% Employed in WITC district 43%
Range of yearly salary $22,878*-$38,997*
Average yearly salary $28,880*

*Average yearly salary based on composite of graduates from Wisconsin's 16 technical college districts (including WITC graduates).

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/acctasst/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

Number of graduates 13
Number of responses 11
Number available for employment 10
Number employed 7
Percent employed 70%
Number employed in related field 3
% Employed in WITC district 43%
Range of yearly salary $22,878*-$38,997*
Average yearly salary $28,880*

*Average yearly salary based on composite of graduates from Wisconsin’s 16 technical college districts (including WITC graduates).
Administrative Professional
10-106-6 Associate Degree

Program Overview
The Administrative Professional program prepares individuals with the software/hardware, administrative, and interpersonal skills needed to perform the duties of administrative support personnel. The second year of the program allows students the flexibility of increasing skills in either communications or software applications. Many of the skill subjects are competency based or are available through alternate delivery methods. With additional education and/or work experience, there is opportunity for graduates to advance into supervisory or managerial positions.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Administrative Professional two-year associate degree includes an embedded technical diploma option as documented below:
• 31-106-8 Office Support Specialist (page 142)

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Administrative Professional students should be able to:
• Follow instructions quickly
• Express ideas verbally and in writing
• Enjoy learning new methods and procedures
• Perform responsible work without close supervision
• Exhibit a willingness to work with others
• Adapt to changing situations
• Work repetitive tasks and identify errors
Key to the student’s success as an Administrative Professional is having a good command of English and effective human relations skills.

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Keyboarding
• Basic computer skills
• English/Basic grammar
• General Math
• Recordkeeping
• Accounting

Program Outcomes
Employers will expect Administrative Professional graduates to be able to:
• Demonstrate effective workplace communications
• Apply technology skills to business and administrative tasks
• Perform routine administrative procedures
• Manage administrative projects
• Maintain internal and external relationships
• Model professionalism in the workplace
Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Graduates of the Administrative Professional program are in high demand because they have the skills required in today’s office. Positions available after graduation may include:
• Administrative Assistant
• Administrative Professional
• Executive Assistant
• Office Manager
• Information Manager
• Executive, Administrative, Corporate, and Personal Secretary
• Records Manager
• Office Support Specialist
• Transcriptionist
• Legal Office Support Person
• Medical Office Support Person
• Web Site Support Person

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>10101174</td>
<td>QuickBooks Accounting - Beginning</td>
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</tr>
<tr>
<td>10101176</td>
<td>Financial Accounting 1A</td>
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<td>10103106</td>
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<td>10103147</td>
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<tr>
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<td>10103152</td>
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<td>10103162</td>
<td>MS Access A</td>
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<td>10105115</td>
<td>Professional Profile</td>
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<tr>
<td>10106110</td>
<td>Document Formatting</td>
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<tr>
<td>10103156</td>
<td>Adobe Photoshop</td>
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<tr>
<td>10106127</td>
<td>Desktop Publishing</td>
<td>2</td>
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<tr>
<td>10106128</td>
<td>Software Integration ▲</td>
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<tr>
<td>10106129</td>
<td>Web Technologies</td>
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<td>Administrative Office Procedures</td>
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<tr>
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<td>10106164</td>
<td>Office Communication</td>
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<td>10106165</td>
<td>Information Management</td>
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<tr>
<td>10106166</td>
<td>Administrative Professional Capstone ▲</td>
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<tr>
<td>10106167</td>
<td>Computer and Business Technologies</td>
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<tr>
<td>10890105</td>
<td>Job Quest</td>
<td>1</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>39</td>
</tr>
</tbody>
</table>

General Studies Courses ▲
• Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>10801195</td>
<td>Written Communication ▲</td>
</tr>
<tr>
<td>10801196</td>
<td>Oral/Interpersonal Communication or</td>
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<tr>
<td>10801198</td>
<td>Speech</td>
</tr>
<tr>
<td>10801197</td>
<td>Technical Reporting ▲</td>
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<td>10804123</td>
<td>Math with Business Applications ▲</td>
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<td>10809195</td>
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<td>10809172</td>
<td>Introduction to Diversity Studies or</td>
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<tr>
<td>10809196</td>
<td>Introduction to Sociology</td>
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<td>10809198</td>
<td>Introduction to Psychology</td>
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ELECTIVES

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
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PROGRAM REQUIREMENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
</tr>
</thead>
</table>

▲ | Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

See pages 41-43 for course descriptions.
10101174
QuickBooks Accounting - Beginning - Credits: 2
Students will learn the QuickBooks accounting software by performing tasks that involve the general ledger, accounts payable, accounts receivable, inventory, payroll, and financial statements. Students will be responsible for finding and correcting errors in the QuickBooks program. PREREQUISITE: 10101101 Financial Accounting 1 or 10101176 Financial Accounting 1A.

10101176
Financial Accounting 1A - Credits: 2
This is a basic accounting course for non-accounting program students. The scope of study focuses on an introduction to business and accounting, analyzing and recording accounting transactions, performing the adjusting process, and completing the accounting cycle. Understanding is based both on theory and application.

10103106
MS PowerPoint - Credits: 1
A complete presentation graphics course that allows you to produce professional-looking presentations. It gives you the flexibility to make informal presentations using overhead transparencies, electronic presentations, formal presentations using 35mm slides, or virtual presentations. Additionally, you can create paper printouts, outlines, speaker notes, and audience handouts.

10103125
MS Outlook - Credits: 1
This course introduces the basics of Microsoft Outlook. Participants will use e-mail, calendar, files, and other features to effectively manage business and personal information.

10103146
MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103147
MS Word B - Credits: 1
Students will learn word processing using MS Word. Credit B activities include tables, mail merge, sort, graphics, and special features of MS Word. COREQUISITE: 10103146 MS Word A.

10103148
MS Word C - Credits: 1
Students will learn word processing using MS Word. Credit C activities will include Wordgroup collaboration, macros, styles, and advanced formatting features of MS Word. COREQUISITE: 10103147 MS Word B.

10103151
MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10103152
MS Excel B - Credits: 1
Students will learn to use MS Excel. Credit B activities will include using advanced features of formulas, object linking and embedding, multiple worksheets, 3-D references, macro basics and database basics. COREQUISITE: 10103151 MS Excel A.

10103162
MS Access A - Credits: 1
Learners create, edit, sort, and query a database. They also learn how to create and print basic forms and reports.

10105115
Professional Profile - Credits: 1
The purpose of this course is to strengthen the professional image. Students begin to develop self-awareness of elements affecting their personal and work relationships. Guidelines for determining appropriate grooming, dress, and poise will be covered. Personal life management along with career/life goal setting will be reinforced. This class should be taken in the last semester of the program.

10106110
Document Formatting - Credits: 2
This hands-on course covers formatting styles of business letters, business and academic reports, memos, tables, and business documents. The course also includes drill work for improving keying speed and accuracy. Students should be able to key 40 words per minute.

10103156
Adobe Photoshop - Credits: 2
Students will become skilled in using the Adobe Photoshop image-editing software package. Students will create and modify graphic images using various tools and techniques. They will learn to create original artwork, manipulate images, and create images for the Web and retouch photographs.

10106127
Desktop Publishing - Credits: 2
Preparation of professional-looking documents using desktop publishing software or word processing software with desktop publishing capabilities.

10106128
Software Integration - Credits: 1
This course is designed to integrate computer applications. Participants will prepare and enhance documents using word processing, spreadsheets, database, and presentation graphics software. PREREQUISITES: 10103106 MS PowerPoint, 10103146 MS Word A, 10103147 MS Word B, 10103148 MS Word C, 10103151 MS Excel A, 10103152 MS Excel B, 10103162 MS Access A.

10106129
Web Technologies - Credits: 3
This course presents the foundational skills necessary to function in a Web 2.0 environment. Students will create a web site using effective web page design concepts including text, graphics, hypertext links, tables, forms, layers, templates, and Cascading Style Sheets (CSS) and behaviors. This course will also introduce students to a broad spectrum of concepts and issues associated with E-Business, cloud based documents and Social Media from marketing to network security to customer service. A general knowledge of working in a Windows environment and keyboarding skills are recommended.

10106139
Administrative Office Procedures - Credits: 3
This course is designed to develop professional skills and attitudes needed in today's global business environment. Topics include making ethical decisions, working independently and as a team member, and managing time. Telecommunications, mail processing, travel arrangements and conferences, public relations, and ergonomics will be included. Previous word processing and proofreading experience is recommended.

10106146
Proofreading for the Office - Credits: 3
This course provides the learner with techniques used in proofreading office documents from both hard and soft copy (computer screen). Learners will incorporate the use of office reference manuals. This project-based course uses individual and group activities as well as in-class and out-of-class work.

10106164
Office Communication - Credits: 3
This course provides the student with the opportunity to develop professional office communication skills using verbal recognition, transcribers, and hard copy material. Students will learn to speak, write, and listen in a clear, courteous, concise, and correct manner. Students will apply these skills to create and share documents electronically while applying the proper document format.

10106165
Information Management - Credits: 2
This course will include coverage of the different indexing systems (alphabetic, numeric, subject, geographic, and chronological) as well as an overview of the entire records management function -- planning, designing, classifying, controlling, and evaluation. Electronic filing methods are utilized at locations where equipment is available.

10106166
Administrative Professional Capstone - Credits: 3
This course is designed to provide students with an experience to simulate tasks and duties performed in their field. It provides a foundation and exposure to Web conferencing techniques available virtual platforms; experience providing computer support in an office setting while tracking the requests; and exposure and use of emerging Internet-based softwares to assist them in their professional duties. Setting priorities, meeting deadlines, and doing maintainable work are stressed. This is a final semester capstone course and requires a high level of ability and mastery of communication, keying, proper document formatting, records management, word processing, spreadsheets, presentations, graphics, databases, and related field requirements. PREREQUISITES: 10106110 Document Formatting and 10106139 Administrative Office Procedures and COREQUISITE: 10106128 Software Integration.

10106167
Computer and Business Technologies - Credits: 1
Learners will gain knowledge on computer hardware, basic computer operations, and file operating system. An emphasis will be placed on file/document management in a network environment and on a standalone personal computer. Learners will become familiar with the World Wide Web by accessing the Internet through browser software. Learners will use e-mail, learn how to communicate properly through e-mail and online vehicles. Learners will use search engines/databases for research purposes and proper validation techniques.

10890010
Job Quest - Credits: 1
This course is designed to enhance the student’s ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.
Advanced EMT
30-531-6 Technical Diploma

Program Overview
WITC offers the Advanced EMT program for students who are seeking advanced skills and a higher level of challenge in an exciting field. The student will develop more sophisticated emergency treatment skills including assessment skills and medication administration. The student will perform a variety of patient assessments and skills including intravenous, intraosseous, intranasal, inhalation, and intramuscular injections on real patients. The student will be expected to successfully complete the clinical component of this course after obtaining a Training Center Training Permit.

Special Feature
Advanced EMT training is offered at various off-campus locations for the student's convenience.

Admission Requirements
Students in this program must:
• Complete application/registration process including payment
• Successfully complete reading entrance assessment (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Provide proof of current Wisconsin licensure with a completed EMT Proof of Licensure and Statement of Understanding Form.
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding Form
• Review and sign the Functional Ability Statement of Understanding

Program-Specific Requirements
Students in this program must:
• Have acceptable results based on the Wisconsin Criminal History Record Check, Wisconsin Caregiver Background Check, Minnesota Caregiver Background Check (if applicable), and/or other states if applicable.
• Be affiliated with an Advanced EMT service approved by the Wisconsin EMS Unit or approval from the Training Center Medical Director
• Pass a physical exam, have current immunizations, and demonstrate negative status for tuberculosis (TB)
• Submit a copy of the appropriate Wisconsin (or other state(s)) Department of Transportation (DOT) Driving Abstract if you have any violations/suspension/revocation
• Submit signed Advanced EMT Syllabi Form
• Attend a mandatory orientation session scheduled prior to start of class

Student Profile
Students in this program should be able to:
• Make decisions based on visual comparisons
• Be accurate and detail oriented
• Have good physical stamina
• Lift 125 pounds (250 pounds with assistance)
• Perform well under stress
• Have good oral and written communication skills
• Be self-confident and emotionally stable
• Think critically

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• English/Grammar/Business English
• Speech
• Health
• First Aid
• Basic Math
• Physical Education
• Psychology
• Biology and Physiology

Key to the student's success as an Advanced EMT is the ability to deal with adverse social situations and locations.

Career Outlook
Licensure as an Advanced EMT allows the Advanced EMT to initiate intravenous therapy and administer selected medications as authorized by the Wisconsin EMS Unit and Ambulance Service Medical Director.

Curriculum
<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>30531335</td>
<td>Advanced EMT ▲</td>
<td>4</td>
</tr>
</tbody>
</table>

▲ This course requires a prerequisite and/or corequisite.

Program Outcomes
The Advanced EMT program is approved by the Wisconsin EMS Unit and follows the National Emergency Medical Services Education Standards. Employers will expect graduates to be able to:
• Make decisions under stress
• Work quickly in situations requiring accuracy
• Question patients to obtain medical and personal history
• Provide efficient and immediate care to critically ill and injured patients
• Deal with adverse social situations including the location of the emergency

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.
30531335
Advanced EMT - Credits: 4
The Advanced EMT course expands the role and skills of the EMT. Skills involved in obtaining intravenous and intraosseous access, intranasal, intramuscular and subcutaneous medication administration, and fluid therapy will be included. Student must hold a current Wisconsin EMT license. Extensive patient assessment knowledge and skills have been integrated throughout the curriculum, as well as enhanced critical decision making. Participants will be required to participate in a clinical experience as part of their training. This class will include the review and revision of the Advanced Emergency Medical Technician(AEMT) curriculum with inclusion of the National Emergency Medical Services Education Standards.
PREREQUISITE: Admission to the program.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th></th>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Number of responses</th>
<th>Percent employed</th>
<th>Range of yearly salary</th>
<th>Number available for employment</th>
<th>Employed in related field</th>
<th>Average yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>22</td>
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<td>$7,200-$81,530</td>
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</table>
Agricultural Power and Equipment Technician
32-070-1 Technical Diploma

Program Overview
This program consists of practical knowledge and shop management skills to help students master installation, service, assembly, adjustment, repair, and operation of various types of machinery and tractors. Students will also learn how to work with Diesel engines, hydraulic systems, transmissions, electrical systems, and mobile air conditioning systems.

Special Features
As part of the Agricultural Power and Equipment Technician program, students are required to obtain a license to operate a forklift. This allows students to be one step closer in their job preparation in the agricultural industry.

In addition, students in this program will have the opportunity to participate in a State of Wisconsin (http://datcp.wi.gov/Consumer/Weights_and_Measures/License_Applications/Mobile_Air Conditioning/index.aspx) approved training course designed to certify operators of refrigerant recover/recycling equipment leading to a Mobile Air Conditioning license. Students must pass a final test to receive their license.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Students in the Agricultural Power and Equipment Technician program should be able to:
• Manipulate tools and equipment skillfully
• Communicate ideas verbally
• Be organized
• Be willing to work with precise limits and standards
• Walk and move around in shop and field assignments
• Lift and carry 50 pounds
• See and hear well (normal or corrected)
• Distinguish colors

Students should discuss any limitations they may have with a Student Success Center counselor.

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Agriculture
• Welding
• Keyboarding
• Electronics
• Drafting
• Auto Mechanics
• English/Speech
• Basic Math/Algebra
• Physics
• Computers
• Power Technology
• Machine Shop
• Print Reading

Program Outcomes
Employers will expect Agricultural Power and Equipment Technician graduates to be able to:
• Repair electrical systems
• Analyze an electronic system
• Repair hydraulic systems
• Repair internal combustion engines
• Repair power trains/transmissions
• Follow industry safety standards

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Agricultural power and equipment technicians are in demand because they can handle a variety of mechanical situations. The typical positions available after graduation include:
• Equipment Mechanic
• Construction Mechanic
• Diesel Mechanic
• Lawn and Garden Equipment Mechanic

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>32070326</td>
<td>Engines 1 for Ag Mechanics</td>
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<tr>
<td>32070337</td>
<td>12-Volt Electrical Theory for Ag Mechanics ▲</td>
<td>1</td>
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<tr>
<td>32070338</td>
<td>Diesel Engine Theory ▲</td>
<td>1</td>
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<tr>
<td>32070339</td>
<td>Mobile Hydraulics Theory ▲</td>
<td>1</td>
</tr>
<tr>
<td>32070341</td>
<td>Power Train Theory ▲</td>
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<td>32070358</td>
<td>Power Trains 1 ▲</td>
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<tr>
<td>32070359</td>
<td>Mobile Hydraulics 1 ▲</td>
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<td>32070360</td>
<td>12-Volt Electrical 1 ▲</td>
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<tr>
<td>32070361</td>
<td>Engines 2 for Ag Mechanics ▲</td>
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<tr>
<td>32070364</td>
<td>Power Trains 2 ▲</td>
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</tr>
<tr>
<td>32070366</td>
<td>Mobile Hydraulics 2 ▲</td>
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</tr>
<tr>
<td>32070367</td>
<td>12-Volt Electrical 2 ▲</td>
<td>5</td>
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<tr>
<td>32070368</td>
<td>Basic Tools</td>
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<tr>
<td>32070369</td>
<td>Mobile HVAC for Heavy Equipment</td>
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<tr>
<td>32442307</td>
<td>Welding for Mechanics</td>
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</table>

Program Requirements
60

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
● See pages 41-43 for course descriptions.
Course Descriptions

(See pages 41-43 for General Studies course descriptions)

32070341 Power Train Theory - Credits: 1
This course will provide the learner with an in-depth look at how internal combustion engines operate. The learner will be able to identify, measure, and inspect parts of the internal combustion engine, with diesel engines used in agriculture machinery the main area of focus.

32070337 12-Volt Electrical Theory for Ag Mechanics - Credits: 1
This course is designed for the learner to understand basic 12-volt electrical circuits, wiring diagrams, starting, charging, and lighting systems. Classroom trainers will be used to apply electrical theory. Using hands-on activities, this course will help the learner to better understand basic 12-volt electrical systems.
PREREQUISITE: 32070368 Basic Tools.

32070359 Mobile Hydraulics 1 - Credits: 5
This course will provide a broad, general, and practical coverage of fluid power components and their design, application, operation, and maintenance. You will learn hydraulics operation by studying manufacturers’ service manuals as well as a prepared text. Lab projects will allow hands-on training. PREREQUISITE: 32070367 12-Volt Electrical 2 and COREQUISITE: 32070339 Mobile Hydraulics Theory.

32070360 12-Volt Electrical 1 - Credits: 4
This course is designed to study the construction, operation, adjustments, and repairs of electrical components used in tractors and farm implements. Classroom and lab activities will include reading and interpreting wiring diagrams, troubleshooting electrical circuits, and performing repairs on alternators, generators, starters, and regulators. PREREQUISITE: 32070339 Mobile Hydraulics Theory.

32070361 Engines 2 for Ag Mechanics - Credits: 5
This course provides the student with both a theoretical and practical background in the basic operating and rebuilding principles of diesel engines. The course includes practical experience in rebuilding, testing, troubleshooting, and tuning diesel engines. Additionally, the student will gain experience in the proper use of tools and equipment. If prerequisite courses have not been completed, the student must have consent of the instructor to enroll. PREREQUISITE: 32070326 Engines 1 for Ag Mechanics and 32070338 Mobile Hydraulics 1.

32070358 Mobile Hydraulics Theory - Credits: 1
This course will provide a practical understanding of mobile hydraulic components. Their design, application, operation, and maintenance will be studied. A hydraulic training bench will be used in the classroom. PREREQUISITE: 32070367 12-Volt Electrical 2.

32070341 Power Train Theory - Credits: 1
This course will provide a general overview of clutches, sliding gear, and hydrostatic drives. Design, operation, adjustment, and maintenance will be discussed. PREREQUISITE: 32070367 12-Volt Electrical 2.

32070355 Mobile Hydraulics 2 - Credits: 5
This course will provide an in-depth study of hydraulically operated and controlled transmissions as they are found on various types of farm tractors. You will learn transmission operation by studying manufacturers’ service manuals as well as a prepared text. Lab projects will allow hands-on training. PREREQUISITE: 32070366 Mobile Hydraulics 2 and COREQUISITE: 32070341 Power Train Theory.

32070364 Power Trains 2 - Credits: 5
This course provides an opportunity to work on clutches, transmission torque amplifiers, torque converters, differentials, final drives, and power take-off units. Lab time is spent on disassembly, parts identification, operation, and repair of these units. COREQUISITES: 32070358 Power Trains 1 and 32070341 Power Train Theory.

32070366 Mobile Hydraulics 2 - Credits: 5
This course provides an in-depth study on how the basic fluid power components are incorporated into a tractor hydraulic system. This lecture- and lab-based course includes demonstration and practice opportunities. If prerequisite courses have not been completed, student must have consent of instructor to enroll. PREREQUISITE: 12-Volt Electrical 2 and COREQUISITE: 32070359 Mobile Hydraulics 1 and 32070339 Mobile Hydraulics Theory.

Gainful employment information is available at this link: http://www.witc.edu/pmpages/agpower/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
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<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
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<tbody>
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<td>14</td>
<td>71%</td>
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<table>
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<tr>
<th>Number of responses</th>
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</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>100%</td>
<td>$29,066-$43,677</td>
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<table>
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<tr>
<th>Number available for employment</th>
<th>Employed in related field</th>
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<tbody>
<tr>
<td>14</td>
<td>13</td>
<td>$35,337</td>
</tr>
</tbody>
</table>

800.243.9482   witc.edu   2015-2016
Architectural Commercial Design
10-614-4 Associate Degree

Program Overview
The Architectural Commercial Design program will prepare students to translate the ideas, rough sketches, specifications, and calculations of engineers, architects, and designers into commercial and residential working drawings. Our program emphasizes construction techniques and materials used in commercial building design.

Special Feature
This program is unique in the state.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
• Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm.

Student Profile
Architectural Commercial Design students should:
• Possess some mathematical and science background
• Enjoy the application of problem solving involved in building design
• Possess the desire to assume responsibility
• Be able to work well with others

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Algebra
• Communications/English
• Geometry
• Trigonometry
• Computers

Program Outcomes
Employers will expect Architectural Commercial Design graduates to be able to:
• Develop construction documents
• Evaluate building materials
• Develop building designs
• Integrate building systems
• Use computer-aided drafting, building information modeling, and architectural related software
• Utilize office practices and standards
• Utilize the Enrolled Wisconsin Commercial Building Code incorporating the International Building Code

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
This program will prepare students to work in both residential and commercial building design industries. Positions available after graduation include:
• CAD Drafter
• Store Planner
• Project Manager
• Technical Coordinator
• Design Technician
• CAD Technician

With additional experience, graduates may move into one of these positions:
• Architect
• Project Manager
• CAD Manager

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
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<td>10481155</td>
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<td>10614101</td>
<td>Architectural Drafting Principles</td>
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<td>10614103</td>
<td>Wood Frame Drafting/Design</td>
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<td>10614110</td>
<td>Architectural Drafting Studio (WBL)</td>
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<td>10614111</td>
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<td>10614115</td>
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<td>10614129</td>
<td>Building Estimating</td>
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<td>10614135</td>
<td>Architectural CAD</td>
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<tr>
<td>10614139</td>
<td>Heating, Ventilating, and Air Conditioning Systems</td>
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<td>10614162</td>
<td>Intro to Building Information Modeling (BIM)</td>
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<td>Site Design</td>
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General Studies Courses

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<tr>
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<td>College Technical Mathematics 1</td>
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<td>10804116</td>
<td>College Technical Mathematics 2</td>
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<tr>
<td>10809122</td>
<td>Introduction to American Government or</td>
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</tr>
<tr>
<td>10809166</td>
<td>Introduction to Ethics: Theory and Application or</td>
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<td>10809172</td>
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<td>Introduction to Psychology or</td>
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<td>10809188</td>
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PROGRAM REQUIREMENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

• Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
• See pages 41-43 for course descriptions.
10410121
Wood Frame Construction - Credits: 3
This course introduces the student to the materials and methods used in wood frame construction. It familiarizes students with components of modern construction for the purpose of selecting the materials best suited to various construction jobs.

10481155
Sustainable Architecture - Credits: 2
In the broad context, sustainable architecture seeks to minimize the negative environmental impact of buildings through ecological and efficient use of energy and materials resources. This course introduces the student to current theories and practices of sustainable building design through the study of energy efficiency techniques, renewable energy resources, and the reduction, recycling or reuse of building construction materials.

10614101
Architectural Drafting Principles - Credits: 4
This course introduces graphic representation in construction. It covers the fundamentals of drafting including line work, lettering, measuring, sketching, projections, and pictorial drawings. Students will use the aforementioned fundamentals to complete a set of drawings for a residence. COREQUISITE: 10614135 Architectural CAD.

10614103
Wood Frame Drafting/Design - Credits: 4
This course introduces the student to the design principles needed for wood frame structures and incorporates the many aspects of building aesthetics and working drawings. The final assignment is to plan a set of drawings for a wood frame commercial building. PREREQUISITE: 10614101 Architectural Drafting Principles.

10614110
Architectural Drafting Studio (WBL) - Credits: 5
This final semester course is designed to prepare the student for the challenges of working in an architectural office. The major portion of the course is the preparation of a set of architectural working drawings for a commercial building. The course also includes architectural office orientation, specifications, architectural group projects, and commercial building planning considerations as well as several activities directed toward successful job-hunting skills. PREREQUISITE: 10614163 Commercial Drafting.

10614111
Plumbing and Electrical Systems - Credits: 2
This course introduces basic principles of plumbing and electrical systems in building design and construction. These systems are studied in the context of the overall building design with emphasis on materials, equipment, systems design, engineering principles, and sustainable design practices. PREREQUISITE: 10614101 Architectural Drafting Principles.

10614115
Architectural Internship - Credits: 3
Internship is designed to provide students with on-the-job experience in actual work situations. These experiences strengthen student competencies through participation in a wide variety of occupational experiences, ranging from routine assignments to specialized work-related duties. PREREQUISITES: Appropriate technical studies courses and a minimum of one year successful associate degree program competencies and/or instructor approval.

10614116
Case Studies in Architecture - Credits: 3
This course builds upon students' prior experience from other courses in which Revit has been instrumental in developing projects. Students will spend part of their time learning advanced concepts in Revit such as creating and editing families, exploring interoperability, exploring 3D viewing options, and other advanced features. Throughout the course, students will also apply those concepts to a project of their choosing. PREREQUISITE: 10614163 Commercial Drafting.

10614124
Commercial Construction - Credits: 3
This course introduces the student to the commercial phase of the building spectrum with applications to steel, concrete, and heavy timber structures. Methods and practices utilized in buildings consisting of the various materials and combinations of materials are covered. PREREQUISITE: 10614121 Wood Frame Construction.

10614129
Building Estimating - Credits: 3
This course introduces the student to the basic methods of building estimating and systems for doing quantity surveys. Emphasis is placed on developing the skills received in preparing the kinds of estimates commonly used in architecture and building construction. Practical exercises in developing estimates for wood frame and light commercial structure are included in the course of study. PREREQUISITE: 10614121 Wood Frame Construction.

10614135
Architectural CAD - Credits: 3
AutoCAD and related architectural software is utilized to teach learners the fundamentals of architectural computer-aided drafting. Topics from CAD applications in architecture and the equipment required to do actual drafting, modifying, and plotting operations are covered. COREQUISITE: 10614101 Architectural Drafting Principles.

10614139
Heating, Ventilating, and Air Conditioning Systems - Credits: 2
This course introduces basic principles of heating, ventilating and air conditioning systems in building design and construction. These systems are studied in the context of the overall building design with emphasis on materials, equipment systems design, engineering principles, and sustainable design practices. PREREQUISITE: 10614101 Architectural Drafting Principles.

10614162
Intro to Building Information Modeling (BIM) - Credits: 2
This course introduces the student to such powerful modeling software as Autodesk Revit. Students will learn the complete BIM process from conceptual development through detailed design. PREREQUISITE: 10614101 Architectural Drafting Principles.

10890100
Success Strategies 1 - Credits: 1
This course is designed to enhance the student’s ability to affect the academic, professional, and personal lives of students.

10890105
Job Quest - Credits: 1
This course is designed to enhance the student’s ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

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Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
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<td>Average yearly salary</td>
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</table>

*The Architectural Commercial Design program is unique in Wisconsin and there was insufficient data to report.
Auto Collision Repair and Refinish Technician
31-405-1 Technical Diploma

Program Overview
The Auto Collision Repair and Refinish Technician program will prepare students to perform repairs on vehicles that have collision damage. This one-year program involves straightening dents, replacing panels, and refinishing the repaired areas. Students will gain hands-on experience by repairing customer vehicles and by working with the latest repair and refinishing equipment.

Special Feature
This program uses advanced I-CAR (Inter-Industry Conference on Auto Collision Repair: www.i-car.com) curriculum training modules. The core training program includes:
• Fundamentals of collision repair
• Vehicle identification, estimating, and terminology
• Trim and hardware
• Advanced high-strength steel overview
• Bolted-on part replacement parts
• Movable glass
• Non-structural repairs
• Plastic and composite repair
• Refinishing
• Detailing
• Hazardous materials, personnel safety, and refinishing safety
• Corrosion protection

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Auto Body Repair and Refinishing
• Basic Mathematics
• Automobile Mechanics
• Machine Shop
• Welding
• Basic English
• Art

Program Outcomes
Employers will expect Auto Collision Repair and Refinish Technician graduates to be able to:
• Straighten collision-damaged sheet metal
• Refinish automobile body parts
• Replace non-structural panels and parts
• Perform auto collision welding procedures

Career Outlook
Typical careers available after graduating from the Auto Collision Repair and Refinish Technician program include:
• Auto Body Technician
• Refinishing Technician
• Paint Representative
• Estimator/Insurance Appraiser
• Service Manager/Shop Owner
• Auto Detailer
• Automobile Restoration Technician
• Equipment and Supplies Specialist
• Auto Glass Replacement Specialist
• Auto Parts Recycling Specialist
• Collision Parts Specialist

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<td>31405303</td>
<td>Auto Collision Repair Welding</td>
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<tr>
<td>31405304</td>
<td>Auto Collision Repair Fundamentals 1</td>
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<td>31405308</td>
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PROGRAM REQUIREMENTS 35

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▼ See pages 41-43 for course descriptions.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternate test scores and/or postsecondary degree completion)
• Take a color blind test
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Auto Collision Repair and Refinish Technician students should:
• Be able to use independent judgment to plan work and select proper tools
• Be able to handle and manipulate tools and equipment
• Have color vision
• Assume responsibility for the quality of their work
• Be able to communicate and relate to customers and co-workers

Campus:
Rice Lake
Programs and Course Descriptions
(See pages 41-43 for General Studies course descriptions)

31405302
Auto Collision Estimating - Credits: 1
Provides experience writing damage reports (estimates) on vehicles needing repair. Both manual and computer-generated estimates will be covered. Students will explore flat-rate operations, labor costs, repair and refinishing time, markups, and discounts.

31405303
Auto Collision Repair Welding - Credits: 2
Provides students with the technical competence needed to successfully repair collision-damaged vehicles using welding technology. Students will also utilize technology to cut sheet metal and high-strength steel.

31405304
Auto Collision Repair Fundamentals 1 - Credits: 2
This course is an introduction to vehicle construction, damage, and repair, including tools and equipment, selection setup, and safe usage. It covers concepts and needed skills that are required in application in the lab/shop companion course in Auto Collision Repair 1.

31405305
Auto Collision Repair Fundamentals 2 - Credits: 1
This course is a detailed study of refinish materials, surface preparations, and application techniques and procedures of undercoats and topcoats. It involves lecture, demonstration, and lab work. It is a companion course to Auto Collision Repair 2. PREREQUISITE: 31405304 Auto Collision Repair Fundamentals 1.

31405306
Auto Collision Repair 1 - Credits: 5
In this course the student will learn about worker protection and shop safety in the auto collision work environment. The basics of replacing exterior panels, bumpers, fenders, hoods, doors, and deck lids and interior door trim panels, seats, center consoles, carpets, and headliners.

31405307
Auto Collision Repair 2 - Credits: 2
In this course the student will learn about the fundamentals and mechanics of refinishing vehicles, measurement to assess the conditions of damage, and fundamentals of collision repair. COREQUISITE: 31405306 Auto Collision Repair 1.

31405308
Auto Collision Repair 3 - Credits: 5
In this course the student will learn about the repair and refinishing of plastic in auto collision repair, structural straightening of steel in actual auto bodies, and repair of the exterior panel of a damaged vehicle. PREREQUISITE: 31405307 Auto Collision Repair 2.

31405309
Auto Collision Repair 4 (WBL) - Credits: 5
In this course the student will learn about the fundamentals of vehicular electronics, heating and cooling systems, and restraints. COREQUISITE: 31405308 Auto Collision Repair 3.

31806352
Applied Physical Science - Credits: 2
Course contains a variety of applied physical science principles including light, color, chemistry, material properties, and direct current electricity. These principles will be applied to applications within the trades.

32804373
Math 373 - Credits: 2
This course covers practical applications of whole numbers, fractions, decimals, percent, proportion, and formula evaluation. The course also includes measurement, U.S. and metric systems of measurement, and basic geometry.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/autocoltech/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
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Program Overview

The Automated Packaging Systems Technician program will give students the skills they need to enter a career in the packaging industry. Students will be trained to service and repair a wide variety of packaging equipment and automated systems. This program emphasizes the maintenance and troubleshooting of electrical, mechanical, and fluid power components on packaging equipment including industrial computer controls and programmable logic controllers. Classroom and hands-on lab instruction on packaging machines plus visits to packaging industries are all parts of the program. Students will also participate in the Institute of Packaging Professionals meetings each month.

Special Features

This program is unique in the state. An outstanding feature of this program is the reliance on actual automated packaging machinery. Global career opportunities are available. The packaging industry, both locally and nationally, provides unique support to the program by providing scholarships, equipment, and supplies.

Admission Requirements

Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile

Automated Packaging Systems Technician students should be able to:
• Learn and apply mechanical principles and repair techniques
• Use good judgment
• Follow procedures carefully
• Handle and manipulate tools and testing equipment
• Assume responsibility for quality work
• Work under pressure
• Stand for long periods of time
• Work from prints and drawings

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:
• Basic Math/Algebra/Geometry
• Computer skills
• General science

Program Outcomes

Employers will expect Automated Packaging Systems Technician graduates to be able to:
• Demonstrate safe practices and techniques
• Install power transmission components, fluid power components, and automation components
• Maintain power transmission components, fluid power components, and automation components
• Troubleshoot power transmission components, fluid power components, and automation components
• Electrically connect automation and communication components
• Troubleshoot automated control systems
• Create electrical systems drawings and schematics for automated machines

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Typical positions available after graduation include:
• Packaging Systems Assembler
• Maintenance Technician
• Field Service Technician
• Line Mechanic/Adjuster
• Packaging Systems Operator
• Machine Assembler
• Customer Service Representative

Curriculum

<table>
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<th>Course Title</th>
<th>Credits</th>
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<td>(A) AC/DC Circuits</td>
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<td>32414380</td>
<td>Basic PLCs</td>
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<td>32420314</td>
<td>Basic Machine Shop</td>
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<td>General Safety</td>
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<td>Packaging Machine Maintenance</td>
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<td>32454341</td>
<td>Fluid Power Systems</td>
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<td>32454342</td>
<td>Packaging Machine Operations</td>
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<td>32454343</td>
<td>Packaging Machine Rebuilding</td>
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<td>32454344</td>
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<td>32454345</td>
<td>Packaging Systems Equipment Control</td>
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<td>32454347</td>
<td>Electromechanical Componentry</td>
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<td>32454348</td>
<td>Troubleshooting</td>
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<td>32454349</td>
<td>Installation of Packaging Machines</td>
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<td>32454357</td>
<td>Power Transmission Componentry</td>
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<td>Packaging Materials/Processes</td>
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<td>Motion Controls</td>
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<td>32469305</td>
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Occupational Supportive/General Studies Courses

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<td>32801361</td>
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<td>32801363</td>
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<tr>
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<td>Applied Information Resources</td>
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Program Requirements

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41-43 for course descriptions.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

32453000

Applied IT Basics - Credits: 2
This course provides students with an introduction to basic Information Technology concepts. Students will learn to identify and install basic PC hardware components, install a desktop operating system, and configure and use its utilities and tools. Also covered is understanding basic network communication, including identifying network devices and identifying, creating, and testing common Ethernet cables.

32442307

(A) AC/DC Circuits - Credits: 3
This course will provide a foundation for working with microprocessor control systems. Students will learn the theory and application of electronic principles as they are applied to control systems found in industry. The learner will use trainers and machine components to provide recognition and understanding of modern microprocessor-based control systems. PREREQUISITE: 32449305 (A) AC/DC Circuits.

32454360

Basic Machine Shop - Credits: 3
This lab-based course will provide instruction in shop safety, measuring, print reading, and basic setup and operation of saws, mills, and lathes.

32449305

General Safety - Credits: 1
The student will learn the United States labor law and safe work practices with employee training requirements. The proper use of safety equipment and personal application of safe working habits will be emphasized. Students who work with chemical hazards and use power tools are exposed to a variety of safety concerns that require the use of guidelines and regulations. Medical attention and response to emergencies is also an important procedure to preserve human life and prevent disease.

32454340

Packaging Machine Maintenance - Credits: 3
The study of the care and maintenance of automated packaging systems. You will learn to select and apply basic tools used for maintenance and repair of equipment. You will develop skill in selecting, ordering, and receiving machine components and supplies. COREQUISITE: 32449305 General Safety.

32454341

Fluid Power Systems - Credits: 3
This course develops the skills required for the implementation of vacuum, air, and oil used to transmit force for performing useful functions on machines. Students will apply symbols to components and connect components to understand the assembly, operation, and maintenance of fluid power systems. The transmission of force is used in a variety of applications and can be hazardous to individuals who do not understand the related laws of physics. COREQUISITE: 32449305 General Safety.

32454342

Packaging Machine Operations - Credits: 3
In this course you will develop skills necessary to operate and adjust machinery in a safe and efficient manner. You will gain experience in product handling and performing assigned tasks on packaging machines. A step-by-step approach to understanding complex tasks from observation and writing documents is a basic skill that can be used in a variety of occupations. COREQUISITE: 32449305 General Safety.

32454343

Packaging Machine Rebuilding - Credits: 5
The student will learn to plan, organize, and perform various tasks for the assembly or repair of packaging machines. Project work will be assigned for individuals and groups to assemble and disassemble packaging equipment simulating the work environment. Rebuilding machines gives students the opportunity to see applications and problems areas found on custom machinery. PREREQUISITE: 32449347 Electromechanical Componentry.

32454344

Schematics, Prints, and Layouts - Credits: 2
This course covers an introduction and use of the many types of engineering drawings used to represent machines. Students will draw sketches and develop interpretation skills required for the correct translation of machine drawings. The ability to understand visualization techniques and symbol usage is a valuable and universal skill as used in everyday life. PREREQUISITE: 32449305 General Safety and 32454340 Packaging Machine Maintenance.

32454345

Packaging Systems Equipment Control - Credits: 3
This course gives the students the opportunity to perform the selection, design, installation, and operation of control systems found on automated packaging machines. The student will work with many types of components to gain recognition and skill development in the correct installation of electrical control systems. The modern control system requires specialized skills that are useful for understanding high technology applications such as robotics and climate control. PREREQUISITE: 32449305 General Safety and 32449338 (A) AC/DC Circuits.

32454347

Electromechanical Componentry - Credits: 4
This course will develop an understanding of the skills necessary for the selection and application of electromechanical components as used in modern control systems. You will have the opportunity to simulate a control system. You will develop techniques used for identifying failures and malfunctions that occur in control systems. PREREQUISITE: 32449345 Packaging Systems Equipment Control.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/autopack/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

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<tr>
<td>Employed in related field</td>
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<tr>
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</tr>
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</table>

800.243.9482
witc.edu
2015-2016

59
Automotive Maintenance Technician
31-404-3 Technical Diploma

Program Overview
Automotive Maintenance Technician is a three-semester program that will provide training in the eight content areas of the automobile as defined by Automotive Service Excellence (ASE). These areas are engine repair, automatic transmission and transaxles, manual drive train and axles, suspension and steering, brakes, electrical/electronic systems, heating and air conditioning, and engine performance. Students will also take courses in DC electricity, communications, and mathematics.

Special Feature
This program has received certification by the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE). See their Web sites at www.natef.org and www.ase.com.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Automotive Maintenance Technician students should:
• Have good math and reading skills
• Have good reasoning and logical-thinking skills
• Be able to work directly with customers
• Be able to work with industrial machinery, tools, equipment, and processes
• Enjoy working with both their mind and hands
• Be able to work alone or with people
• Be able to work with computers

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Auto service work experiences
• Communications
• General Metals
• Machine Shop
• Small Engines
• Welding
• Basic computer skills
• Basic Math

Program Outcomes
Employers will expect Automotive Maintenance Technician graduates to be able to:
• Use tools and equipment to diagnose and service automobile systems
• Practice safe techniques when servicing automobiles
• Estimate automotive repair and order replacement parts
• Communicate and respond to customers’ needs

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Typical positions available at automobile dealerships or repair shops after graduation include:
• Brake Technician
• Air Conditioning Technician
• Auto Transmission Technician
• Automotive Electrical Technician
• Service Writer
• Drive Train Technician
• Suspension and Alignment Technician
• Drivability Technician
• Automotive Technician

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
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<tr>
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<td>Automatic Transmissions ▲</td>
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<td>Air Conditioning and Heating Systems (WBL) ▲</td>
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<td>3140371</td>
<td>Manual Drive Trains ▲</td>
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<td>3140375</td>
<td>Engine Repair 1 ▲</td>
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<td>Electrical Systems ▲</td>
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<tr>
<td>32804373</td>
<td>Math 373</td>
<td>2</td>
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PROGRAM REQUIREMENTS
44

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
※ See pages 41-43 for course descriptions.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

31404361 Suspension and Alignment - Credits: 3
This course introduces steering system types, suspension geometry, troubleshooting procedures, and repair of suspensions including both two- and four-wheel alignments. PREREQUISITE: 31404366 Automotive Fundamentals.

31404362 Automotive Brake Systems - Credits: 3
This course introduces students to automotive braking systems, troubleshooting procedures, and repair of brake systems to include manual, power, and anti-lock types. PREREQUISITE: 31404366 Automotive Fundamentals.

31404363 Automatic Transmissions - Credits: 4
This course includes the principles of construction and operation of automatic transmissions and transaxles. Diagnosis and repair of front-, rear-, and four-wheel drive transmissions will be covered. PREREQUISITE: 31404366 Automotive Fundamentals.

31404364 Air Conditioning and Heating Systems (WBL) - Credits: 3
This course introduces automotive air conditioning and heating systems. Theory of operation, diagnostic techniques, and servicing of heating and air conditioning systems will be covered. PREREQUISITES: 31404366 Automotive Fundamentals and 31414370 DC Automotive Electrical.

31404366 Automotive Fundamentals - Credits: 2
This course is an introduction to the automotive field. Career opportunities together with employer expectations will be discussed. Students will begin to use required safety practices for both general lab activities and when operating equipment. Vehicle maintenance inspections together with light repairs will take place.

31404371 Manual Drive Trains - Credits: 3
This course introduces the operation and repair of manual transmissions, transaxes, drivelines, differential assemblies, and transfer cases. PREREQUISITE: 31404366 Automotive Fundamentals.

31404375 Engine Repair 1 - Credits: 2
This course introduces the principles of engine operation and engine condition diagnosis. COREQUISITES: 31404366 Automotive Fundamentals, 31414370 DC Automotive Electrical, and 32804373 Math 373.

31404376 Engine Repair 2 - Credits: 4
The course introduces the service procedures for engine removal, disassembly, and repair. COREQUISITES: 31404375 Engine Repair 1 and 31404366 Automotive Fundamentals.

31404381 Electrical Systems - Credits: 4
This course introduces battery, starting, and charging systems, lighting systems; theory of operation; diagnostic techniques; and servicing procedures. This course also includes an introduction to hybrid automobiles. COREQUISITES: 31404366 Automotive Fundamentals and 31414370 DC Automotive Electrical.

31404384 Engine Performance 1 - Credits: 3
This course is an introduction to the diagnosis and repair of engine mechanical, ignition, and fuel-related problems that relate to engine performance. PREREQUISITES: 31404366 Automotive Fundamentals and 31414370 DC Automotive Electrical.

31404385 Engine Performance 2 - Credits: 4
This course is a companion to Engine Performance 1. Computerized automotive controls and emissions will be introduced in this course. Advanced diagnostic procedures will be covered. COREQUISITE: 31404384 Engine Performance 1.

31404386 Body Electrical Systems - Credits: 3
This course is an introduction to automotive body electrical systems. Students will learn about various body electrical components and how to diagnose and repair body electrical systems. PREREQUISITES: 31404366 Automotive Fundamentals and 31414370 DC Automotive Electrical.

31414370 DC Automotive Electrical - Credits: 2
This course will introduce students to Ohm’s law, electrical fundamentals, magnetism, and series and parallel circuits. Further studies will include automobile wiring diagrams, electrical test equipment, and basic troubleshooting. COREQUISITE: 32804373 Math 373 and 31404366 Automotive Fundamentals.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/autotech/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
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<tr>
<th>Number of graduates</th>
<th>22</th>
<th>Number employed</th>
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<th>% employed in WITC district</th>
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<td>Employed in related field</td>
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<td>Average yearly salary</td>
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</table>
**Program Overview**

The Broadband Technologies program prepares students for occupations in four distinct areas of the telecommunications industry—telephony, cable television, computer information systems, and wireless communications. Students will become knowledgeable in all four merging technologies. They will be trained on the installation and maintenance of business and residential electronic equipment; on coaxial, twisted pair, and fiber optic cable systems; and on wireless technologies. Students will develop hands-on skills, computer skills, and also interpersonal relations skills. Specific areas of interest can be selected according to the student’s career choice.

**Special Features**

This program is unique in the state.

WITC is an ETA-I (Electronics Technicians Association, International) approved training provider for the following certifications:

- Fiber Optics Installer
- Certified Computer Service Technician
- Certified Satellite Installer

**Career Pathway Options**

A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Broadband Technologies two-year associate degree includes an embedded technical diploma option as documented below:

- 31-451-1 Broadband Technician

**Admission Requirements**

Students in this program must:

- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Take a color blind test
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

**Student Profile**

Broadband Technologies students should be able to:

- Apply scientific principles and technical knowledge
- Handle and manipulate tools and equipment skillfully
- Perform mathematical computations accurately
- Assume responsibility for their work
- Enjoy working independently

**Preparation for Admission**

Students should strive to reach a comfort level in the following courses or skills:

- Energy
- Electronics
- Algebra
- Physics
- Principles of Technology
- English
- Speech
- Creative Writing
- Accounting
- Business Law
- Economics

**Program Outcomes**

Employers will expect the Broadband Technologies graduates to be able to:

- Follow Safety Procedures and policies
- Diagnose problem areas using electrical principles and solid-state/digital electronics
- Perform installations, repairs, and troubleshooting of special systems
- Test broadband network levels for customer standards
- Calculate voltage, current, and power for systems outputs
- Perform layout and construction of aerial and buried fiber optic and paired cable systems
- Interpret system maps
- Perform routine installation and service activities

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

**Career Outlook**

Graduates of this program will be ready to start their career as:

- Cellsite Technician
- Broadband Technician
- Broadband Consultant

**Curriculum**

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**Occupational Supportive/General Studies Courses**

- 32801361 Applied Communications 1 2
- 32801363 Applied Communications 2 2
- 32804355 Math 355 3
- 32804364 Math 364 2
- 32809371 Applied Human Relations 2

**General Studies Courses**

- 32451352 Introduction to Cellular Technology 2
- 32451353 Infrastructure Cabling 3
- 32451354 Digital Telephone Applications 3
- 32451355 Security Systems Applications 3
- 32451356 PBX Installations 2
- 32451357 Advanced Cellular Technology 2
- 32451358 Fiber Design and Implementation 2
- 32451359 Geographic Information Systems 2
- 32451360 Broadband Safety 1
- 32451361 Broadband Industry Concerns 2
- 32451362 Broadband Transmission 3
- 32605300 Communications Electricity 1
- 32605301 Communications Electricity 2 2
- 32605302 Communications Electronics 1 2
- 32605303 Communications Electronics 2 2

**PROGRAM REQUIREMENTS**

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
- See pages 41-43 for course descriptions.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

32150301
IP Networking - Credits: 3
Students will learn to identify and describe the various components of a computer network, identify and compare the different networking topologies, and select appropriate cabling and connections options. This course introduces hardware and software components that make up a local area network and configuration of the TCP/IP protocol, including planning and implementation, will be covered. Students will gain an understanding of the use of computer resources and share network troubleshooting tools and procedures and apply them to their work. PREREQUISITES: 32605301 Communications Electricity 2 and 32605303 Communications Electronics 2.

32451341
Telephone Networking - Credits: 3
This course will introduce the student to the basics of the telephone network portion of the broadband industry; it will focus on four primary areas: cable and wire - the design of the cables physically and electrically and how to splice them; print reading - construction drawing, system maps, and circuit diagram; installation - installation of customer wiring and equipment and teaching the customer how to properly use the equipment; basic troubleshooting - finding and repairing trouble in materials and equipment.

32451342
Intro to HFC/Cable TV - Credits: 3
This course introduces the student to the basics of the HFC (Hybrid Fiber Coaxial) portion of the broadband industry. It will focus on four primary areas: cable and wire - the design of the cables physically and electrically and how to splice them; print reading - construction drawings, system maps, circuit diagrams; installation - installation of customer materials and equipment and teaching the customer how to properly use the equipment; basic troubleshooting - finding and repairing trouble in materials and equipment.

32451343
Fiber Optics Operations - Credits: 3
This course is intended for students in the broadband industry. It will be used to familiarize the student with rule setting organizations such as OSHA, DILHR, and NEC. It will focus on the safe use of equipment such as hand tools, power tools, ladders, and bucket trucks. The course will certify the student in first aid in the Medic First Aid program.

32451344
Internship - Credits: 1
Internship is designed to provide students with on-the-job experience in a work setting. This experience strengthens student competencies through participation in a wide variety of occupational experiences, ranging from routine assignments to specialized work-related tasks. Prior approval is required for enrollment in this course.

32451345
Multi-Line Phone Systems - Credits: 2
This course focuses on the generic installation and maintenance concerns of multi-line telephone systems. System prints, charts, and manuals are used to familiarize the student with rule setting organizations such as OSHA, DILHR, and NEC. It will focus on the safe use of equipment such as hand tools, power tools, ladders, and bucket trucks. The course will certify the student in first aid in the Medic First Aid program.

32451347
Construction Practices - Credits: 2
This course introduces the student to the safe use and care of construction equipment such as climbing equipment (belt/climbers), lashing equipment, and vibratory/backhoe. It will familiarize the student with both the use of this equipment and how to properly use it in the broadband industry in the placement of coaxial, twisted pair, and optic cables. PREREQUISITES: 32451341 Telephone Networking, 32451342 Intro to HFC/Cable TV and 32451343 Fiber Optics Operations.

32451348
Signal Testing - Credits: 2
This is an introduction to the world of wireless communications. It will provide an understanding of how we use radio frequencies to transmit signals, data, and voice over the airwaves. Information will be provided to correctly set up and troubleshoot a variety of equipment used in radio communications. PREREQUISITES: 32451342 Broadband Transmission.

32451352
Introduction to Cellular Technology - Credits: 3
This course is an introduction to the concept of resource sharing and network troubleshooting tools and procedures and apply them to their work. PREREQUISITES: 32451341 Telephone Networking and 32605301 Communications Electronics 1.

32451354
Digital Telephone Applications - Credits: 3
Advanced technology affecting change and future change in the broadband industry will be studied. This course will introduce students to all DSL services on a hybrid fiber system and will demonstrate how DSL services provide the last-mile technology for the public network provider. PREREQUISITES: 32605301 Communications Electricity 2 and COREQUISITE: 32605303 Communications Electronics 2.

32451355
Security Systems Applications - Credits: 3
This course is designed to train those with no previous knowledge in security systems. This course will introduce the student to hybrid fiber optic/coaxial cable systems. Basic alignment, testing, and troubleshooting techniques are taught. System performance standards and measurement parameters are also covered. COREQUISITE: 32451348 Signal Testing.

32451356
PABX Systems - Credits: 2
This course focuses on installation and administration of PBX systems. Students will gain basic understanding of the functions and operation of PBX systems. Manuals are used to administer specific commands of PBX systems. The student will be able to perform installation and removal of extensions and program special features systemswide. PREREQUISITES: 32451345 Multi-Line Phone Systems, 32605301 Communications Electricity 2, and 32605303 Communications Electronics 2.

32451357
Advanced Fiber Technology - Credits: 2
This course will cover the theory of wireless communications. An emphasis will be placed on the design, construction, and troubleshooting of a cellular phone system. Topics will include what equipment goes into a typical base station and the technological processes that are followed each time a call is made. PREREQUISITES: 32451352 Introduction to Cellular Technology.

32451358
Fiber Design and Implementation - Credits: 2
Fiber optic Network Design and Implementation is gaining momentum as a viable solution for transmitting fiber relatively inexpensively to our businesses and homes. Many products and solutions are being developed based on PON (passive optical network) technology. The material in this product is based on the ITU-T G.983 specifications. This class will benefit those with little or no fiber experience. COREQUISITE: 32605301 Communications Electronics 1.

32451359
Geographic Information Systems - Credits: 2
Geographical Informational Systems (GIS) provide broadband businesses with many solutions such as analyzing relationships among signal coverage, test results, trouble tickets, customer inquiries, revenues, and gap analysis. Broadcast companies use GIS for preacquiring antenna, analyzing service areas, gecoding clients, and correlating equipment requirements to service area demand. Students will learn the fundamental concepts and basic functions of a GIS, the properties of GIS maps, and the structure of a GIS database. In course exercises, you will develop basic software skills by working with tools to visualize geographic data, create maps, query a GIS database, and analyze data using common analysis tools.

32451360
Broadband Safety - Credits: 1
This course is intended for students in the broadband industry. It will help them understand the three distinct areas and how they operate independently, as well as together, to provide services to the customer. It will help them understand the need for good customer relations regarding problem solving for the customer and for the industry. It will discuss methods of introducing and teaching customers about new equipment and technologies and how to use them.

32451361
Broadband Industry Concerns - Credits: 2
This course is intended for students in the broadband industry. It will help them understand the three distinct areas and how they operate independently, as well as together, to provide services to the customer. It will help them understand the need for good customer relations regarding problem solving for the customer and for the industry. It will discuss methods of introducing and teaching customers about new equipment and technologies and how to use them.

32451362
Broadband Transmission - Credits: 3
This course is an introduction to digital electronics trainer and computer assisted instruction (CAI). Emphasis will be placed on the alignment, testing, and troubleshooting of end-to-end transmission systems. Also introduced in this course are basic AC and DC signaling arrangements. PREREQUISITES: 32605301 Communications Electricity 2.

32605300
Communications Electricity 1 - Credits: 2
This course is an introduction to the basic concepts, principles, and theories of DC electricity, including the analysis of circuits to learn the relationship of current, voltage, and resistance. Knowledge and use of test equipment will focus on multimeters and digital voltmeters. Critical-thinking skills are emphasized to develop competencies in problem solving and troubleshooting using a digital electronics trainer and computer assisted instruction (CAI).

32605301
Communications Electricity 2 - Credits: 2
This course is an introduction to digital electronics trainer and computer assisted instruction (CAI). Emphasis will be placed on the alignment, testing, and troubleshooting of end-to-end transmission systems. Also introduced in this course are basic AC and DC signaling arrangements. PREREQUISITES: 32605301 Communications Electricity 2.

32605302
Communications Electronics 1 - Credits: 2
This course covers the theory of semiconductor devices, including diodes, bipolar transistors, and field effect transistors. Solid-state circuits, including power supplies and multistage amplifiers are also covered. Individuals will develop troubleshooting methods and skills and have laboratory experiences to observe how semiconductor electronic circuits function. Critical-thinking skills are emphasized within this course to develop competencies in problem solving and troubleshooting using a digital electronics trainer and computer assisted instruction (CAI). COREQUISITE: 32605301 Communications Electronics 1.

32605303
Communications Electronics 2 - Credits: 2
This course covers the theory of semiconductor devices, including diodes, bipolar transistors, and field effect transistors. Solid-state circuits, including power supplies and multistage amplifiers are also covered. Individuals will develop troubleshooting methods and skills and have laboratory experiences to observe how semiconductor electronic circuits function. Critical-thinking skills are emphasized within this course to develop competencies in problem solving and troubleshooting using a digital electronics trainer and computer assisted instruction (CAI). COREQUISITE: 32605302 Communications Electronics 1.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/telecom/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number of responses</th>
<th>Number available for employment</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
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<tr>
<td>12</td>
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<td>12</td>
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<td>$27,038-$56,156</td>
<td>$40,780</td>
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800.243.9482
witc.edu
2015-2016
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Programs and Course Descriptions
Program Overview
Business Management students will acquire a broad-based business background. Business managers are found in a wide variety of settings in virtually every sector of the economy. Students gain a background to enable them to make sound business decisions. Areas of study include accounting and budgeting, human resources, finance, marketing, law, planning, supervision, and business technology. Communication, math, and leadership skills are developed throughout the program. Electives in the program provide an opportunity for students to customize the degree to specific career interests.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
• Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm

Student Profile
When students enter this program, they should be able to:
• Work well with others, individually and in groups
• Assume responsibility and have sound, ethical judgment
• Communicate well, both verbally and in writing
• Organize in an accurate and detailed manner
• Use technology
• Handle pressure and multiple tasks
• Learn new ideas, methods, and concepts
• Learn through a variety of delivery methods

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Business
• Mathematics
• Communication skills
• Computer skills
• Management skills

Program Outcomes
Employers will expect graduates of the program to be able to:
• Plan the operations of a business across functional areas
• Organize resources to achieve the goals of the organization
• Direct individuals and/or processes to meet organizational goals
• Control business processes

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
After completing this program, graduates will be ready for their career in a variety of positions such as:
• Assistant Manager
• Manager
• Management Trainee
• Department Manager
• Branch Manager
• Business Manager
• Store Manager
• Operations Assistant
• Coordinator
• Owner
• Entrepreneur
• Customer Service

Curriculum
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<td>10101170</td>
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<td>10101174</td>
<td>QuickBooks Accounting - Beginning ▲</td>
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<td>10103106</td>
<td>MS PowerPoint</td>
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<td>10103146</td>
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<td>10103151</td>
<td>MS Excel A</td>
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<td>10103152</td>
<td>MS Excel B ▲</td>
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<td>Marketing Principles</td>
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<td>10104180</td>
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Technical Studies Courses

General Studies Courses ³

Electives 6
Program Requirements 66

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
³ See pages 41-43 for course descriptions.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10101101 Financial Accounting 1 - Credits: 4
Complete accounting cycle, special journals, payroll tax principles, special procedures, and financial statements. Accounting applications through practice set approach.

10101170 Financial Analysis - Credits: 3
In Financial Analysis, the learner applies the skills necessary to achieve an understanding of the financial aspects of business. Each learner will demonstrate application of financial statement interpretation, analysis, forecasting, budgeting and expense control relevant to the nonfinancial manager.

10101174 QuickBooks Accounting - Beginning - Credits: 2
Students will learn the QuickBooks accounting software by performing tasks that involve the general ledger, accounts payable, accounts receivable, inventory, payroll, and financial statements. Students will be responsible for finding and correcting errors in the QuickBooks program. PREREQUISITE: 10101101 Financial Accounting 1 or 10101176 Financial Accounting 1A.

1030106 MS PowerPoint - Credits: 1
A complete presentation graphics course that allows you to produce professional-looking presentations. It gives you the flexibility to make informal presentations using overhead transparencies, electronic presentations, formal presentations using 35mm slides, or virtual presentations. Additionally, you can create paper printouts, outlines, speaker notes, and audience handouts.

1030146 MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

1030151 MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

1030152 MS Excel B - Credits: 1
Students will learn to use MS Excel. Credit B activities will include using advanced features of formulas, object linking and embedding, multiple worksheets, 3-D references, macro basics and database basics. COREQUISITE: 1030151 MS Excel A.

1030162 MS Access A - Credits: 1
Learners create, edit, sort, and query a database. They also learn how to create and print basic forms and reports.

10304102 Marketing Principles - Credits: 3
This course focuses on the marketing process as it relates to the operation of a business enterprise. The intent is to provide students with an understanding of how the marketing function fits within the overall structure of the organization. Special attention is given to the role and significance of evaluating customer needs, pricing, distribution, and promotion of products and services.

10304180 Business & Marketing Field Study - Credits: 2
This course will allow the student to analyze what specific occupational field(s) they are best suited for. Included will be an in-depth self-analysis, simulated job application and interviews, a career research report, and work-based experience(s). PREREQUISITE: Minimum of 40 credits of program coursework must be completed prior to enrolling in this course.

1030500 Introduction to Business - Credits: 3
This is an introductory course designed to develop an understanding of the activities, functions, and principles of business enterprises. The course helps to gain insight into the responsibilities and challenges of operating a business. Emphasis is on the interaction of the various functions required to operate businesses of all sizes. Specifically, the areas of business trends, ownership models, leadership, human resources, marketing, information management, and finance will be explored.

1030525 Business Law - Credits: 3
Business Law provides the student with a working knowledge of the legal system, business ethics, and essentials of contracts. Students gain knowledge in logical and analytical thinking, and are encouraged to challenge legal issues and defend their point of view.

1031107 Principles of Finance - Credits: 3

1031600 Human Resource Management - Credits: 3
In Human Resource Management, the learner applies the skills and tools necessary to effectively value and apply employees’ abilities and needs to organization goals. Each learner will demonstrate the application of the supervisor’s role in contemporary human resource management, impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies and procedures, training, performance management, employee counselling and development, and effective use of compensation and benefit strategies. It is recommended that the learner have experience using a PC/MAC, using the MS Windows operating systems and software suite, browsing Web pages, downloading files, using e-mail, and exchanging files prior to enrolling in this course.

1031698 Managing Human Resources - Credits: 3
Introduces the functions of Human Resource Management in the legal and social context of today’s dynamic business environment. Topics include human resource development, employee selection, performance, appraisal, compensation, training, labor relations, affirmative action, and career management.

10396108 Customer Service - Credits: 1
This course examines customer service as it relates to organizational quality. It addresses service models for internal and external customers, systems and strategies applied to customer service, and tools and techniques for gathering customer feedback and handling complaints.

10396157 Strategic Planning - Credits: 1
Analyze current business strategy, recognize trends, develop vision and mission statements, identify benchmarks, measure business against benchmarks, recommend future directions.

10396188 Project Management - Credits: 3
In Project Management, the learner applies the skills and tools necessary to design, implement, and evaluate formal projects. Each learner will demonstrate the application of the role of project management, developing a project proposal, use of relevant software, working with project teams, sequencing tasks, charting progress, dealing with variations, budgets and resources, implementation, and assessment.

10396191 Supervision - Credits: 3
In Supervision, the learner applies the skills and tools necessary to perform the functions of a frontline leader. Each learner will demonstrate the application of strategies and transition to a contemporary supervisory role including day-to-day operations, analysis, delegation, controlling, staffing, leadership, problem solving, team skills, motivation, and training.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>% employed</td>
<td>28</td>
<td>71%</td>
</tr>
<tr>
<td>Range of yearly salary</td>
<td>90%</td>
<td>$18,000-$107,350</td>
</tr>
<tr>
<td>Average yearly salary</td>
<td>18</td>
<td>$38,553</td>
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</tbody>
</table>

Number of graduates: 39
Number of responses: 34
Number available for employment: 31

800.243.9482  witc.edu  2015-2016
Program Overview
In the CNC Machine Tool Operation program, students learn the skills to set up and operate manual and computer numerically-controlled (CNC) machine tools and to measure and inspect parts for accuracy. Additionally, students learn to use computer-aided drafting (CAD) and computer-aided manufacturing (CAM) software programs to design and machine parts. Skilled machine tool operators work in tool rooms, job shops, CNC production facilities, and in modern manufacturing companies. Successful graduates have many opportunities to advance in their careers as they gain additional experience and training.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The CNC Machine Tool Operation one-year technical diploma includes two embedded short-term technical diplomas as documented below:
• 30-444-2 CNC Technician
• 30-444-3 Manufacturing Production Technician

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
When students enter this program, they should be able to:
• Solve math problems
• Visualize shapes and forms
• Problem solve
• Be detail oriented
• Enjoy doing mechanical work
• Lift 25 pounds
• Assume responsibility
• Follow procedures carefully
• Manage their time
• Work well with others and under supervision

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Communications
• Computer drafting
• General metals/welding
• Machine shop
• Print reading
• Algebra
• Trigonometry
• Geometry
• Keyboarding
• Physics

Program Outcomes
Employers will expect graduates of the program to be able to:
• Apply basic safety practices in the machine shop
• Interpret industrial/engineering drawings
• Apply precision measuring methods to part inspection
• Perform basic machine tool equipment set up and operation
• Perform programming, set up, and operation of CNC machine tools

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
After completing this program, graduates will be ready for their career in a variety of positions such as:
• Machine Tool Operator
• Apprentice Machinist
• CNC Machinist
• Maintenance Machinist
• CNC Programmer

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>31420322</td>
<td>Print Reading for Machine Trades 1</td>
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</tr>
<tr>
<td>31420323</td>
<td>Print Reading for Machine Trades 2 ▲</td>
<td>1</td>
</tr>
<tr>
<td>32420320</td>
<td>CAD/CAM Applications ▲</td>
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<tr>
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<td>Introduction to CAD/CAM</td>
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<tr>
<td>32444300</td>
<td>CNC Turning – Basic Operation and Programming</td>
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<tr>
<td>32444301</td>
<td>CNC Milling – Basic Operation and Programming</td>
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</tr>
<tr>
<td>32444302</td>
<td>Machining - Fundamentals and Drilling Processes</td>
<td>2</td>
</tr>
<tr>
<td>32444303</td>
<td>Machining - Turning Processes</td>
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<tr>
<td>32444304</td>
<td>Machining - Milling Processes</td>
<td>3</td>
</tr>
<tr>
<td>32444305</td>
<td>Machining - Surface Grinding Processes</td>
<td>3</td>
</tr>
<tr>
<td>32444306</td>
<td>CNC Milling – Advanced Operation and Programming ▲</td>
<td>4</td>
</tr>
<tr>
<td>32444307</td>
<td>CNC Turning – Advanced Operation and Programming ▲</td>
<td>4</td>
</tr>
</tbody>
</table>

PROGRAM REQUIREMENTS 35

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41-43 for course descriptions.
31420322  
Print Reading for Machine Trades 1 - Credits: 1  
This course will cover the basic principles of print reading. The emphasis will be on object representation, geometric dimensioning and tolerances (GDT), threads, and section views. Strongly recommend a basic understanding of mathematics concepts.  

31420323  
Print Reading for Machine Trades 2 - Credits: 1  
This advanced print reading course will cover drawing changes, auxiliary and section views, detail and assembly prints, machined features, gears, and CNC documents. PREREQUISITE: 31420322 Print Reading for Machine Trades 1.  

32420320  
CAD/CAM Applications - Credits: 2  
Computer-Aided Design (CAD) and Computer-Assisted Manufacturing (CAM) have become standard tools used almost wherever CNC production in metalworking takes place. Students will use the CAD/CAM software to build geometry, tool and material libraries, and define cutting paths/patterns. Post-processing of these CAD/CAM files will generate CNC programs in machine-specific G-code format. PREREQUISITE: 32420361 Introduction to CAD/CAM or consent of instructor.  

32420361  
Introduction to CAD/CAM - Credits: 1  
This course will introduce students to computer-aided drafting, auxiliary and section views, detail and assembly prints, machined features, gears, and CNC documents. PREREQUISITE: Introduction to CAD/CAM or consent of instructor.  

32444300  
CNC Turning - Basic Operation and Programming - Credits: 2  
This course includes the operation of CNC (Computer Numerical Control) lathes and turning centers including calling up programs, loading and unloading parts, part inspection, and monitoring tool wear. The use of process plans, inspection sheets and set up guides will also be covered. This course will also provide an introduction to planning and writing programs for CNC turning centers using standard G and M codes. Learners will set up work pieces in machines, enter programs, set tool offsets, enter tool compensation, and complete part projects.  

32444301  
CNC Milling - Basic Operation and Programming - Credits: 2  
This course includes the operation of CNC (Computer Numerical Control) mills and machining centers including calling up programs, loading and unloading parts, part inspection, and monitoring tool wear. The use of process plans, inspection sheets, and set up guides will also be covered. This course will provide an introduction to planning and writing programs for CNC mills and machining centers using standard G and M codes. Learners will set up work pieces in machines, enter programs, set tool offsets, enter tool offsets, and complete part projects.  

32444302  
Machining - Fundamentals and Drilling Processes - Credits: 2  
This course will provide the basic machining information needed by the learner in subsequent CNC Machine Tool Operation courses. It will also provide instruction and practice in the use of sawing and drilling machines and related processes.  

32444303  
Machining - Turning Processes - Credits: 3  
This course will provide basic instruction and practice in the use of lathes and various turning machines. Students will learn about lathes, associated processes, turning tools, and related safety/maintenance issues.  

32444304  
Machining - Milling Processes - Credits: 3  
This course will provide instruction and practice in the use of milling machines and various processes performed on them. Students will learn about mills, associated processes, milling machine tooling, and related safety/maintenance issues.  

32444305  
Machining - Surface Grinding Processes - Credits: 3  
This course will provide instruction and practice in the use of the manual surface grinder and various surface grinding processes.  

32444306  
CNC Milling - Advanced Operation and Programming - Credits: 4  
The advanced setup and operation of CNC (Computer Numerical Control) machining centers is covered in this course. Applications include selection of tools and workholding devices, setting tool offsets and work offsets, calling up programs, proofing programs, making edits and machine adjustments. Advanced level programming for CNC machining centers is also covered in this course. Learners will write programs at the machine and computer, enter offsets and compensation, and machine multiple parts to prove out programs.  

32444307  
CNC Turning - Advanced Operation and Programming - Credits: 4  
The advanced setup of CNC (Computer Numerical Control) turning centers is covered in this course. Applications include selection of tools and workholding devices, setting tool offsets and work coordinate positions, calling programs, proofing programs, making edits and machine adjustments. Advanced level programming for CNC turning centers is also covered in this course. Learners will write programs at the machine and computer, enter offsets and tool compensation, and machine multiple parts to prove out programs.  

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/cncmachtoolop/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.
Composite Technology
10-630-4 Associate Degree

Program Overview
Be a part of the fast growing, rapidly changing composite technology industry. This program prepares students to be successful in today’s high-tech world of composite materials. Supported by a background in composite theory, students will gain hands-on experience in fabrication, inspection and repair of composite products. Composite products include aircraft, marine, sporting goods, wind turbines, automobiles, bicycles, spacecraft and more.

Special Feature
This program is unique in the state.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Composite Technology two-year associate degree includes an embedded technical diploma option as documented below:
• 31-630-1 Composite Technician

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Students in this program must:
• Apply mathematical, scientific, and manufacturing principles
• Work from prints and drawings
• Be detail oriented
• Handle and manipulate tools and testing equipment
• Assume responsibility for quality work
• Stand for long periods of time

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Mathematics (algebra, trigonometry, calculus)
• Sciences (biology, chemistry, physics)
• Keyboarding/computer skills
• Print reading

Program Outcomes
Employers will expect graduates of the program to be able to:
• Demonstrate proficiency in composite manufacturing processes
• Use common composite processes and techniques to repair composite material
• Apply industry and corporate standards of quality and lean manufacturing principles
• Control a manufacturing environment
Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Positions available after graduation may include:
• Composite Materials Technician
• Materials Technician
• Materials and Processing Technician

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10106167</td>
<td>Computer and Business Technologies</td>
<td>1</td>
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<tr>
<td>10196165</td>
<td>Lean Enterprise</td>
<td>3</td>
</tr>
<tr>
<td>10606198</td>
<td>CATIA ENOVIA (DMU)</td>
<td>2</td>
</tr>
<tr>
<td>10630102</td>
<td>Industrial Safety</td>
<td>1</td>
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<tr>
<td>10630104</td>
<td>Composite Repair Fundamentals</td>
<td>4</td>
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<tr>
<td>10630106</td>
<td>Composite Fabrication Methods/ Applications 1</td>
<td>4</td>
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<tr>
<td>10630110</td>
<td>Internship</td>
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<tr>
<td>10630119</td>
<td>Composite Research Project</td>
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<tr>
<td>10630111</td>
<td>Aircraft Familiarization and Systems</td>
<td>2</td>
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<tr>
<td>10630112</td>
<td>Engineering Drawings</td>
<td>3</td>
</tr>
<tr>
<td>10630114</td>
<td>Composite Testing and Inspection</td>
<td>3</td>
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<tr>
<td>10630115</td>
<td>Introduction to Composites 1</td>
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<td>10630116</td>
<td>Introduction to Composites 2</td>
<td>3</td>
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<tr>
<td>10630117</td>
<td>Composite Machining</td>
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<tr>
<td>10630118</td>
<td>Composite Fabrication Methods/ Applications 2</td>
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<tr>
<td>10630120</td>
<td>Tooling for Composite Fabrication</td>
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<tr>
<td>10630121</td>
<td>Composite Design</td>
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<td>10890105</td>
<td>Job Quest</td>
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Program Requirements

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<th>Technical Studies Courses</th>
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<td>10801196</td>
<td>Oral/Interpersonal Communication</td>
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<tr>
<td>10801198</td>
<td>Speech</td>
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<td>10804113</td>
<td>College Technical Mathematics 1A</td>
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<tr>
<td>10806112</td>
<td>Principles of Sustainability</td>
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<tr>
<td>10806134</td>
<td>General Chemistry</td>
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<tr>
<td>10809196</td>
<td>Introduction to Sociology</td>
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<tr>
<td>10809198</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
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<td></td>
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</tbody>
</table>

PROGRAM REQUIREMENTS

62

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

See pages 41-43 for course descriptions.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10106167

Computer and Business Technologies - Credits: 1

Learners will gain knowledge on computer hardware, basic computer operations, and the operating system. An emphasis will be placed on file/document management in a network environment and on a standalone personal computer. Learners will become familiar with the World Wide Web by accessing the Internet through browser software. Learners will use e-mail and learn how to communicate properly through e-mail and optional online vehicles. Learners will use search engines/databases for research purposes and proper validation techniques.

10196195

Clean Enterprise - Credits: 3

Clean Enterprise focuses on the abilities of supervisors to identify and increase workplace productivity. Learners will identify workplace productivity solutions through study and practice of: basic principles of lean manufacturing and Toyota Production System (TPS); Value-Stream Mapping, SS Work Flow, Cellular Manufacturing, and Kanban Systems and Kaizen practices.

10630198

CATIA ENOVIA (DMU) - Credits: 2

Intended for students who want to learn to view and analyze CAD data. It also covers the various analytical and navigational tools available within ENOVIA DMU. It also shows how functional dimensioning and tolerancing information can be viewed. Students are introduced to the product environment and the 2-D viewer environment to view all types of data. Students are introduced to 3D printing technology as a means to realistically view CAD parts.

10630102

Industrial Safety - Credits: 1

This course provides an in-depth study of the human and safety practices required for work in industry. Topics include: introduction to OSHA; bloodborne pathogens, machine guarding, hazardous materials, electrical safety, working at heights, surfaces, fire protection, and hazardous communication.

10630104

Composite Repair Fundamentals - Credits: 4

This course is designed to provide students with the knowledge and techniques used for structural repair of components made with composite materials while incorporating industry standards for strength and safety. Subject matter is covered in classroom setting and lab for hands-on experience.

10630106

Composite Fabrication Methods/Applications 1 - Credits: 4

Fundamentals of numerous composite structure fabrication methods and their applications throughout industry will be covered in both a classroom and lab setting. Students will gain proficiency in hand layup, use of pre-preg materials, sandwich core construction, bonding, vacuum bagging, filament winding, vacuum assist resin transfer molding and resin transfer molding. Emphasis will also be placed on composites safety. PREREQUISITE: 10630116 Introduction to Composites 2

10630107

Composite Machining - Credits: 1

This course introduces fabrication with automated processes. Advanced training on RTM (resin transfer mode) fabrication and filament winding will be covered. This is a continuation of Composite Fabrication Methods/Applications 1 with advanced automated composite principles which are used in the industry. COREQUISITE: 10630106 Composite Fabrication Methods/Applications 1.

10630117

Composite Machining - Credits: 1

Machining or drilling of composite structures is different than working with metals. This course will show students how to machine and drill composite structures and the special tools involved. Students gain hands-on experience in using drill presses, vertical axis mills, and lathe for shaping and trimming composite structures.

10630118

Composite Fabrication Methods/Applications 2 - Credits: 4

This course introduces fabrication with automated processes. Advanced training on RTM (resin transfer mode) fabrication and filament winding will be covered. This is a continuation of Composite Fabrication Methods/Applications 1 with advanced automated composite principles which are used in the industry. COREQUISITE: 10630106 Composite Fabrication Methods/Applications 1.

10630119

Composite Research Project - Credits: 1

This is an individual project activity with a subject to be focused on current composite industry fabrication, repair, non-destructive inspection (NDI), and evaluations. Project activity will involve web-based research and report paper with supporting lab work involving fabrication, repair, or NDI.

10630120

Tooling for Composite Fabrication - Credits: 4

Students are introduced to the various means of fabricating tooling or molds for construction of composite structures. Course covers making tools from patterns or CNC of tooling board. Students experience use of CNC equipment, spraying of gel coat and sealants, and polishing of surfaces to allow for composite structure layup, cure, and release.

10630121

Composite Design - Credits: 2

Students are introduced to the various aspects of composite design in a classroom setting. Students will understand the orthotropic nature of composite structures, their behavior when loaded and in different environments. Students will also learn the do's and don'ts for design of composite structures (monolithic and sandwich core) and how to fasten or bond them together. Students develop an understanding for the different designs typically used in aircraft, aerospace, marine, wind energy, and industrial applications. PREREQUISITES: 10630116 Introduction to Composites 2 and 10630112 Engineering Drawings.

10890105

Job Quest - Credits: 1

This course is designed to enhance the student's ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

Graduate Employment Information

Composite Technology is a new WITC program. No graduate follow-up information is currently available.

800.243.9482  witic.edu  2015-2016
Cosmetology
31-502-1 Technical Diploma

Program Overview
The Cosmetology program prepares students with the essential theoretical and practical instruction to develop skills in cosmetology fundamentals, hair sculpture, hair design, chemical texture, hair color, nail care and design, esthetics, advanced cosmetology techniques, and client services, reflective of industry standards and trends. This program meets the Wisconsin Department of Safety and Professional Services Cosmetology Practitioner License training requirement of 1550 hours. Upon successful completion of this program, students will be eligible to take the Wisconsin Cosmetology Practitioner License Examination.

Special Feature
WITC is a Pivot Point Member School, an educational program consisting of distinctive techniques of scientific hair designing and cosmetology. Techniques from this educational program are taught in educational institutions around the world. For more information, visit pivot-point.com.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Review and sign Functional Ability Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
• Attend a mandatory orientation session

Student Profile
Cosmetology students should:
• Communicate clearly
• Work well with others
• Display a strong work ethic
• Show creativity

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Family and Consumer Education
• Accounting/Mathematics
• Chemistry/Biology
• Health
• Communications
• Economics
• Art

Program Outcomes
Employers will expect Cosmetology graduates to be able to:
• Apply safety and sanitation procedures
• Adhere to the current Wisconsin administrative codes and statutes for cosmetology
• Demonstrate interpersonal skills for success
• Perform haircutting services
• Perform shampoo services
• Perform skin care services
• Perform texture services
• Perform hair color services
• Demonstrate hairstyling and finishing techniques
• Perform nail services
• Develop strategies to market products and services

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Career opportunities are excellent for a cosmologist. Opportunities for graduates include:
• Cosmetologist
• Color Technician
• Make-Up Artist
• Nail Technician
• Skin Care/Esthetics

With additional experience, graduates may move into one of these positions:
• Manager
• Owner
• Platform Artist
• Instructor
• Independent Contractor
• Consultant

Curriculum
<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>31502382</td>
<td>Hair Sculpture ▲</td>
<td>3</td>
</tr>
<tr>
<td>31502383</td>
<td>Hair Design ▲</td>
<td>3</td>
</tr>
<tr>
<td>31502384</td>
<td>Chemical Texture ▲</td>
<td>3</td>
</tr>
<tr>
<td>31502385</td>
<td>Hair Color ▲</td>
<td>3</td>
</tr>
<tr>
<td>31502386</td>
<td>Cosmetology Fundamentals ▲</td>
<td>4</td>
</tr>
<tr>
<td>31502387</td>
<td>Client Services 1 ▲</td>
<td>2</td>
</tr>
<tr>
<td>31502388</td>
<td>Client Services 2 ▲</td>
<td>3</td>
</tr>
<tr>
<td>31502389</td>
<td>Advanced Cosmetology Techniques ▲</td>
<td>2</td>
</tr>
<tr>
<td>31502394</td>
<td>Esthetics ▲</td>
<td>1</td>
</tr>
<tr>
<td>31502395</td>
<td>Nail Care and Design ▲</td>
<td>1</td>
</tr>
<tr>
<td>31502396</td>
<td>Client Services 3 ▲</td>
<td>5</td>
</tr>
</tbody>
</table>

PROGRAM REQUIREMENTS 30

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better. Students must earn a grade point of 2.0 in all required courses.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

**31502382**
*Hair Sculpture - Credits: 3*
Develop skills, utilizing proper tools and equipment, in hair cutting, hair tapering (clipper cuts), and razor cutting on manikins and clients. COREQUISITES: 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, and 31502387 Client Services 1.

**31502383**
*Hair Design - Credits: 3*
Develop skills, utilizing proper tools and equipment, in hairstyling, curling, thermal waving, finger waving, roller setting, pin curl placement, blow drying, shampoo, scalp and hair treatments, conditioning, reconditioning, hair analysis and care of hairpieces, wigs and wefts on manikins and clients. COREQUISITES: 31502382 Hair Sculpture, 31502384 Chemical Texture, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, and 31502387 Client Services 1.

**31502384**
*Chemical Texture - Credits: 3*
Develop skills, utilizing proper tools and equipment, in hair straightening, hair relaxing, thermal hair straightening, blowouts, and permanents applying chemistry principles on manikins and clients. COREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, and 31502387 Client Services 1.

**31502385**
*Hair Color - Credits: 3*
Develop skills, utilizing proper tools and equipment, in hair coloring, tinting, and bleaching while applying chemistry principles and law of color inclusive of color correction techniques, hair damage assessment, and appropriate product selection on manikins and clients. COREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, and 31502387 Client Services 1.

**31502386**
*Cosmetology Fundamentals - Credits: 4*
Examine industry trends and fundamental cosmetology topics related to individual cosmetologist hygiene/grooming, professional communication, and personal and professional development. Focus on anatomy, physiology, and disorders of the hair, skin and nails and the study of bacteriology, decontamination, safety and first aid required in establishments, including Wisconsin cosmetology state statutes and administrative codes. Develop knowledge and familiarity with salon point-of-sale software. COREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, and 31502387 Client Services 1.

**31502387**
*Client Services 1 - Credits: 2*
Develop practical techniques learned in the classroom for hair sculpting, hair design, chemical texture, hair color and communication skills with clients, inclusive of individual student needs, including point-of-sale process and salon operations. COREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, and 31502386 Cosmetology Fundamentals.

**31502388**
*Client Services 2 - Credits: 3*
Develop practical techniques learned in the classroom for hair sculpting, hair design, chemical texture, hair color, and communication skills with clients, inclusive of individual student needs, with continued application of point-of-sale process and salon operations. PREREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, 31502387 Client Services 1, and COREQUISITES: 31502389 Advanced Cosmetology Techniques, 31502394 Esthetics, 31502395 Nail Care and Design, and 31502396 Client Services 3.

**31502389**
*Advanced Cosmetology Techniques - Credits: 2*
Practice advanced techniques learned in the classroom for hair sculpting, hair design, chemical texture, hair color, and hair care with manikins and clients, inclusive of individual student needs. PREREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, 31502387 Client Services 1, and COREQUISITES: 31502388 Client Services 2, 31502394 Esthetics, 31502395 Nail Care and Design, and 31502396 Client Services 3.

**31502390**
*Esthetics - Credits: 1*
Develop skills, utilizing proper tools and equipment, in hair removal, beard and mustache shaping, facial treatments, makeup, eyelashes, light therapy, and basic principles of electricity on manikins and clients. PREREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, 31502387 Client Services 1, and COREQUISITES: 31502389 Advanced Cosmetology Techniques, 31502394 Esthetics, 31502395 Nail Care and Design, and 31502396 Client Services 3.

**31502391**
*Nail Care and Design - Credits: 1*
Develop skills, utilizing proper tools and equipment, in manicures, pedicures, and varied nail enhancement techniques on manikins and clients. PREREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, 31502387 Client Services 1, and COREQUISITES: 31502388 Client Services 2, 31502389 Advanced Cosmetology Techniques, 31502394 Esthetics, and 31502396 Client Services 3.

**31502396**
*Client Services 3 - Credits: 5*
Enhance practical techniques learned in the classroom for hair sculpting, hair design, chemical texture, hair color, esthetics, nails, and communication skills with clients; inclusive of individual student needs, with continued application of point-of-sale process and salon operations. PREREQUISITES: 31502382 Hair Sculpture, 31502383 Hair Design, 31502384 Chemical Texture, 31502385 Hair Color, 31502386 Cosmetology Fundamentals, 31502387 Client Services 1, and COREQUISITES: 31502388 Client Services 2, 31502389 Advanced Cosmetology Techniques, 31502394 Esthetics, and 31502395 Nail Care and Design.

Gainful employment information is available at this link: [http://www.witc.edu/cosmetology/](http://www.witc.edu/cosmetology/). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

**Graduate Employment Information**
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Average yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>31</td>
<td>67%</td>
<td>$16,704</td>
</tr>
</tbody>
</table>

Number employed: 31

Percent employed: 97%

Range of yearly salary: $14,559-$19,239

Average yearly salary: $16,704
Program Overview

The Criminal Justice - Law Enforcement 720 Academy will provide students with the right skills to handle complex situations encountered as a criminal justice official at municipal, county, or state government levels.

To become eligible to work as an officer in the State of Wisconsin, the student must have basic policing skills. The Wisconsin Department of Justice’s (WisDOJ) Law Enforcement Standards Board has established criteria. Admission is restricted to those who qualify under WisDOJ administrative rules. Upon completing the Academy, the student becomes certifiable for a period of two years from the date of completion. This makes the student eligible for formal certification as a Basic Law Enforcement Officer upon hiring by a law enforcement agency.

Work as an officer requires integrity. Candidates for the Criminal Justice - Law Enforcement 720 Academy must undergo criminal history and traffic record checks and may be required to submit fingerprints and do drug screening. All candidates will be asked to participate in a personal screening interview. See www.wilenet.org for additional information from the Law Enforcement Standards Board.

Admission Requirements

Students in this program must:
• Complete application form
• Have earned a high school diploma or GED certificate
• Review and sign the Functional Ability Statement of Understanding
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Complete admissions interview with a WITC Counselor (above requirements should be completed prior to interview)

Program-Specific Requirements

Students in this program must:
• Have achieved an associate degree from a Wisconsin Technical College System district or its accredited equivalent from another state; OR have earned at least 60 accredited college credits. The 60-college credit standard is defined in terms of semester credits. Quarter credits may be converted to semester credits by multiplying quarter credits by two-thirds. Generally, 90 quarter credits are equivalent to 60 semester credits. Applicants must provide an official college transcript.
• Submit Background Check fee.
• Complete physical fitness assessment.
• Attend a mandatory program orientation session.
• If employed, the employing agency must provide a copy of completed form DJ-LE-303, Verification of Employment Standards and Application for Certification, to enroll an officer in preparatory training. This form documents that the student has met all of the required employment standards.
• Complete form DJ-LE-310, Student Authorization for Release of Information.
• Complete form DJ-LE-327, Application for Enrollment in Law Enforcement, Jail or Secure Juvenile Detention Officer Training.
• Sign and acknowledge compliance with the Criminal Justice - Corrections, Criminal Justice - Law Enforcement, Law Enforcement Academy Jail Academy Handbook, Grading Policy and Program Rules, Penalties, and Grievance Procedures.
• Complete an oral interview with a panel of criminal justice executives or with teaching or counselling staff affiliated with the training school.
• Undergo a criminal history records check conducted by training school staff. An unpardoned felony conviction or misdemeanor crime of domestic violence conviction will prohibit a student from attending the unified tactics portion of preparatory law enforcement officer training, and will prohibit employment as a law enforcement officer.
• Undergo a physical assessment. A physical assessment will be conducted to verify that the applicant can meet the physical standards required. The assessment will be conducted by a licensed physician, physician assistant or nurse practitioner utilizing the Physician’s Assessment form (DJ-LE-332), or a form similar to DJ-LE-332, which provides the physician with a job description on which to base the assessment. The applicant will also complete a personal medical history, a copy of which is to be submitted to the examining physician, nurse practitioner or physician assistant for reference.
• Possess a valid Wisconsin driver’s license or other such valid operator’s permit recognized by the Wisconsin Department of Transportation as authorizing operation of a motor vehicle.
• Be at least 18 years of age and a United States citizen, and complete form DJ-LE-322, Birth Certificate Verification, to provide verification of age and citizenship.

Student Profile

Students in this program should be able to:
• Lift and carry at least 80 pounds
• See and hear well (normal or corrected)
• Distinguish colors
• Communicate ideas verbally and in writing

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:
• Grammar/Business English
• Speech
• Basic Math/Algebra
• Economics
• Business Law
• Psychology
• Health/First Aid
• Physical Education

Program Outcomes

Employers will expect graduates of the Criminal Justice - Law Enforcement 720 Academy to be able to perform diverse job functions including:
• Describe basic legal principles
• Report hazards to public safety
• Respond to emergencies
• Provide first aid to the injured
• Investigate the results and causes of crimes and crashes

Career Outlook

Criminal Justice - Law Enforcement 720 Academy graduates are in demand because they can perform many public safety functions. Typical positions available upon successful completion include:
• Police Officer
• Deputy Sheriff
• WisDNR Warden/Ranger
• Forest Service Ranger

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>30504231</td>
<td>Overview of Criminal Justice</td>
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<tr>
<td>30504232</td>
<td>Overview of Patrol Response</td>
<td>2</td>
</tr>
<tr>
<td>30504233</td>
<td>Principles of Patrol Response</td>
<td>2</td>
</tr>
<tr>
<td>30504234</td>
<td>Application of Patrol Response</td>
<td>2</td>
</tr>
<tr>
<td>30504235</td>
<td>Overview of Investigations</td>
<td>2</td>
</tr>
<tr>
<td>30504236</td>
<td>Principles of Investigations</td>
<td>2</td>
</tr>
<tr>
<td>30504237</td>
<td>Application of Investigations</td>
<td>2</td>
</tr>
<tr>
<td>30504238</td>
<td>Physical Fitness</td>
<td>1</td>
</tr>
<tr>
<td>30504239</td>
<td>Principles of Emergency Vehicle Response</td>
<td>2</td>
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<tr>
<td>30504331</td>
<td>Overview of Tactics</td>
<td>2</td>
</tr>
<tr>
<td>30504332</td>
<td>Principles of Tactics</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Requirements 21

Curriculum and location are subject to change and will be published on College Web site when final.
Course Descriptions

30504321 Overview of Criminal Justice - Credits: 1
Through classroom lecture students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase I topics: Academy Orientation, Fundamentals of Criminal Justice, Ethics, Cultural Competency, Agency Policy, and Professional Communication.

30504322 Overview of Patrol Response - Credits: 2
Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase I topics: Critical Thinking and Decision-Making, Basic Response (RESPOND), Radio Procedures, Introduction to TraCS, Traffic Law Enforcement, and First Aid.

30504323 Principles of Patrol Response - Credits: 2
Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase II topics: Professional Communication Skills II, Incident Command Systems and NIMS, Hazardous Materials and WMD, Tactical Response, Crisis Management, and TEMS/ Self-Buddy Aid.

30504324 Application of Traffic Response - Credits: 2
Through classroom lecture, and on-campus lab, students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase III topics: Traffic Law Enforcement - Core and Radar, Traffic Crash Investigations & Incident Management, Operating a Motor Vehicle While Intoxicated (OMVWI), and Standardized Field Sobriety Tests (SFST).

30504325 Overview of Investigations - Credits: 2
Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase I topics: Constitutional Law I, Crimes I, Juvenile Law I, Interviews, and Report Writing.

30504326 Principles of Investigations - Credits: 2
Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase II topics: Constitutional Law II, Crimes II, and Domestic.

30504327 Application of Investigations - Credits: 2
Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase III topics: Ethics II: Moral Reasoning and Professional Responsibility, Cultural Competence II: Fair and Impartial Policing, Victims, Sexual Assault, Child Maltreatment, Interrogations, Physical Evidence Collection, and Testifying in Court.

30504328 Physical Fitness - Credits: 1
Through classroom lecture and on-campus lab students will apply the Department of Justice 720 Academy Physical Fitness Program requirements.

30504329 Principles of Emergency Vehicle Response - Credits: 2
Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase II topics: Emergency Vehicle Operation and Control (EVOC) and Vehicle Contacts II.

30504331 Overview of Tactics - Credits: 2
Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase I topics: Fundamentals of Firearms, Vehicle Contacts I, and Officer Wellness.

30504332 Principles of Tactics - Credits: 3
Through classroom lecture, and on-campus lab students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase II topics: Physical Fitness, DAAT, and Firearms II.

Graduate Employment Information
(WTCS Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>18</th>
<th>Number employed</th>
<th>15</th>
<th>% employed in WITC district</th>
<th>93%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of responses</td>
<td>17</td>
<td>Percent employed</td>
<td>94%</td>
<td>Range of yearly salary</td>
<td>$21,000-$50,228</td>
</tr>
<tr>
<td>Number available for employment</td>
<td>16</td>
<td>Employed in related field</td>
<td>13</td>
<td>Average yearly salary</td>
<td>$48,101</td>
</tr>
</tbody>
</table>

800.243.9482
witic.edu
2015-2016
Criminal Justice Studies
10-504-5  Associate Degree

Program Overview
Protective services today require employees that are knowledgeable, ethical, have strong communication skills, and that are adaptable to ever-changing technology along with changes in society. The Criminal Justice Studies program will prepare students for various positions in the criminal justice field. The program will also prepare the graduate to work as a juvenile detention officer, police dispatcher, or security officer positions. As an associate degree program, the credits and focus also prepare a graduate to pursue other associated careers such as probation/parole agent, public defense lawyer, FBI agent, or other law enforcement positions requiring a bachelor’s degree and beyond.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Review and sign Functional Ability Statement of Understanding
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Students in this program must:
• Submit background check fee
• Have acceptable results based on the Wisconsin Criminal History Record Check - information from the Criminal History Record Check may affect ability to secure internship placement and the ability to find employment after graduation.

Student Profile
Students in the Criminal Justice Studies program must:
• Be able to work under stress
• Be honest and ethical
• Accept and treat others fairly regardless of age, sex, or cultural background
• Be able to accept authority and relate to authority figures
• Have strong organizational skills
• Have strong written and oral/interpersonal communication skills
• Be able to reason and solve complex problems or have critical thinking skills
• Be able to work in complex organizations

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Basic keyboarding and computer skills
• Basic math skills
• Reading skills at or above the high school level
• Writing skills at or above the high school level
• Grammar/Business English
• Speech
• Basic Math/Algebra
• Economics
• Business Law
• Psychology
• Health/First Aid
• Physical Education
Key to the student’s success in the program is a caring attitude toward people, especially victims of a crime.

Program Outcomes
Employers will expect graduates to be able to:
• Think critically
• Manage emergencies
• Communicate effectively
• Demonstrate professionalism
• Conduct investigations
• Interact with others
Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Graduates will find employment opportunities in government, commerce, or industry as:
• Police Officers
• Deputy Sheriffs
• State Patrol/Troopers
• Jail Deputy/Officers
• Correctional Officers
• Youth Care Workers
• Detention Workers
• Private Investigators
• Security Officers
• Telecommunicators
• Park and Forestry Personnel
After completing the associate degree program, graduates may apply for the 160 Jail Officer Academy or 720 Law Enforcement Training.
With additional education or work experience, graduates may also pursue a position as an:
• Adult/Juvenile Administrator
• Institutional Case Worker/Social Worker
• Probation/Parole Administrator
• Probation/Parole Agent
• Youth Counselor/Case Aide
• Youth Detention Home Supervisor

Curriculum
Number  Course Title  Credits
Technical Studies Courses
10504161 Courts/Jurisdiction  3
10504163 Criminal Justice-Introduction  3
10504164 Introduction to Criminal Law  3
10504165 Communication Strategies  3
10504167 Policing Strategies  3
10504168 Wellness  2
10504169 Criminal Justice Due Process  3
10504172 Criminology  3
10504173 Criminal Justice Investigations  3
10504174 Correctional Institutions  3
10504175 Juvenile Justice System  3
10504176 Criminal Justice Ethics  3
10504177 Traffic Law Enforcement  3
10504146 Probation/Parole  3
10504181 Criminal Justice Report Writing  3
10504182 Criminal Justice Internship  2
10504183 Criminal Justice Capstone  3
10520104 Issues in Alcohol and Other Drug Abuse  3
General Studies Courses
10801195 Written Communication  3
10801196 Oral/Interpersonal Communication  3
10801198 Speech  3
10804107 College Mathematics  3
10804123 Math with Business Applications  3
10804189 Introductory Statistics  3
10809122 Introduction to American Government  3
10809172 Introduction to Diversity Studies  3
10809174 Social Problems  3
10809159 Abnormal Psychology  3
10809196 Introduction to Sociology  3
10809198 Introduction to Psychology  3

PROGRAM REQUIREMENTS  64

• Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
• See pages 40-43 for course descriptions.
• Students must earn a grade point of 2.0 or better in all required 10504XXX and 10520XXX courses.
10504161  Court/Jurisdiction - Credits: 3
This introductory course explores the development of the American judicial system. Students will examine the operational procedures of the federal, state, municipal, and specialized court systems as they impact law enforcement and/or corrections.

10504163  Criminal Justice-Introduction - Credits: 3
Students will explore the evolution of criminal justice systems, including courts, corrections, and law enforcement. Understand career pathways within the criminal justice system, including roles, functions, and professionalism.

10504164  Introduction to Criminal Law - Credits: 3
Identify basic concepts of criminal law. Students will explore the elements of various crimes against persons, property and crimes involving drugs, alcohol, or other criminal activity. Understand the diverse sentence structures in the criminal justice system.

10504165  Communication Strategies - Credits: 3
Students will learn about the communication process and techniques used to make them effective. Professional communicators. Verbal and nonverbal communication strategies will be emphasized for a variety of situations and populations. Professional communication skills, including Motivational Interviewing (MI), interviewing, and interrogation techniques will be emphasized.

10504167  Policing Strategies - Credits: 3
Students will learn various policing strategies. Emphasis will be placed on community policing philosophies and problem solving using community resources. Understand how to identify and develop partnerships in the community to promote positive community relationships.

10504168  Wellness - Credits: 2
Understand how to maintain a healthy lifestyle, including stress management and relaxation, weight control, effective sleep, minimization of alcohol and tobacco use, financial stability, and spirituality. Recognize factors contributing to suicide within the criminal justice profession.

10504169  Criminal Justice Due Process - Credits: 3
Learn key concepts and principles of due process and constitutional law. The U.S. Constitution, particularly the Bill of Rights, will be analyzed as it applies to the criminal justice professionals. Legal precedent setting cases and state law will be reviewed.

10504172  Criminology - Credits: 3
This introductory course examines the nature, demographics, and impact of crime in the United States. Using a scientific approach, students will analyze the theoretical causation of criminal activity. Explore legal and political implications of crime prevention and control.

10504173  Criminal Justice Investigations - Credits: 3
Gain general knowledge of investigative strategies and techniques. Learn basic information on identifying, processing, and preserving various types of evidence, and processing crime scenes. Interview and interrogation techniques will be practiced within legal guidelines of Miranda.

10504174  Correctional Institutions - Credits: 3
Students will study the evolution of punishment, jails, and prisons. Emphasis will be given to institutional subgroups, evidence-based practice and rehabilitative institutional programs and services.

10504175  Juvenile Justice System - Credits: 3
Compare and contrast the Juvenile and Adult justice systems. The historical aspect of the juvenile system will be studied and compared to the modern day system. Juvenile sanctions and dispositions, including rehabilitation and therapy, will be discussed. Laws covering child maltreatment and children in need of protection services will be recognized.

10504176  Criminal Justice Ethics - Credits: 3
This course explores the ethical, legal, and criminal justice professional issues. It is designed to teach a process of ethical decision-making and to increase awareness of the complexities in the criminal justice system for criminal justice professionals.

10504177  Traffic Law Enforcement - Credits: 3
Gain a basic knowledge of Wisconsin traffic laws. General skills of detecting traffic violations, issuing traffic citations, directing traffic, and crash investigation will be gained. Identify responsibilities of a first responding officer, how to manage the response to a scene, and take necessary steps to enable effective follow-up as needed.

10504146  Probation/Parole - Credits: 3
Explore the function, duties, and role of probation and parole. Learn the types of offenses, sentancing process, presentence investigation, revocation procedures, transitioning, and alternatives to incarceration. Identify and implement classification and assessment tools proved to be effective in evidence based practice.

10504181  Criminal Justice Report Writing - Credits: 3
Learn basic requirements, guidelines, and skills for proper and professional written documentation of activities in a criminal justice setting. The student will explain the context of report writing, take effective field notes, organize information in reports, write narratives, and describe what information should/should not be included in certain types of reports.

10504182  Criminal Justice Internship - Credits: 2
The Criminal Justice Internship is designed to provide on-the-job experiences in actual work situations. These experiences strengthen student competencies through participation in a wide variety of criminal justice system experiences ranging from routine assignments to specialized work-related duties. Instructor approval is required prior to enrolling in this course. PREREQUISITE: 32 Credits of 10504XXX or 10520XXX coursework must be completed.

10504183  Criminal Justice Capstone - Credits: 2
This course is the capstone work-based experience for the Criminal Justice Studies program. It is designed to encourage students to think critically and solve challenging problems. Students will design, develop, and perform a project either in an actual work experience or a simulated project. The project will be designed to utilize skills typical of a graduate in the field. Instructor approval is required prior to enrolling in this course. PREREQUISITE: 32 Credits of 10504XXX or 10520XXX coursework must be completed.

10520104  Issues in Alcohol and Other Drug Abuse - Credits: 3
Students gain a basic understanding of the use and abuse of alcohol and other drugs. Emphasis is on historical and social perspectives of drug use, trends of use, and legal and social responses to problematic alcohol and illicit drug use. Additionally, this course provides an accurate description of the effects of psychoactive drugs, identifies methods of substance abuse treatment, and introduces the student to local treatment services.

Graduate Employment Information
Criminal Justice Studies is a new WITC program. No graduate follow-up information is currently available.

800.243.9482  witc.edu  2015-2016
Program Overview
The Dairy Herd Management program will prepare students with practical experience and theory applications to meet the demands of operating profitable and progressive dairy farms. Proper management skills, herdsperson traits, and continued use of new technologies are keys in being competitive in today’s markets. This program is for the student serious about maintaining a career in dairy herd management.

Special Features
This program is designed for the learner to gain first-hand experience through internships. This will incorporate actual work experience in such areas as a dairy herdsperson, milking, feeding, calf care, general farm duties, scheduling, and employer/employee communications.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Dairy Herd Management one-year technical diploma includes a series of three embedded short-term technical diplomas as documented below:

- 30-091-1 Dairy Feeding Management
- 30-091-2 Dairy Genetics and Reproduction
- 30-091-4 Dairy Cattle Management

Admission Requirements
Students in this program must:

- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Dairy Herd Management students should be able to:

- Make judgments and decisions
- Get along well with people
- Exhibit safe working habits
- Communicate clearly and effectively
- Enjoy working in agricultural settings
- Work well with limited supervision
- Stand or walk for long periods of time
- Lift a minimum of 50 pounds

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:

- Communication skills
- Basic problem-solving skills
- Basic computer skills
- General business concepts
- Applied math

Program Outcomes
Upon completion of this program, students will be able to:

- Manage farm business
- Coordinate herd reproduction programs
- Administer herd health practices
- Manage herd feeding

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Some available careers upon completion of this program are:

- AI Technician
- Dairy Herd Manager
- DHIA Field Technician
- Farm Owner
- Feed and Nutrition Consultant
- Herdsperson

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td>31091312</td>
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<tr>
<td>31091314</td>
<td>Dairy Feeding Management</td>
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<tr>
<td>31091318</td>
<td>Dairy Lab 1</td>
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<tr>
<td>31091320</td>
<td>Dairy Lab 2</td>
<td>2</td>
</tr>
<tr>
<td>31091324</td>
<td>Milk Production</td>
<td>2</td>
</tr>
<tr>
<td>31091332</td>
<td>Dairy Cattle Industry</td>
<td>2</td>
</tr>
<tr>
<td>31091335</td>
<td>Dairy Cattle Genetics and Reproduction</td>
<td>4</td>
</tr>
<tr>
<td>31091340</td>
<td>Dairy Housing and Farmstead Design</td>
<td>2</td>
</tr>
<tr>
<td>31091344</td>
<td>Dairy Business Management</td>
<td>2</td>
</tr>
<tr>
<td>31091348</td>
<td>Dairy Cattle Management</td>
<td>2</td>
</tr>
<tr>
<td>31091360</td>
<td>Dairy Management Internship 1</td>
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</tr>
<tr>
<td>31091361</td>
<td>Dairy Management Internship 2</td>
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</tr>
</tbody>
</table>

WISCONSIN TECHNICAL COLLEGE

Campus: Rice Lake

See pages 41-43 for course descriptions.
Gainful employment information is available at this link: [http://www.witc.edu/pgmpages/dairyhd/career.htm](http://www.witc.edu/pgmpages/dairyhd/career.htm). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.
Program Overview

The Dental Assistant program prepares graduates to work with dentists as they examine and treat patients. Dental assistants with documented skills also may carry out a variety of laboratory, clinical, and office duties. Some dental assistants manage the office and are responsible for patient scheduling and bookkeeping functions. Most dental assistants work in general or specialized dental offices, either for individual dentists or for groups of dentists. Some dental assistants may choose to work for insurance companies, dental laboratories, or dental supply companies. The dental assistant also may find employment with federal agencies such as the Veterans’ Administration; United States Public Health Services; the Armed Forces; or a state, county, or city health facility.

The program in dental assisting is accredited by the Commission on Dental Accreditation (and has been granted the accreditation status of “approval without reporting requirements”). The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission’s Web address is: http://www.ada.org/100.aspx

Admission Requirements

Students in this program must:

• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Review and sign Functional Abilities Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements

Students in this program must:

• Submit Background Check fee
• Have an acceptable Wisconsin Caregiver Background Check, National Criminal Background Check, Minnesota Caregiver Background Check (if applicable), and other states, if applicable
• Pass a physical exam, have current immunizations, and demonstrate negative status for tuberculosis (Tb)
• Possess current certification of “CPR for Healthcare Providers” or equivalent
• Review and sign Allied Health Division Confidentiality Statement
• Attend a mandatory program orientation session

Student Profile

Dental Assistant students in the program should:

• Work well with others
• Adjust to diverse personalities and backgrounds

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

• Biology
• English
• Math
• Keyboarding/computer skills

Program Outcomes

Employers will expect graduates of this program to be able to:

• Perform a variety of advanced supportive dental procedures
• Manage infection and hazard control
• Produce diagnostic intraoral and extraoral radiographs on a variety of patients
• Perform advanced dental laboratory procedures
• Demonstrate professional behaviors, ethics, and appearance
• Perform dental office business procedures

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Graduates of the program will be qualified for a variety of positions including:

• Dental Assistant
• Dental Receptionist
• Dental Office Manager
• Dental Practice Manager
• Dental Lab Technician
• Dental Laboratory Assistant
• Dental Insurance Claims Processor
• Dental Sales Representative
• Dental Treatment Coordinator
• Dental Specialty Assistant
• Maxillofacial Dental Assistant
• Endodontic Dental Assistant
• Prosthodontic Dental Assistant
• Orthodontic Dental Assistant
• Pediatric Dental Assistant
• Periodontal Dental Assistant

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>10508101</td>
<td>Dental Health Safety ▲</td>
<td>1</td>
</tr>
<tr>
<td>10508103</td>
<td>Dental Radiography ▲</td>
<td>2</td>
</tr>
<tr>
<td>10508113</td>
<td>Dental Materials ▲</td>
<td>2</td>
</tr>
<tr>
<td>10508120</td>
<td>Dental Office Management ▲</td>
<td>2</td>
</tr>
<tr>
<td>10508304</td>
<td>Dental and General Anatomy ▲</td>
<td>2</td>
</tr>
<tr>
<td>31508302</td>
<td>Dental Chairside ▲</td>
<td>5</td>
</tr>
<tr>
<td>31508306</td>
<td>Dental Assistant Clinical ▲</td>
<td>3</td>
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<tr>
<td>31508307</td>
<td>Dental Assistant Professionalism ▲</td>
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<td>31508308</td>
<td>Dental Chairside Advanced ▲</td>
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<td>31508309</td>
<td>Dental Laboratory Procedures ▲</td>
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<tr>
<td>31508310</td>
<td>Dental Radiography - Advanced ▲</td>
<td>1</td>
</tr>
<tr>
<td>31508311</td>
<td>Dental Assistant Clinical - Adv ▲</td>
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</table>

Occupational Specific Courses ▲

Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

Occupational Supportive/ General Studies Courses ▲

See pages 41-43 for course descriptions.

Students must earn a grade point of 2.0 or better in all required courses.
### Course Descriptions

(See pages 41-43 for General Studies course descriptions)

#### Dental Health Safety - Credits: 1
Prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA Standards, and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. CPR certification is a prerequisite; students will be required to show proof of certification before beginning the course. This course is a WTCS aligned course required in both the Dental Hygienist and Dental Assistant programs. 

**PREREQUISITE:** Current certification in CPR for Healthcare Providers.

#### Dental Radiography - Credits: 2
Prepares dental auxiliary students to operate x-ray units and expose bitewing, periapical, extra oral, and occlusal radiographs. Emphasis is placed on protection against x-ray hazards. Students also process, mount, and evaluate radiographs for diagnostic value. In this course students demonstrate competency on a manikin. In addition, students expose bitewing radiographs on a peer, role-play patient. Students gain further experience in exposing radiographs on patients in the clinical portion of their program. This course also provides the background in radiographic theory required for students to make informed decisions and adjustments. 

**COREQUISITES:** 10508101 Dental Health Safety and 10508304 Dental and General Anatomy.

#### Dental Materials - Credits: 2
Prepares dental auxiliary students to handle and prepare dental materials such as liners, bases, cements, amalgam, resin restorative materials, gypsum products, and impression materials. They also learn to take alginate impressions on a manikin and fabricate diagnostic models. Students will also develop the ability to educate patients about preventive dentistry, brushing and flossing techniques, and dental procedures, using lay terminology. Throughout the course, students will apply decoding strategies to the correct use and interpretation of dental terminology.

**COREQUISITES:** 10508101 Dental Health Safety, 10508304 Dental and General Anatomy, and 10508304 Dental and General Anatomy.

#### Dental Chairside - Credits: 5
Prepares dental assistant students to chart oral cavity structures, dental pathology, and restorations and to assist a dentist with basic dental procedures including examinations, pain control, amalgam restoration, and cosmetic restoration. Students will also develop the ability to educate patients about preventive dentistry, brushing and flossing techniques, and dental procedures, using lay terminology. Throughout the course, students will apply decoding strategies to the correct use and interpretation of dental terminology.

**COREQUISITES:** 10508101 Dental Health Safety, 10508304 Dental and General Anatomy, Dental Office Management.

#### Dental Chairside - Advanced - Credits: 2
 Prepares dental assistant students to adapt chairside skills to assisting with dental specialties as they are performed in general practice. Focuses on pediatric dentistry, orthodontics, oral and maxillofacial surgery, endodontics, periodontics, and prosthodontics. Students will also develop the ability to assist with sealants, perform coronal polishing, and apply topical fluoride and topical anesthetics.

**PREREQUISITE:** 31508302 Dental Chairside and **COREQUISITES:** 31508309 Dental Laboratory Procedures.

#### Dental Laboratory Procedures - Credits: 4
Prepares Dental Assistant students to produce alginate impressions and fabricate diagnostic models, oral appliances, temporary restorations, and custom trays. Students also polish oral appliances.

**PREREQUISITE:** 10508113 Dental Materials and **COREQUISITES:** 10508304 Dental and General Anatomy and 31508308 Dental Chairside Advanced.

#### Dental Assistant Clinical - Credits: 3
Prepares students for clinical employment in the dental profession. Emphasizes integration of core abilities and basic occupational skills. Students will process, mount, and evaluate radiographs for diagnostic value. In addition, they will use radiographs to explain dental health and treatment plans to patients.

**PREREQUISITE:** 10508101 Dental Health Safety and 10508304 Dental and General Anatomy.

#### Dental Assistant Clinical - Adv - Credits: 2
Prepares dental assistant students for professional success in a dental practice or another dental health care environment. Students develop professional appearance and image. More importantly, they learn to work within ethical guidelines and legal frameworks. In preparation for entering the work force, dental assistants customize or develop their portfolios and lay out an on-going professional development plan.

**PREREQUISITE:** Acceptance into the Dental Assistant program.

#### Dental Assistant Professional - Credits: 1
Prepares dental assistant students to apply fundamentals of general and dental anatomy to informed decision-making and to professional communication with colleagues and patients.

**PREREQUISITE:** Acceptance into the Dental Assistant program.

### Graduate Employment Information

(WTCS Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WTCS district</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
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Gainful employment information is available at this link: [http://www.witc.edu/pgmpages/dentalastr/career.htm](http://www.witc.edu/pgmpages/dentalastr/career.htm). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.
Program Overview

The Dietary Manager program will train students to manage food service personnel, food supplies, kitchen equipment, food production, and nutrition aspects of food service. This program provides skills beyond the level of dietary assistant. As dietary managers, graduates will be members of the dietetic team under the supervision of a registered dietitian. Students need to complete their occupational experience in a hospital, nursing home, or other pre-approved dietary setting. Students completing the Dietary Manager Occupational Experience course may need to complete site forms. Further information can be obtained from the instructor.

Student Profile

Dietary Manager students should be able to:
• Perform clerical tasks
• Plan and direct others in routine activities
• Communicate ideas verbally and in writing
• Follow procedures and maintain standards
• Accept responsibility
• Organize work rapidly
• Be aware of new techniques and methods
• Pass a physical exam
• Walk and stand for long periods

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:
• Family and Consumer Science, Home Economics, or Food Service Experience
• Health
• Basic math knowledge/skills
• Basic science knowledge/skills
• Oral and Written Communication

Program Outcomes

Employers will expect graduates of this program to:
• Use nutrition principles to plan, prepare, and evaluate menus to meet clients’ dietary needs
• Apply basic principles of purchasing, receiving, storage, and inventory of food and supplies
• Collect nutritional assessment data using interviewing skills

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Dietary Manager graduates are in demand because of their ability to provide and assess nutrition care service. Opportunities for employment exist in many service industries including hospitals, long-term care facilities, school food service, assisted living facilities, correctional facilities, and similar food service operations. The positions available to students after graduation are:
• Certified Dietary Manager
• Dietary Manager
• Food Service Supervisor

This program is accredited by the Association of Nutrition and Foodservice Professionals (ANFP), and students are eligible to complete a certifying exam for registered dietary managers.

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>30312300</td>
<td>Dietary Manager</td>
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<tr>
<td>30312301</td>
<td>Dietary Manager Occupational Experience ▲</td>
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</table>

PROGRAM REQUIREMENTS 4

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
Course Descriptions

30312300
Dietary Manager - Credits: 3
The Dietary Manager course is part of a two-course program approved by the Dietary Manager Association. Individuals who are interested in working as supervisors in the kitchens of hospitals and nursing homes will find this program worthwhile. Instruction includes normal nutrition, therapeutic nutrition, food production and service, human relations, institutional development, and data management.

30312301
Dietary Manager Occupational Experience - Credits: 1
The internship portion of the Dietary Manager program requires each student to work with a preceptor and the instructor in fulfilling 150 hours of on-the-job work experience. Actual work assignments will be individually determined based on the previous experiences of the student and the work site itself. An orientation session, midterm meeting, and follow-up evaluation will be coordinated by the instructor. COREQUISITE: 30312300 Dietary Manager.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Number of responses</th>
<th>Percent employed</th>
<th>Range of yearly salary</th>
<th>Number available for employment</th>
<th>Employed in related field</th>
<th>Average yearly salary</th>
<th>% employed in WITC district</th>
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<td>0%</td>
<td>0</td>
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<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
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*Insufficient data to report.
Program Overview
The Early Childhood Education program prepares students to work as teacher-caregivers in early childhood settings. It combines hands-on fieldwork in area centers with related academic work at the college. Graduates become responsible for the care and education of children in the birth-to-eight-years age range. They create and maintain safe and healthy play environments, guide behavior, plan and implement learning activities, and work cooperatively with staff and parents.

Special Features
Earn an Early Childhood Education degree in two years or less through online classes, daytime or evening classes.
General Studies courses are offered in a variety of delivery methods including in-person, online, or ITV (Interactive Television).
Agreements between the Wisconsin Technical College System (WTCS) and the following baccalaureate degree-granting institutions allow graduates to transfer credits to:
• Cardinal Stritch University
• UW-River Falls
• UW-Stevens Point
• Lakeland College
• UW-La Crosse
• UW-Stout
• UW-Oshkosh
• UW-Whitewater
Contact the receiving institution for specific details.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Early Childhood Education two-year associate degree includes an embedded technical diploma option as documented below:
• 31-307-1 E-Connect - Child Care Services (page 86)

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Review and sign the Functional Ability Statement of Understanding
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Students in this program must:
• Complete and sign Background Information Disclosure Form (BID)
• Submit Background Check fee
• Have an acceptable Wisconsin Caregiver Background Check or Minnesota Caregiver Background Check, as applicable
  - Information from the Caregiver Background Check may affect ability to secure fieldwork placement and the ability to find employment after graduation
• Complete Staff Health Report - Child Care Provider Form (physical form)
There are four practicum experiences required in the Early Childhood Education program. Practicum 1 requires a minimum of 64 hours of off-campus field experience, and Practicum 2, 3, and 4 require a minimum of 128 hours of off-campus field experience. In-class contact time is also required as part of the practicum experience.

Student Profile
Students in the Early Childhood Education program should:
• Enjoy and respect children
• Exhibit a caring attitude
• Be flexible
• Use good judgment
• Be dependable
• Communicate effectively
• Be able to lift 50 pounds
• Be able to accept constructive feedback

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Applied Math
• Psychology
• Speech/Communications
• Family and Consumer Education
• English/Foreign Language
• Health/Food Choices
• Sociology
• Art

Program Outcomes
Employers will expect Early Childhood Education graduates to:
• Apply child development theory to practice
• Cultivate relationships with children, family, and the community
• Assess child growth and development
• Use best practices in teaching and learning
• Demonstrate professionalism
• Integrate health, safety, and nutrition practices

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
The demand for early childhood professionals continues to increase as parents look for providers who can guide their child’s development. The typical careers that are available after graduation include:
• Child Care Teacher
• Child Care Assistant Teacher
• Family Child Care Provider
• Infant or Toddler Caregiver
• In-home Nanny
• Early Childhood Special Needs Assistant
• Program Director/Administrator
• Public School Teacher Aide/Assistant
• Head Start Teacher/Assistant

Curriculum
Number Course Title Credits
10307146 ECE: Foundations of Early Childhood Education 3
10307151 ECE: Infant & Toddler Development 3
10307166 ECE: Curriculum Planning 3
10307167 ECE: Health, Safety, & Nutrition 3
10307174 ECE: Practicum 1 3
10307178 ECE: Art, Music, & Language Arts 3
10307179 ECE: Child Development 3
10307187 ECE: Children with Differing Abilities 3
10307188 ECE: Guiding Children's Behavior 3
10307192 ECE: Practicum 2 * 3
10307194 ECE: Math, Science, & Social Studies 3
10307195 ECE: Family & Community Relationships 3
10307197 ECE: Practicum 3 * 3
10307198 ECE: Administering an Early Childhood Education Program or 3
10307204 Supervision/Administration of ECE Programs 3
10307199 ECE: Practicum 4 * 3

General Studies Courses
10801195 Written Communication ▲ 3
10801198 Speech ▲ 3
10804123 Math with Business Applications * or 3
10804107 College Mathematics * or 3
10804189 Introductory Statistics * or 3
10806112 Principles of Sustainability or 3
10806122 Natural Sciences in Society or 3
10809172 Introduction to Diversity Studies 3
10809195 Economics or 3
10809122 Introduction to American Government 3
10809196 Introduction to Sociology 3
10809198 Introduction to Psychology or 3
10809188 Developmental Psychology ▲ 3

Electives
3

Program Requirements
▲ Requires a prerequisite and/or corequisite that must be completed with a grade of 2.0 or better.
* See pages 41-43 for course descriptions.
* Credit for Prior Learning not applicable for this course.

WITC offers a wide array of credit-based early childhood education courses, credentials, and degree options that align with the Youngstar requirements.
For more information, go to www.witc.edu/ece.
This 3-credit course introduces you to the early childhood profession. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; explore the standards for quality early childhood education; explore strategies that support diversity and anti-bias perspectives; implement activities developed by the co-op teacher/instructor; integrate professional behaviors; practice caregiver routines as curriculum; practice positive interpersonal skills with children and adults; analyze the guiding principles and the five developmental domains related to the WI Early Learning Standards; integrate the WI Early Learning Standards into the program's teaching cycle (ongoing assessment, planning and curriculum goals, and implementation); evaluate learning and assessment activities using the early learning standards for each individual child. Students must complete or have on file a Staff Health Report – Child Care Provider form (physical form) and current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and/or Minnesota as applicable) forms, as part of this course.

This 3-credit course will focus on beginning level curriculum development in the specific content areas of art, music, and language arts. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play; establish a developmentally appropriate environment for art, music, and language arts; develop activity plans that promote child development and learning; analyze caregiving routines as curriculum; create developmentally appropriate language, literature, and literacy activities; create developmentally appropriate music and movement activities.

This 3-credit course examines the components of curriculum planning in early childhood education. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine and establish a developmentally appropriate environment; integrate Developmentally Appropriate Practice (DAP) into curriculum; develop activity plans that promote child development and learning; develop curriculum plans that promote child development across all content areas; analyze early childhood curriculum models.

This 3-credit course examines the topics of health, safety, and nutrition within the context of the early childhood educational setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives, follow governmental regulations and professional standards; as they apply to health, safety, and nutrition; provide a safe early childhood environment, provide a healthy early childhood environment, plan nutritionally sound menus, adhere to child abuse and neglect mandates, apply Sudden Infant Death Syndrome (SIDS) risk reduction strategies, apply strategies to prevent the occurrence of Shaken Baby Syndrome (SBS), incorporate health, safety, and nutrition concepts into the children's curriculum.

This 3-credit practicum course you will learn about and apply the course competencies in an actual child care setting. The course competencies include: identify children's growth and development; maintain the standards for quality early childhood education; practice strategies that support diversity and anti-bias perspectives; implement student teacher-developed activity plans; identify the elements of a developmentally appropriate environment; implement positive guidance strategies; demonstrate positive behaviors; utilize caregiving routines as curriculum; utilize positive interpersonal skills with children; utilize positive interpersonal skills with adults; students must complete or have on file a Staff Health Report – Child Care Provider form (physical form) and current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and/or Minnesota as applicable) forms, as part of this course. COREQUISITE: 10307174 ECE: Practicum 1.

This 3-credit course will focus on beginning level curriculum development in the specific content areas of math, science and social studies. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play; establish a developmentally appropriate environment for math, science, and social studies; develop activity plans that promote child development and learning; create developmentally appropriate science activities; create developmentally appropriate math activities; create developmentally appropriate social studies activities.

This 3-credit course will focus on the child with differing abilities in an early childhood education setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; provide inclusive play and learning experiences based on assessment; integrate strategies that support diversity and anti-bias perspectives; summarize child development principles; analyze factors that affect the behavior of children; practice positive guidance strategies; develop guidance strategies to meet individual needs; create a guidance philosophy.

This 3-credit practicum course you will learn about and apply the course competencies in an actual child care setting. The course competencies include: assess children's growth and development; implement the standards for quality early childhood education; integrate strategies that support diversity and anti-bias perspectives; build meaningful curriculum; provide a developmentally appropriate environment; facilitate positive guidance strategies; evaluate one's own professional behaviors and practices; lead caregiving routines as curriculum; utilize positive interpersonal skills with children; utilize positive interpersonal skills with adults. Students must complete or have on file a Staff Health Report – Child Care Provider form (physical form) and current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and/or Minnesota as applicable) forms, as part of this course. COREQUISITE: 10307192 ECE: Practicum 2.

This is the first of six courses designed to prepare participants to receive a credential as a child care administrator. This course represents an overview of the roles and responsibilities of administrators of various early care and education programs and the groups with whom they have role relationships, with an emphasis on quality.

This 3-credit practicum course you will learn about and apply the course competencies in an actual child care setting. The course competencies include: analyze children's growth and development based on assessment; integrate strategies that support diversity and anti-bias perspectives; promote professional behaviors and practices; implement meaningful curriculum; create respectful, reciprocal relationships; evaluate early childhood education programs for quality; explore professional options in early childhood education. Students must complete or have on file a Staff Health Report – Child Care Provider form (physical form) and current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and/or Minnesota as applicable) forms, as part of this course. COREQUISITE: 10307197 ECE: Practicum 3.

This 3-credit practicum course will focus on building meaningful curriculum in the specific content areas of math, science and social studies. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play; establish a developmentally appropriate environment for math, science, and social studies; develop activity plans that promote child development and learning; create developmentally appropriate science activities; create developmentally appropriate math activities; create developmentally appropriate social studies activities.
Program Overview
E-CHiLD is an innovative Early Childhood Education associate degree program that blends online learning with community-based student teaching. Students will engage in a variety of online teaching and learning experiences, including virtual “live” face-to-face classroom sessions one evening per week. Customized learning kits, optional open teaching labs and technical support are available to enhance learning. E-CHiLD is designed to fit into busy life schedules with less demand on time and budget.

E-CHiLD is based on a cohort model - a select group of learners who start together and move together through the program, following a prescribed course sequence and plan. E-CHiLD is designed to build meaningful relationships, maximize educational technology and promote timely program completion. Eligible students will have completed five Early Childhood Education program technical studies (core) courses or less.

Special Features
Earn an Early Childhood Associate degree online.
• Engage in a variety of online teaching and learning experiences
• Interact face to face in a virtual classroom setting with instructor and peers, one evening per week
• Optional open teaching labs
• Customized learning kits
• Technical Support available
• Community-based student teaching

Agreements between the Wisconsin Technical College System (WTCS) and the following baccalaureate degree-granting institutions allow graduates to transfer credits to:
• Cardinal Stritch University
• UW-River Falls
• UW-Stevens Point
• UW-Stout
• Lakeland College
• UW-La Crosse
• UW-Superior
• UW-Oshkosh
• UW-Whitewater

Contact the receiving institution for specific details.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Review and sign the Functional Ability Statement of Understanding
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Students in this program must:
• Complete and sign Background Information Disclosure Form (BID)
• Submit Background Check fee
• Have an acceptable Wisconsin Caregiver Background Check or Minnesota Caregiver Background Check, as applicable
• Information from the Caregiver Background Check may affect ability to secure fieldwork placement and the ability to find employment after graduation
• Complete Staff Health Report - Child Care Provider form (physical form)

There are four practicum experiences required in the E-CHiLD program. Practicum 1 requires a minimum of 64 hours of off-campus field experience, and Practicums 2, 3, and 4 require a minimum of 128 hours of off-campus field experience. Class contact time is also required as part of the practicum experience.

Student Profile
Students in the E-CHiLD program should:
• Enjoy and respect children
• Exhibit a caring attitude
• Be flexible
• Use good judgment
• Be dependable
• Communicate effectively
• Be able to lift 50 pounds
• Be able to accept constructive feedback

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Applied Math
• Psychology
• Speech/Communications
• Family and Consumer Education
• English/Foreign Language
• Health/Food Choices
• Sociology
• Art

Program Outcomes
Employers will expect E-CHiLD graduates to:
• Apply child development theory to practice
• Cultivate relationships with children, family, and the community
• Assess child growth and development
• Use best practices in teaching and learning
• Demonstrate professionalism
• Integrate health, safety, and nutrition practices

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
The demand for early childhood professionals continues to increase as parents look for providers who can guide their child’s development. The typical careers that are available after graduation include:
• Childcare Teacher
• Childcare Assistant Teacher
• Family Child Care Provider
• Infant or Toddler Caregiver
• In-home
• Early Childhood Special Needs Assistant
• Program Director/Administrator
• Public School Teacher Aide/Assistant
• Head Start Teacher/Assistant

For more information, go to www.witc.edu/echild.htm.

Campus: Online

Curriculum

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<tr>
<th>Number</th>
<th>Course Title</th>
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<td>ECE: Infant &amp; Toddler Development</td>
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<td>ECE: Curriculum Planning</td>
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ELECTIVES
3

PROGRAM REQUIREMENTS 69

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41-43 for course descriptions.
* Credit for Prior Learning not applicable for this course.

T.E.A.C.H. Early Childhood®
Wisconsin Early Childhood Association
http://wisconsinearlychildhood.org/programs/teach/
This 3-credit course introduces you to the early childhood profession. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; identify the history of early childhood education; summarize types of early childhood education settings; identify the components of a quality early childhood education program; summarize the responsibilities of early childhood education professionals; explore early childhood curriculum models, and analyze the principles of the WI Model Early Learning Standards.

### ECE: Core Practicum - Credits: 3

This 3-credit practicum course will focus on beginning level curriculum development in the specific content areas of art, music, and language arts. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play; establish a developmentally appropriate environment for art, music, and language arts; develop activity plans that promote child development and learning; analyze caregiving routines as curriculum; analyze the methods and designs of child development research; analyze the role of heredity and the environment; examine the role of brain development in early learning (conception through age three); examine caregiving routines as curriculum.

### ECE: Nutrition and Food Service - Credits: 3

This 3-credit course examines strategies to prevent the occurrence of Shaken Baby Syndrome (SBS), Sudden Infant Death Syndrome (SIDS) risk reduction strategies, apply nutrition within the context of the early childhood educational setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the history of nutrition and food service; analyze nutrition within the context of the early childhood setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of nutrition and food service; utilize positive interpersonal skills with children; utilize positive interpersonal skills with adults; promote professional behaviors and practices; explore early childhood curriculum models, and analyze the components of an ECE facility; design an ECE program; integrate strategies that support diversity and anti-bias perspectives; promote professional behaviors and practices; explore early childhood curriculum models.

### ECE: Early Child Development - Credits: 3

This 3-credit course focuses on early child development. Course competencies include: examine the critical role of play; establish a developmentally appropriate environment for art, music, and language arts; develop activity plans that promote child development and learning; analyze caregiving routines as curriculum; analyze the methods and designs of child development research; analyze the role of heredity and the environment; examine the role of brain development in early learning (conception through age three); examine caregiving routines as curriculum.

### ECE: Infant & Toddler Development - Credits: 3

This 3-credit course focuses on early child development. Course competencies include: examine the critical role of play; establish a developmentally appropriate environment for art, music, and language arts; develop activity plans that promote child development and learning; analyze caregiving routines as curriculum; analyze the methods and designs of child development research; analyze the role of heredity and the environment; examine the role of brain development in early learning (conception through age three); examine caregiving routines as curriculum.

### ECE: Early Child Development - Credits: 3

This 3-credit course focuses on early child development. Course competencies include: examine the critical role of play; establish a developmentally appropriate environment for art, music, and language arts; develop activity plans that promote child development and learning; analyze caregiving routines as curriculum; analyze the methods and designs of child development research; analyze the role of heredity and the environment; examine the role of brain development in early learning (conception through age three); examine caregiving routines as curriculum.

### ECE: Practicum 3 - Credits: 3

This 3-credit practicum course will focus on an early childhood education program. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; analyze children’s growth and development; analyze the components of an ECE facility; design an ECE program; integrate strategies that support diversity and anti-bias perspectives; promote professional behaviors and practices; implement meaningful curriculum; create respectful, reciprocal relationships; evaluate early childhood education programs for quality; explore professional options in early childhood education. Students must complete or have on file a Staff Health Report – Child Care Provider form (physical form) and current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and/or Minnesota as applicable) forms, as part of this course. COREQUISITE: 10307197 ECE: Practicum 3.

### ECE: Ethics, Advocacy, and Leadership - Credits: 3

This 3-credit course will develop an understanding of the relationship between the Code of Ethical Conduct, child advocacy, and leadership in an early childhood setting.
E-Connect - Child Care Services
31-307-1 Technical Diploma

Program Overview
E-Connect - Child Care Services is an innovative one-year technical diploma that incorporates the first year of the Early Childhood Education associate degree with Wisconsin Professional Preschool Credential coursework. Graduates of this program will be recognized as Wisconsin Registry Career Ladder - Career Level 11. Coursework is available in both online and in-person formats in order to accommodate a variety of life schedules and individual learning styles.

Special Features
• Earn an E-Connect - Child Care Services technical diploma in one year through online, daytime and evening classes - mix and match.
• Meets “Year One” technical studies coursework required to obtain the Early Childhood Education associate degree with seamless opportunities for degree completion.
• Meets the coursework requirements for the Wisconsin Preschool Credential when combined with the ECE: Preschool Credential Capstone course and commission process.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Review and sign the Functional Ability Statement of Understanding
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Students in this program must:
• Complete and sign Background Information Disclosure Form (BID)
• Submit Background Check fee
• Have an acceptable Wisconsin Caregiver Background Check or Minnesota Caregiver Background Check, as applicable
  - Information from the Caregiver Background Check may affect ability to secure fieldwork placement and the ability to find employment after graduation
• Complete Staff Health Report - Child Care Provider form (physical form)

There are two practicum experiences required in the E-Connect - Child Care Services program. Practicum 1 requires a minimum of 64 hours of off-campus field experience and Practicum 2 requires a minimum of 128 hours of off-campus field experience. Class contact time is also required as part of the practicum experience.

Student Profile
Students in the E-Connect - Child Care Services program should:
• Enjoy and respect children
• Exhibit a caring attitude
• Be flexible
• Use good judgment
• Be dependable
• Communicate effectively
• Be able to lift 50 pounds
• Be able to accept constructive feedback

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Applied Math
• Psychology
• Speech/Communications
• Family and Consumer Education
• English/Foreign Language
• Health/Food Choices
• Sociology
• Art

Program Outcomes
Employers will expect E-Connect - Child Care Services graduates to:
• Relate knowledge of child development to practice
• Create relationships with children, family, and the community
• Apply observation, documentation, and assessment strategies
• Implement developmentally appropriate teaching and learning activities
• Demonstrate professionalism
• Follow health, safety, and nutrition practices

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
The demand for early childhood professionals continues to increase as parents look for providers who can guide their child’s development. The typical careers that are available after graduation include:
• Childcare Teacher
• Childcare Assistant Teacher
• Family Child Care Provider
• Infant or Toddler Caregiver
• In-home Nanny
• Early Childhood Special Needs Assistant
• Program Director/Administrator
• Public School Teacher Aide/Assistant
• Head Start Teacher/Assistant

Curriculum
Number Course Title Credits
Technical Studies Courses
10307148 ECE: Foundations of Early Childhood Education 3
10307151 ECE: Infant & Toddler Development 3
10307167 ECE: Health, Safety, & Nutrition 3
10307174 ECE: Practicum 1 3
10307178 ECE: Art, Music, & Language Arts 3
10307179 ECE: Child Development 3
10307188 ECE: Guiding Children’s Behavior 3
10307192 ECE: Practicum 2 3
10307194 ECE: Math, Science, & Social Studies 3

Program Requirements 27
• Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
• Credit for Prior Learning not applicable for this course

For more information, go to www.witc.edu/e-connect
http://wisconsinearlychildhood.org/programs/teach/
Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10307148
ECE: Foundations of Early Childhood Education - Credits: 3
This 3-credit course introduces you to the early childhood profession. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; investigate the history of early childhood education; summarize types of early childhood education programs; summarize responsibilities of early childhood education professionals; explore early childhood curriculum models, and analyze the principles of the WI Model Early Learning Standards.

10307151
ECE: Infant & Toddler Development - Credits: 3
In this 3-credit course you will study infant and toddler development as it applies to an early childhood education setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; analyze development of infants and toddlers (conception to three years); correlate prenatal conditions with development; summarize child development theories; analyze the role of heredity and the environment; examine culturally and developmentally appropriate environments for infants and toddlers; examine the role of brain development in early learning (conception through age three); examine caregiving routines as curriculum.

10307167
ECE: Health, Safety, & Nutrition - Credits: 3
This 3-credit course examines the topics of health, safety, and nutrition within the context of the early childhood educational setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; follow governmental regulations and professional standards; as they apply to health, safety, and nutrition, provide a safe early childhood environment, provide a healthy early childhood environment, plan nutritionally sound menus, adhere to child abuse and neglect mandates, apply sudden Infant Death Syndrome (SIDS) risk reduction strategies, apply strategies to prevent the occurrence of Shaken Baby Syndrome (SBS), incorporate health, safety, and nutrition concepts into the children's curriculum.

10307174
ECE: Practicum 1 - Credits: 3
In this 3-credit practicum course you will learn about and apply the course competencies in an actual child care setting. The course competencies include: document children's behavior; explore the standards for quality early childhood education; explore strategies that support diversity and anti-bias perspectives; implement activities developed by the co-op teacher/instructor; demonstrate professional behaviors; practice caregiving routines as curriculum; practice positive interpersonal skills with children and adults; analyze the guiding principles and the five developmental domains related to the WI Early Learning Standards; integrate the WI Early Learning Standards into the program's teaching cycle (ongoing assessment, planning and curriculum goals, and implementation); evaluate learning and assessment activities using the early learning standards for each individual child. Students must complete or have on file a Staff Health Report – Child Care Provider form (physical form) and current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and/or Minnesota as applicable) forms, as part of this course.

10307178
ECE: Art, Music, & Language Arts - Credits: 3
This 3-credit course will focus on beginning level curriculum development in the specific content areas of art, music, and language arts. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play; establish a developmentally appropriate environment for art, music, and language arts; develop activity plans that promote child development and learning; analyze caregiving routines as curriculum; create developmentally appropriate language, literature, and literacy activities; create developmentally appropriate art activities; create developmentally appropriate music and movement activities.

10307179
ECE: Child Development - Credits: 3
This 3-credit course examines child development within the context of the early childhood education setting. Course competencies include: analyze social, cultural, and economic influences on child development; summarize child development theories; analyze development of children age three through age eight; summarize the methods and designs of child development research; analyze the role of heredity and the environment; examine the role of brain development in early learning (ages 3-8).

10307188
ECE: Guiding Children's Behavior - Credits: 3
This 3-credit course examines positive strategies to guide children's behavior in the early childhood education setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; summarize early childhood guidance principles; analyze factors that affect the behavior of children; practice positive guidance strategies; develop guidance strategies to meet individual needs; create a guidance philosophy.

10307192
ECE: Practicum 2 - Credits: 3
In this 3-credit practicum course you will learn about and apply the course competencies in an actual child care setting. The course competencies include: identify children's growth and development; maintain the standards for quality early childhood education; practice strategies that support diversity and anti-bias perspectives; implement student teacher-developed activity plans; identify the elements of a developmentally appropriate environment; implement positive guidance strategies; demonstrate professional behaviors; utilize caregiving routines as curriculum; utilize positive interpersonal skills with children; utilize positive interpersonal skills with adults; Students must complete or have on file a Staff Health Report – Child Care Provider form (physical form) and current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and/or Minnesota as applicable) forms, as part of this course. (REQUISITE: 10307174 ECE: Practicum 1).

10307194
ECE: Math, Science, & Social Studies - Credits: 3
This 3-credit course will focus on beginning level curriculum development in the specific content areas of math, science and social studies. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play; establish a developmentally appropriate environment for math, science, and social studies; develop activity plans that promote child development and learning; create developmentally appropriate science activities; create developmentally appropriate math activities; create developmentally appropriate social studies activities.

Graduate Employment Information
(WITC Graduate Survey Responses 2012–2013; for most recent data, go to witic.edu)

The information below is based on graduates' responses from Chippewa Valley Technical College, Moraine Park Technical College, and Southwests Wisconsin Technical College and does not include WITC graduates.

Number of graduates 21
Number of responses 17
Number available for employment 10
Number employed 9
Percent employed 90%
Employed in related field 4

% employed in WITC district NA
Range of yearly salary $28,078 – $28,078
Average yearly salary $28,078

800.243.9482 witic.edu 2015-2016 87
Emergency Medical Technician
30-531-3 Technical Diploma

Program Overview
This program will prepare the student to respond in many emergencies that require urgent medical attention. The student will be trained to assess the emergency, provide the care that can save a life, and transport the patient to the hospital. The student must know how to respond quickly to high-level emergencies such as a motor vehicle accident, heart attack, near drowning, childbirth, poisoning, and life-threatening injury. Students must be 18 years old for licensing. The student will also be expected to complete ten patient contacts, after obtaining a Training Center Training Permit.

Special Feature
Emergency Medical Technician (EMT) training is offered at various off-campus locations for the student's convenience.

Admission Requirements
Students in this program must:
• Be at least 17 years old
• Complete application/registration process and submit fee
• Successfully complete reading entrance assessment (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding Form
• Review and sign the Functional Ability Statement of Understanding

Program-Specific Requirements
Students in this program must:
• Have acceptable results based on the Wisconsin Criminal History Record Check, Wisconsin Caregiver Background Check, Minnesota Caregiver Background Check (if applicable), and/or other states if applicable
• Provide current immunization history and demonstrate negative status for tuberculosis (Tb)
• Submit a copy of the appropriate Wisconsin (or other state(s)) Department of Transportation (DOT) Driving Abstract if you have any violations/suspension/revocation
• Submit signed EMT Syllabi Form
• Attend a mandatory orientation session scheduled prior to the start of class

Student Profile
EMT students should be able to:
• Make minute visual comparisons and decisions
• Be detail oriented and accurate
• Follow written instructions

• Have good physical stamina and lift 125 pounds (250 with assistance)
• Work 24-hour shifts
• Have good coordination and balance

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Health
• First Aid
• Physical Education
• Psychology
• Biology/Physiology
• English/Grammar
• Speech
• Business English
• Basic Math

Key to the student's success as an EMT is a desire to work for the good of others.

Program Outcomes
The Emergency Medical Technician program is approved by the Wisconsin Division of Health Services because it uses the current National Emergency Medical Services Education Standards. Graduates will be able to:
• Make decisions under stress
• Work quickly in situations requiring accuracy
• Question patients to obtain medical and personal history
• Provide efficient and immediate care to critically ill and injured patients
• Deal with adverse social situations including the location of the emergency

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Emergency Medical Technicians are the crucial link in the healthcare system. Graduates of the EMT program must complete the National Registry of Emergency Medical Technicians Exam for licensing. If successful, students will be eligible to apply for licensure as an:
• EMT

Curriculum

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▲ This course requires a prerequisite and/or corequisite.

Note: in order to successfully complete the program, the student must complete the clinical portion of the class.

Program Requirements

| PROGRAM REQUIREMENTS | 5 |

Note: in order to successfully complete the program, the student must complete the clinical portion of the class.
Emergency Medical Technician - Credits: 5

This course prepares students for all aspects of emergency medical care, both medical and trauma situations, sanctioned by the Wisconsin Division of Health, at the basic level. Following the most current Wisconsin Revision of the National Standard Curriculum, this course includes didactic and practical skill information in the following areas: legal aspects, anatomy and physiology, patient assessment, critical thinking skills, airway adjuncts, fractures and dislocations, spinal injuries, soft tissue wounds, pharmacology, stroke, cardiac, geriatric, ambulance operations, and triage. Successful completion of this course prepares the learner for the National Registry practical and written examination at the EMT level. PREREQUISITE: Admission to the program.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

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Emergency Medical Technician - Paramedic

31-531-1 Technical Diploma

Financial Aid Eligible

Program Overview
The one-year Emergency Medical Technician - Paramedic (EMT - Paramedic) program is identical to the S31 coursework in the Paramedic Technician associate degree program. The program offers students the opportunity to further their professional EMS careers. Instruction is based upon the U.S. DOT Administration/Wisconsin Bureau of Local Health Support and EMS Curriculum - Paramedic Technician Curriculum. Students are prepared with the knowledge and skills to work competently as an EMT - Paramedic. The program consists of classroom lectures, practical skills labs, laboratory simulations, and hospital and pre-hospital clinical experiences. Additional certifications in Advanced Cardiac Life Support, Pre-Hospital Trauma Life Support, and Pediatric Advanced Life Support are offered, as well as neonatal advanced life support competencies. Students who successfully complete the program are eligible to take the National Registry of EMT’s written and practical examinations for paramedic level of certification.

Students completing the one-year EMT - Paramedic program have the option of returning to complete the associate degree program by completing Medical Terminology and all of the General Studies coursework outlined on Page 142. The Emergency Medical Technician - Paramedic program is accredited by the Commission on Accreditation of Allied Health Programs (www.caahep.org) upon recommendation of the Committee on Accreditation of Education Programs for the Emergency Medical Services Professions (CoAEMSP). This will enable graduates to take the Wisconsin Paramedic licensing examinations upon successful completion of all portions of the technical studies courses.

Special Features
• Lecture coursework will be offered via ITV (interactive television) on four evenings per week to all campus locations and the Hayward Outreach Center (days and originating site to be determined)
• On-site skills labs will be scheduled every other Saturday at the Rice Lake Campus

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
• Complete current “CPR for Healthcare Providers” certification
• Provide proof of current Wisconsin licensure with a completed EMT Proof of Licensure and Statement of Understanding form
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Review and sign the Functional Ability Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
In order to be admitted to the program, the student must:
• Attend a mandatory program orientation session
• Pass a physical exam, have current immunizations, and demonstrate negative status for tuberculosis (Tb)
• Submit Background Check fee
• Have acceptable results based on the Wisconsin Criminal History Record Check, Wisconsin Caregiver Background Check, Minnesota Caregiver Background Check (if applicable), and/or other states, if applicable

Student Profile
Emergency Medical Technician - Paramedic students should be able to:
• Think critically

Career Outlook
Graduates of the program will be ready to start their career as paramedic technicians in a variety of healthcare settings including:
• Ambulance services
• Dispatch centers
• First responder units
• Hospitals/Emergency Departments
• Industrial Safety Departments
• Rescue squads
• Urgent care facilities

With further education, advancement potential may include:
• Critical Care Transport Paramedic
• Ambulance Service Training Coordinator
• EMS Shift Supervisor
• EMS Instructor
• Ambulance Service Manager
• Medic
• Flight Paramedic
• Registered Nurse

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>10531911</td>
<td>EMS Fundamentals ▲</td>
<td>2</td>
</tr>
<tr>
<td>10531912</td>
<td>Paramedic Medical Principles ▲</td>
<td>4</td>
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<tr>
<td>10531913</td>
<td>Adv. Patient Assessment Principles ▲</td>
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<td>10531914</td>
<td>Adv. Pre-hospital Pharmacology ▲</td>
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<td>10531915</td>
<td>Paramedic Respiratory Management ▲</td>
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<td>10531916</td>
<td>Paramedic Cardiology ▲</td>
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<td>10531917</td>
<td>Paramedic Clinical/Field 1 ▲ *</td>
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<tr>
<td>10531918</td>
<td>Advanced Emergency Resuscitation ▲</td>
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<td>10531919</td>
<td>Paramedic Medical Emergencies ▲</td>
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<tr>
<td>10531920</td>
<td>Paramedic Trauma ▲</td>
<td>3</td>
</tr>
<tr>
<td>10531921</td>
<td>Special Patient Populations ▲</td>
<td>3</td>
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<td>10531922</td>
<td>EMS Operations ▲</td>
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<td>10531923</td>
<td>Paramedic Capstone ▲</td>
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<tr>
<td>10531924</td>
<td>Paramedic Clinical/Field 2 ▲ *</td>
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</tbody>
</table>

PROGRAM REQUIREMENTS 38

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
* This course will be offered in various regional hospitals and clinical settings.

Students must earn a grade point of 2.0 or better in all required courses.
Programs and Course Descriptions

10531911
EMS Fundamentals - Credits: 2
This course provides the paramedic student with comprehensive knowledge of EMS systems, safety, well-being, legal issues, and ethical issues, with the intended outcome of improving the health of EMS personnel, patients, and the community. The students will obtain fundamental knowledge of public health principles and epidemiology as related to public health emergencies, health promotion, and illness/injury prevention. Introducing students to comprehensive anatomical and medical terminology and abbreviations will foster the development of effective written and oral communications with colleagues and other health care professionals. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531912
Paramedic Medical Principles - Credits: 4
This course addresses the complex depth of anatomy, physiology, and pathophysiology of major human systems while also introducing the paramedic students to the topics of shock, immunology, and bleeding. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531913
Adv. Patient Assessment Principles - Credits: 3
This course teaches the paramedic student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. By utilizing a structured and organized assessment process with knowledge of anatomy, physiology, pathophysiology, life span development, and changes that occur to the human body with time, the students will learn to develop a list of differential diagnoses through clinical reasoning, along with the ability to modify the assessment as necessary to formulate a treatment plan for their patients. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531914
Adv. Pre-hospital Pharmacology - Credits: 3
This course provides the paramedic student with the comprehensive knowledge of pharmacology required to formulate and administer a pharmacological treatment plan intended to mitigate emergencies and improve the overall health of the patient. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531915
Paramedic Respiratory Management - Credits: 2
This course teaches the paramedic student to integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patient airway, adequate mechanical ventilation, and respiration for patients of all ages. Specific knowledge pertaining to the respiratory system is also provided to ensure the student is prepared to formulate a field impression and implement a comprehensive treatment plan for a patient with a respiratory complaint. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531916
Paramedic Cardiology - Credits: 4
This course teaches the paramedic student to integrate assessment findings with principles of cardiovascular anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a cardiovascular complaint. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531917
Paramedic Clinical/Field 1 - Credits: 3
This course provides the student with the opportunity to enhance his or her learning through the practice of paramedicine in field and health care environment experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531918
Advanced Emergency Resuscitation - Credits: 1
By teaching Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) methodologies and protocols, this course prepares the paramedic student in the integration of comprehensive knowledge of causes and pathophysiology into the management of shock, respiratory failure, respiratory arrest, cardiac arrest, and peri-arrest states with an emphasis on early intervention to prevent respiratory and/or cardiac arrest if possible. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531919
Paramedic Medical Emergencies - Credits: 4
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a medical complaint. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531920
Paramedic Trauma - Credits: 3
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for an acutely injured patient. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531921
Special Patient Populations - Credits: 3
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for patients with special needs. Gynecological emergencies, along with special considerations in trauma are also included within this course. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531922
EMS Operations - Credits: 1
This course provides the paramedic student with the knowledge of operational roles and responsibilities to ensure patient, public, and EMS personnel safety. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531923
Paramedic Capstone - Credits: 1
This course provides the student with a final opportunity to incorporate their cognitive knowledge and psychomotor skills through labs and scenario-based practice and evaluations prior to taking the National Registry written and practical examinations. Technical skills attainment (15A) for each student will be compiled and/or documented within this course as required by the DHS-approved paramedic curriculum. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531924
Paramedic Clinical/Field 2 - Credits: 4
This course provides the student with the opportunity to enhance his or her learning through the practice of paramedicine in field and health care environment experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course. Successful completion of this course requires the student to meet all clinical and field competency requirements at the paramedic level as defined by WI DHS EMS. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/emtpar/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>21</td>
<td>79%</td>
<td>$21,600-$60,000</td>
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<td>16</td>
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<tr>
<td>23</td>
<td>Employed in related field</td>
<td></td>
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</tr>
</tbody>
</table>

800.243.9482
witc.edu
2015-2016
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Program Overview

Today’s successful farmer must keep up with changes and improvements in the farming industry to remain competitive. The Farm Business and Production Management technical diploma will give students both classroom and on-the-farm instruction. The program consists of six courses taught over a six-year period. WITC accepts new enrollments into the program each year beginning July 1.

Special Feature

Tuition assistance is available through the state of Wisconsin.

Admission Requirements

Students in this program must:
• Complete an application form

Student Profile

Students in this program should be able to:
• Apply concepts and skills
• Tolerate dust
• Stand, crouch, kneel, and move around easily

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:
• Agriculture
• Biology/General Science
• Accounting
• Math
• English

Key to the student’s success in the program is the ability to detect farm business needs based on a variety of conditions.

Program Outcomes

Farm Business and Production Management graduates will be able to:
• Utilize agronomic resources for optimal farm production
• Evaluate livestock management plans
• Plan for operation and maintenance of farm facilities and equipment
• Create farm business plans
• Apply marketing principles to agricultural enterprises

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Farm Business and Production Management graduates are in demand because of the concern for profit in the farming industry. Typical careers available after graduation include:
• Farm Owner
• Farm Manager/Operator
• Farm/Field Crop Manager
• Livestock Farmer
• Breeder
• Farm Worker
• Dairy Laborer
• Dairy Herdsperson

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>30090381</td>
<td>Operating the Farm Business</td>
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<td>30090382</td>
<td>Soil Management</td>
<td>4</td>
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<tr>
<td>30090383</td>
<td>Crop Management</td>
<td>4</td>
</tr>
<tr>
<td>30090384</td>
<td>Livestock Nutrition</td>
<td>4</td>
</tr>
<tr>
<td>30090385</td>
<td>Livestock Management</td>
<td>4</td>
</tr>
<tr>
<td>30090386</td>
<td>Farm Records and Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

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Program Requirements
Programs and Course Descriptions

30090381 Operating the Farm Business - Credits: 4
This course will help the student learn many items involved with running a modern farm. These skills include but are not limited to record keeping, selecting proper insurance for the farm, analyzing financial performance, identifying credit needs and sources, planning for crops, and planning for the feeding of livestock.

30090382 Soil Management - Credits: 4
Soil Management is important to the productivity and profitability of a farmer. The farmer is a steward of the land and an environmentalist. The farmer must take care of the soil or he will not be a farmer for long! The student in this class will learn how to prepare a land use plan, collect and interpret soil samples results, develop a plan for fertilizer use on crops, develop a plan for storage and use of manure, analyze new farm issues and practices to determine future use, evaluate tillage equipment and methods, and to practice farm and environmental safety.

30090383 Crop Management - Credits: 4
This course will help the student learn many items involved with agricultural crop production. These skills include but are not limited to management practices, pest control, harvesting options and practices, economics, planting practices, seed and variety selection, etc.

30090384 Livestock Nutrition - Credits: 4
The Livestock Nutrition course will instruct the student in the following areas: anatomy and physiology of livestock, nutrient requirements for calves, heifers, and cows; ration balancing for calves, heifers, lactating cows, and dry cows; determine livestock feed needs; evaluate by-product feeds and feed additives; low input livestock feeding; metabolic disorders; and current issues in agriculture. Individualized instruction will be held at the student’s on-the-job work location. The class also involves credit for on-the-job experience.

30090385 Livestock Management - Credits: 4
Animal agriculture has changed dramatically in the past decade and will continue to change at an even more rapid rate in the future. With advanced technology, animals have been cloned from tissue cells other than the gametes. This may allow us to produce animal products other than the traditional milk, meat, and fiber of the past. Along with positive changes, we have new animal diseases, concerns for the environment, human health, and these things are happening in a very volatile, economic climate. This course will help you analyze the current situation and make plans to take advantage of the changes in animal agriculture brought about by technological advances. Only by taking advantage of this change will we be able to survive economically in a world market.

30090386 Farm Records and Analysis - Credits: 4
This course emphasizes the practical use of a farm record system in managing the farm through farm and financial analysis. Includes the establishment of farm business goals, selection and use of farm credit, farm business arrangements, farm estate planning, and farm income taxes. Instruction is provided on the use of computers and/or computer records and financial analysis of the farm business and finance strategy to meet the learner’s needs. Production and financial decisions will be made based on the learner’s farm business analysis. All competencies will be assessed using the learner’s farm or with simulations established by the instructor.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>9</td>
<td>100%</td>
<td>$21,600-$150,000</td>
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<tr>
<td>Number of responses</td>
<td>Percent employed</td>
<td>Annual yearly salary</td>
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<tr>
<td>9</td>
<td>100%</td>
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<tr>
<td>Number available for employment</td>
<td>Employed in related field</td>
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</tr>
<tr>
<td>9</td>
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</tbody>
</table>
Program Overview
The Finance program will prepare the student for employment in several business careers. With an emphasis on finance, the student will be ready for a career in business management, banking, corporate finance, investments, insurance, and real estate. Additional skill areas include technology, computers, and basic marketing. In addition, the two-year associate degree will allow the student to transfer credits to UW System schools or private colleges.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
• Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm.

Student Profile
Finance students should be able to:
• Work with people and ideas in a team setting
• Work with numbers and charts
• Perform in a competitive environment
• Use various computer applications
• Prepare written reports and oral presentations

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Mathematics/Algebra
• Accounting
• Keyboarding
• Spreadsheets/Word Processing
• Basic grammar
• Investments

The student’s success in this program depends on their willingness to be innovative, make team decisions, and take risks. The student must also enjoy working with numbers and computers.

Program Outcomes
Employers will expect Finance graduates to be able to:
• Utilize business software, the Internet, and computer applications to make financial decisions, spreadsheets, reports, and presentations
• Apply accounting principles including financial statement preparation and/or analysis
• Perform financial calculations and present value analysis
• Apply principles of banking
• Demonstrate knowledge of major lines of insurance
• Utilize investment and real estate fundamentals

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Employers will be looking for Finance graduates with strong computer, technical, and communication skills. Some typical positions available after graduation are:
• Business Manager or Owner
• Loan Officer or Personal Banker
• Sales or Sales Manager
• Financial Analyst
• Investment Advisor
• Insurance Sales or Broker
• Real Estate Sales or Broker
• Stockbroker
• Accountant/Bookkeeper

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<td>Financial Accounting 2</td>
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<td>Financial Analysis</td>
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<tr>
<td>10103106</td>
<td>MS PowerPoint</td>
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<td>MS Excel A</td>
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<td>10104102</td>
<td>Marketing Principles</td>
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<td>10105115</td>
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<td>10105125</td>
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<td>Money and Banking</td>
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<td>Principles of Finance</td>
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<td>10114125</td>
<td>Personal Finance</td>
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<td>Investments</td>
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<td>Principles of Insurance</td>
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<td>10196189</td>
<td>Team Building and Problem Solving</td>
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<td>10196191</td>
<td>Supervision</td>
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<td>PROGRAM REQUIREMENTS</td>
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<td></td>
<td>▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.</td>
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<tr>
<td></td>
<td>▼ See pages 41-43 for course descriptions.</td>
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</tr>
</tbody>
</table>

Campus:
WITC
Ashland
New Richmond
Rice Lake
Superior
10101101
Financial Accounting 1 - Credits: 4
Complete accounting cycle, special journals, payroll tax principles, special procedures, and financial statements. Accounting applications through practice set approach.

10101103
Financial Accounting 2 - Credits: 4
Students will be introduced to corporate accounting. Students will have an understanding of corporate transactions with an emphasis on stocks and bonds. The student will analyze financial statements including the statement of cash flows. Managerial accounting is also introduced in this class. PREREQUISITE: 10101101 Financial Accounting 1.

10101170
Financial Analysis - Credits: 3
In Financial Analysis, the learner applies the skills necessary to achieve an understanding of the financial aspects of business. Each learner will demonstrate application of financial statement interpretation, analysis, forecasting, budgeting and expense control relevant to the nonfinancial manager.

10103106
MS PowerPoint - Credits: 1
A complete presentation graphics course that allows you to produce professional-looking presentations. It gives you the flexibility to make informal presentations using overhead transparencies, electronic presentations, formal presentations using 35mm slides, or virtual presentations. Additionally, you can create paper printouts, outlines, speaker notes, and audience handouts.

10103146
MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103151
MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10103152
MS Excel B - Credits: 1
Students will learn to use MS Excel. Credit B activities will include using advanced features of formulas, object linking and embedding, multiple worksheets, 3-D references, macro basics and database basics. PREREQUISITE: 10103151 MS Excel A.

10104102
Marketing Principles - Credits: 3
This course focuses on the marketing process as it relates to the operation of a business enterprise. The intent is to provide students with an understanding of how the marketing function fits within the overall structure of the organization. Special attention is given to the role and significance of evaluating customer needs, pricing, distribution, and promotion of products and services.

10105115
Professional Profile - Credits: 1
The purpose of this course is to strengthen the professional image. Students begin to develop self-awareness of elements affecting their personal and work relationships. Guidelines for determining appropriate grooming, dress, and poise will be covered. Personal life management along with career/life goal setting will be reinforced. This class should be taken in the last semester of the program.

10105125
Business Law - Credits: 3
Business Law provides the student with a working knowledge of the legal system, business ethics, and essentials of contracts. Students gain knowledge in logical and analytical thinking, and are encouraged to challenge legal issues and defend their point of view.

10114103
Money and Banking - Credits: 3
Money and Banking introduces students to money and the financial system, interest rates, financial institutions, and the Federal Reserve.

10114107
Principles of Finance - Credits: 3

10114125
Personal Finance - Credits: 3
Personal Finance introduces students to money management, taxes, financial services, credit, real estate, insurance, stocks, bonds, mutual funds, retirement planning, and estate planning.

10114150
Investments - Credits: 3
Investments introduces students to stock and bond valuation models, options, futures, future options, international investing, and the spot market. In addition, the student will learn about various investment careers and the various licensing requirements, regulations, and laws that impact the investment community.

10114192
Principles of Insurance - Credits: 3
Principles of Insurance introduces students to insurance contracts, legal principles, and utilizing insurance as a risk management tool using automotive, homeowners, life, health, and commercial insurance.

10196189
Team Building and Problem Solving - Credits: 3
In Team Building and Problem Solving, the learner applies the skills and tools necessary to facilitate problem solving in a team environment. Each learner will demonstrate the application of the benefits and challenges of group work, necessary roles in a team, stages of team development, different approaches to problem solving, consensus, systematic process of problem definition, data acquisition, analysis, developing alternative solutions, solution implementation, evaluation, and documentation.

10196191
Supervision - Credits: 3
In Supervision, the learner applies the skills and tools necessary to perform the functions of a frontline leader. Each learner will demonstrate the application of strategies and transition to a contemporary supervisory role including day-to-day operations, analysis, delegation, controlling, staffing, leadership, problem solving, team skills, motivation, and training.

10890105
Job Quest - Credits: 1
This course is designed to enhance the student’s ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>8</th>
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<td>Percent employed</td>
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<td>Employed in related field</td>
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<td>$28,537*</td>
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</table>

*Range of yearly salary and average yearly salary is based on graduates’ responses from the following technical colleges within the Wisconsin Technical College System (WITCS) and includes WITC graduates: Madison Area Technical College and Western Technical College.
Program Overview
The Gerontology - Aging Services Professional program is designed to meet the emerging and rapidly growing demand for service providers needed to work with the aging population. Students will acquire comprehensive and interdisciplinary training to prepare them to work with older adults in a variety of positions and in diverse settings such as community, non-profit and government agencies, counseling centers, adult care, memory care, senior centers, home health care, assisted living, long-term care, nursing homes, group homes, hospitals, Hospice, and business and industry. This innovative and flexible program blends online and in-person experiential learning with community-based fieldwork and is designed to fit into busy life schedules. Students can choose part-time or full-time program options and mix and match coursework. It is ideal for people entering the job market or choosing to enhance their current careers in service delivery or leadership roles within the gerontology field. Graduates will be added to the Wisconsin Community-Based Residential Facility (CBRF) Employee Registry and will receive a Red Cross First Aid and Choking certification card.

Special Features
- Flexible course selection and scheduling designed to assist with life planning
- 8 week rotating block courses offered in online and in-person evening formats
- Part-time and full-time program options with flexible entry and exit
- Ideal for people entering the job market or choosing to enhance their current careers in service delivery or leadership roles within the gerontology field
- Graduates will be added to the Wisconsin Community-Based Residential Facility (CBRF) Employee Registry and will receive a Red Cross First Aid and Choking certification card

Admission Requirements
Students in this program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
- Review and sign the Functional Abilities Statement of Understanding
- Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
- Complete and sign Background Information Disclosure Form (BID)
- Submit Background Check fee
- Have an acceptable Wisconsin Caregiver Background Check or Minnesota Caregiver Background Check as applicable - Information from the Caregiver Background Check may affect ability to secure fieldwork placement and the ability to find employment after graduation

Student Profile
Students entering the Gerontology - Aging Services Professional program should:
- Have a responsible attitude and commitment to serve others
- Communicate effectively in writing and speech
- Think critically and use good judgment
- Exhibit cultural awareness and develop positive rapport with diverse groups
- Accept and respond appropriately to feedback
- Possess a positive attitude and commitment to serve others
- Demonstrate emotional stability and maturity

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Psychology
- Sociology
- Speech/Communication
- Health
- Parenting/Family Living

Program Outcomes
Employers will expect Gerontology - Aging Services Professional graduates to be able to:
- Demonstrate professionalism
- Integrate knowledge of physical, social, psychological and spiritual aspects of aging into service delivery
- Apply safe, legal, and ethical gerontological standards and practices
- Navigate complex systems that provide assistance to older adults
- Cultivate professional relationships
- Model a commitment to cultural competence and advocacy

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Gerontology - Aging Services Professional program graduates will be well prepared to use their knowledge, skills and abilities working with older adults in a variety of positions in diverse settings such as:
- Community, Non-Profit and Government Agencies
- Counseling Centers
- Adult Care
- Senior Centers
- Home Health Care and Assisted Living
- Long-term Care, Nursing Homes and Group Homes
- Hospitals
- Hospice
- Business and Industry

Potential Job Titles:
- Aging Services Provider
- Advocacy Specialist
- Geriatric Care Specialist
- Dementia Care Specialist/Provider
- Benefits Coordinator
- Client Navigation Specialist
- Activity/Recreation Coordinator
- Housing/Transportation Specialist
- Program Planner
- Private Service Provider/Small Business Owner

Curriculum
Number Course Title Credits

Technical Studies Courses
10501109 Healthcare Computing 2
10520103 Ethics in Human Services 3
10520112 Family Systems 3
10544100 Communication of Aging 3
10544101 Social Gerontology 3
10544102 Psychological Aspects of Aging 3
10544103 Gerontology Fieldwork 1
10544104 Physical Aspects of Aging 3
10544105 Dementia and Alzheimer’s 3
10544106 Healthy Aging 3
10544107 Death and Dying 3
10544108 Developing the Gerontology Professional 3
10544109 Gerontology Fieldwork 2 2
10544110 Programs of Aging Services 3
10544111 Legal and Financial Issues of Aging 3
10575100 CBRF Caregiver Fundamentals 2

General Studies Courses
10001195 Written Communication 3
10001198 Speech or 3
10001199 Oral/Interpersonal Communication 3
10004123 Math with Business Applications 3 or
10004107 College Mathematics 3 or
10004189 Introductory Statistics 4
10006198 Human Biology 3
10009159 Abnormal Psychology 3
10009172 Introduction to Diversity Studies 3
10009198 Introduction to Psychology 3

Program Requirements 66

*Select online program courses available to these program with plans for full program availability Fall 2016.

Go to witc.edu for most current information.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10501109 Healthcare Computing - Credits: 2
This course provides an introduction to basic computer applications used in healthcare settings, including common software packages, operating systems, file management, word processing, spreadsheets, databases, the Internet and e-mail. Students are introduced to the hardware and software components of computer systems and electronic medical records.

10520103 Ethics in Human Services - Credits: 3
This course explores the ethical, legal, and professional issues facing the human services worker. It is designed to teach a process of ethical decision-making and to increase awareness of the complexities in practice. Students are introduced to current state and federal statutes, regulations, and judicial decisions that govern the professional practice in human services. Standards, code of ethics, clients’ rights, and confidentiality are emphasized.

10520112 Family Systems - Credits: 3
This course focuses on issues related to families and family functioning relevant to the human services field. Major areas of focus will include child maltreatment, domestic violence, and addiction, with emphasis on relevant helping skills and services.

10544100 Communication of Aging - Credits: 3
Develop effective communication strategies and supportive interview techniques that enhance rapport and relationships with aging populations. Apply ethical principles, standards and boundaries that acknowledge self-determination.

10544101 Social Gerontology - Credits: 3
Explore aging in respect to social roles and processes. Topics include history of aging, demographics, family relationships, social supports, economics, retirement, loss, poverty and politics of aging.

10544102 Psychological Aspects of Aging - Credits: 3
Recognize how experience and history affect the value and societal expectations of each generation. Understand diversity among older adults including, but not limited to, race, ethnicity, culture, sexual orientation; and physical, cognitive and developmental disabilities.

10544103 Gerontology Fieldwork 1 - Credits: 2
Examine the scope, values, and principles of the gerontology profession. Coursework introduces the typical roles and duties of aging services professionals. Students assess their own motivations, attitudes, and interests. In addition to the regular classroom hours, observation and fieldwork in a community-based setting working with older adults is required. Students must complete or have on file current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and Minnesota) forms, as part of this course. Prerequisite: 10544103 Gerontology Fieldwork 1.

10544104 Physical Aspects of Aging - Credits: 3
Analyze normal and pathological changes occurring in the aging human body with special emphasis on age-related chronic diseases. Topics addressed include analysis of biological theories of aging, cultural/ethnic influence on aging pathologies, and other factors impacting the aging process.

10544105 Dementia and Alzheimer’s - Credits: 3
Examine the signs, symptoms and stages of Alzheimer’s and other forms of dementia and how these diseases affect physiology and brain function. This course focuses on the principles of communicating and providing care to individuals with memory loss and confusion while learning the best practices for dealing with behavior changes, challenges with the activities of daily living, and strategies to assist caregivers.

10544106 Healthy Aging - Credits: 3
Investigate practices that promote healthy aging including nutrition, physical activity, prevention practices, and commonly prescribed medications for the older adult. Emphasis will focus on the “well” elderly population and practices identified to address current aging trends.

10544107 Death and Dying - Credits: 3
Explore societal, cultural, and personal views of death, dying, and bereavement. Examine losses experienced during the course of aging beyond the physical and emotional process of death and bereavement. Examine losses experienced during the course of aging beyond the physical and emotional process of death and bereavement. Examine losses experienced during the course of aging beyond the physical and emotional process of death and bereavement.

10544108 Developing the Gerontology Professional - Credits: 3
Examine the various roles of the aging services professional and the contexts in which they work. Apply relationship building, communication, ethical standards, self-care planning and practices, documentation, and other related skills to case studies and real life situations. Function as an interdisciplinary team member addressing the complex needs of aging adults.

10544109 Gerontology Fieldwork 2 - Credits: 2
Refine and expand skills acquired in Gerontology Fieldwork 1, through continued on-the-job training. In addition to the regular classroom hours, fieldwork in a community-based setting working with older adults is required. Students must complete or have on file current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and Minnesota) forms, as part of this course. Prerequisite: 10544103 Gerontology Fieldwork 1.

10544110 Programs of Aging Services - Credits: 3
Explore the wide spectrum of programs and services available to older adults that address a variety of physical, mental, emotional, social, financial, legal, spiritual, and recreational needs. Examine social policy as it relates to aging and available federal funding for the aging consumer including community resources, eligibility criteria, and how to access and coordinate services. Additional topics include supplementing social networking and enhancing mental health functioning.

10544111 Legal and Financial Issues of Aging - Credits: 3
Analyze legal and financial concepts and structures including Power of Attorney for health care/finance, guardianships, trusts, reallocation of assets, spending down, Medicare/Medicaid benefits, supplemental insurance, Social Security, elder abuse/ neglect, financial exploitation, and relevant governmental policies. Apply knowledge through advocacy to benefit aging adults on local, state and federal levels.

10575100 CBRF Caregiver Fundamentals - Credits: 2
In this credit-based course, students will obtain the knowledge and skills required to become Community-Based Residential Facility (CBRF) caregivers. Coursework will include the following training modules: DHS 83.20 (2) (b) CBRF Fire Safety, DHS 83.20 (2) (d) CBRF Medication Administration and Management, DHS 83.20 (2) (a) CBRF Standard Precautions, DHS 83.20 (2) (c) CBRF First Aid and Choking, DHS 83.21 (1) CBRF Resident’s Rights, and DHS 83.21 (3) CBRF Challenging Behaviors. Upon successful completion of this course, students are added to the Wisconsin CBRF Employee Registry and will receive the Red Cross CBRF First Aid and Choking certification card.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)
The information below is based on graduates’ responses from Northeast Wisconsin Technical College and does not include WITC graduates as this is a new program at WITC.

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
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<td>2</td>
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</tr>
<tr>
<td>5</td>
<td>2</td>
<td>80%</td>
<td>2</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

800.243.9482
witc.edu
2015-2016
Health Information Technology
10-530-1  Associate Degree

Program Overview
This field is where healthcare meets the cutting edge of technology! Health Information Technicians are specialists in great demand! The Health Information Management (HIM) professionals can expect to be in high demand as the health sector expands into the century. In fact, the Bureau of Labor Statistics cites health information technology as one of the fastest growing occupations in the U.S. Health Information Technicians contribute to the quality of care by collecting, analyzing, and reporting healthcare data. This requires knowledge of disease, treatments, computer systems, and organizational skills.

Health Information Technology (HIT) is a two-year associate degree program that prepares graduates to compile, process, and maintain electronic healthcare records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the healthcare system. In addition, graduates will possess the skills to process, maintain, compile and report patient information for health requirements and standards in a manner consistent with the healthcare industry's numerical coding system. Graduates of this program will have the potential for employment in hospitals, clinics, nursing homes, mental health facilities, home health agencies, state and federal health agencies and private industry.

Special Features
- All courses will be offered online
- The program may be completed in a full-time or part-time format
- Students will attend clinical rotations in the second year (third or fourth semesters) of the program

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Health Information Technology two-year associate degree includes an embedded technical diploma option as documented below:

- 31-530-1 Medical Coding Specialist (page 130) in that area. The Health Information Technology graduates to be able to:

Admission Requirements
Students in this program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
- Complete one year of high school chemistry or one term of college-level chemistry with a 2.0 or better
- Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
- Review and sign the Functional Abilities Statement of Understanding
- Complete Computer Literacy assessment
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Students in this program must:
- Submit Background Check fee
- Have an acceptable Wisconsin Caregiver Background Check, National Criminal Background Check, Minnesota Caregiver Background Check (if applicable), and/or other states as applicable

Student Profile
HIT students should:
- Be able to communicate effectively orally and in writing
- Be detail oriented and accurate
- Have good reasoning and organizational skills
- Be able to learn through a variety of delivery methods

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Health
- English/Grammar
- Basic math
- Keyboarding
- Computer applications

Key to the student’s success in this program is attentiveness to detail and effective human relations skills.

Program Outcomes
Employers will expect Health Information Technology graduates to be able to:
- Manage health data
- Apply coding and reimbursement systems
- Model professional behaviors and ethics
- Maintain electronic applications to manage health information
- Apply organizational management techniques
- Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Typical positions available after graduation include:
- Health Information Technician
- HIM Supervisor
- Coding Specialist
- Release of Information Specialist
- Insurance/Business Specialist
- Reimbursement Coordinator

- Data Quality and Integrity Monitor
- Privacy and/or Security Officer
- Data Analyst
- Cancer Registrar

The Health Information Technology (Associate Degree) program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>10103129</td>
<td>Introduction to MS Office</td>
<td>1</td>
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<tr>
<td>10103146</td>
<td>MS Word A</td>
<td>1</td>
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<td>10103151</td>
<td>MS Excel A</td>
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<td>10530161</td>
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<td>10530176</td>
<td>Health Data Management ▲</td>
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<tr>
<td>10530177</td>
<td>Healthcare Stats &amp; Research</td>
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<tr>
<td>10530178</td>
<td>Healthcare Law &amp; Ethics ▲</td>
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<td>10530194</td>
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<td>10530195</td>
<td>Applied Coding ▲</td>
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</tr>
<tr>
<td>10530196</td>
<td>Professional Practice 1 ▲</td>
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</tr>
<tr>
<td>10530197</td>
<td>ICD Diagnosis Coding ▲</td>
<td>3</td>
</tr>
<tr>
<td>10530198</td>
<td>Professional Practice 2 ▲</td>
<td>3</td>
</tr>
<tr>
<td>10530199</td>
<td>ICD Procedure Coding ▲</td>
<td>2</td>
</tr>
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General Studies Courses ▲
- 10801196 Oral/Interpersonal Communication or
- 10801198 Speech
- 10804123 Math with Business Applications ▲
- 10806177 General Anatomy and Physiology ▲
- 10809172 Introduction to Diversity Studies
- 10809195 Economics
- 10809198 Introduction to Psychology

PROGRAM REQUIREMENTS 65
▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41-43 for course descriptions.

Students must earn a grade point of 2.0 or better in all required courses.

Campus: Online

800.243.9482  witc.edu  2015-2016
Graduate Employment Information
(WTCS Graduate Survey Responses 2012-2013; for most recent data, go to wtc.edu)
The information below is based on graduates’ responses from the following technical colleges within the Wisconsin Technical College System (WTCS) and does not include WITC graduates: Chippewa Valley Technical College, Fox Valley Technical College, Gateway Technical College, Moraine Park Technical College, Northeast Wisconsin Technical College, Waukesha County Technical College, and Western Technical College.

<table>
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<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
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<td>80</td>
<td>51</td>
<td>51%</td>
<td>$22,200-$63,503</td>
<td>$38,313</td>
</tr>
</tbody>
</table>

Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10103129 Introduction to MS Office - Credits: 1
Learners will create, edit, view, and print basic documents using word processing, spreadsheets, database, and presentation software.

10103146 MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103151 MS Excel A - Credits: 1
Students will use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10501101 Medical Terminology - Credits: 3
Focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

10503160 Healthcare Informatics - Credits: 4
Emphasizes the role of information technology in healthcare through an investigation of the electronic health record (EHR), business, and health information software applications. Learners will develop skills to assist in information systems design and implementation. PREREQUISITES: 10503176 Health Data Management, 10103129 Intro to MS Office, 10103146 MS Word A and COREQUISITE: 10103151 MS Excel A.

10503161 Health Quality Management - Credits: 3
Prepares students to assign ICD diagnosis codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation. PREREQUISITES: 10501101 Medical Terminology, 10503181 Intro to the Health Record, and 10806177 General Anatomy and Physiology, and COREQUISITE: 10503182 Human Disease for the Health Professions.

10503165 Healthcare Reimbursement - Credits: 2
This course prepares learners to understand and interpret healthcare payers, illustrate the reimbursement cycle, and to comply with regulations related to fraud and abuse. Learners assign Diagnosis Related Groups (DRGs), Ambulatory Payment Classifications (APCs), and Resource Utilization Groups (RUGs) with entry-level proficiency using computerized encoding and grouping software. PREREQUISITES: 10501101 Medical Terminology, 10806177 General Anatomy and Physiology, and 10503181 Intro to the Health Record, and COREQUISITES: 10503181 Human Disease for the Health Professions, and 10503197 ICD Diagnosis Coding, 10503184 CPT Coding and 10503199 ICD Procedure Coding.

10503177 HealthCare Studies & Research - Credits: 2
Examines the principles of management to include planning, organizing, human resource management, directing, and controlling as related to the health information department. COREQUISITE: 10503161 Health Quality Management.

10503178 HealthCare Law & Ethics - Credits: 2
Examines regulations for the content, use, confidentiality, disclosure, and retention of health information. An overview of the legal system and ethical issues are addressed. PREREQUISITE: 10503176 Health Data Management.

10503181 Intro to the Health Record - Credits: 1
Prepares learners to interpret clinical documentation that they will encounter in a variety of healthcare settings. Emphasis is placed on understanding the common disorders and diseases of each body system to include the etiology (cause), signs and symptoms, diagnostic tests and results, and medical treatments and surgical procedures. PREREQUISITES: Admission to plan 105031 Health Information Technology or 315302 Medical Coding Specialist.

10503182 Human Disease for the Health Professions - Credits: 3
Prepares learners to interpret clinical documentation that they will encounter in a variety of healthcare settings. Emphasis is placed on understanding the common disorders and diseases of each body system to include the etiology (cause), signs and symptoms, diagnostic tests and results, and medical treatments and surgical procedures. PREREQUISITES: Admission to plan 105031 Health Information Technology or 315302 Medical Coding Specialist, 10501101 Medical Terminology, and 10806177 General Anatomy and Physiology.

10503184 CPT Coding - Credits: 3
Apply CPT instructional notations, conventions, rules, and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation. PREREQUISITES: 10501101 Medical Terminology, 10503181 Intro to the Health Record, and 10806177 General Anatomy and Physiology, and COREQUISITE: 10503182 Human Disease for the Health Professions.

10503195 Applied Coding - Credits: 2
Prepares students to assign ICD and CPT/HCPCS codes supported by medical documentation with intermediate level of proficiency. Students will prepare appropriate physician queries in accordance with compliance guidelines and will assign codes to optimize appropriate reimbursement. COREQUISITES: 10503197 ICD Diagnosis Coding, 10503199 ICD Procedure Coding, 10503184 CPT Coding, and 10503185 Healthcare Reimbursement.

10503196 Professional Practice 1 - Credits: 3
Applies previously acquired skills and knowledge by means of clinical experiences in the technical procedures of health record systems and discussion of clinical situations. This is the first of a two-semester sequence of supervised clinical experiences in healthcare facilities. PREREQUISITES: 10503197 ICD Diagnosis Coding, 10503178 Healthcare Law & Ethics, 10503199 ICD Procedure Coding, and COREQUISITE: 10503184 CPT Coding.

10503197 ICD Diagnosis Coding - Credits: 3
Prepares students to assign ICD diagnosis codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation. PREREQUISITES: 10501101 Medical Terminology, 10503181 Intro to the Health Record, and 10806177 General Anatomy and Physiology, and COREQUISITE: 10503182 Human Disease for the Health Professions.

10503198 Professional Practice 2 - Credits: 3
Applies previously acquired skills and knowledge and discussion of clinical situations. Prepares for the certification examination and pre-graduation activities. This is the second of a two-semester sequence of supervised technical and managerial clinical experiences in health care facilities. PREREQUISITES: 10503160 Health Care Informatics, 10503196 Professional Practice 1, 10503195 Applied Coding and COREQUISITES: 10503165 Healthcare Reimbursement, 10503182 Human Disease for the Health Professions, and 10503194 HIM Organizational Resources.

10503199 ICD Procedure Coding - Credits: 2
Prepares students to assign ICD procedure codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation. PREREQUISITES: 10501101 Medical Terminology, 10503181 Intro to the Health Record, and 10806177 General Anatomy and Physiology, and COREQUISITE: 10503182 Human Disease for the Health Professions.

800.243.9482
witic.edu 2015-2016
Program Overview

The air conditioning and refrigeration industry is one of the fastest growing occupations. This program will prepare students to design, install, service, maintain, and operate HVAC/R systems in residential, public, and light commercial buildings. The basic concepts of geothermal heating and cooling will be introduced. Students will be trained to service systems in residential homes, hospitals, government buildings, schools, hotels and motels, apartment buildings, and office buildings.

Special Feature

This program is unique in the state.

Admission Requirements

Students in this program must:

- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile

Students of this program should be able to:

- Learn mechanical principles and repair techniques
- Use good judgment
- Follow procedures carefully
- Handle and manipulate tools and equipment skillfully
- Assume responsibility for their work
- Adhere to required standards
- Adapt and handle a variety of duties and interruptions
- Work under pressure
- Move easily and lift 50 pounds
- Distinguish colors

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

- General Math/Algebra
- Science
- Communications
- Health/Human Relations

Program Outcomes

Employers will expect graduates of this program to be able to:

- Practice safe techniques when servicing and testing HVAC/R systems
- Troubleshoot HVAC/R systems
- Use tools and equipment to service and/or test HVAC/R systems
- Select equipment to install for an HVAC/R system
- Estimate HVAC/R repair cost and order parts
- Meet requirements for the EPA Refrigeration Certificate
- Interpret HVAC/R drawings
- Estimate a heating and cooling load
- Communicate HVAC/R service reports for customers

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Typical positions available after graduation include:

- Residential HVAC/R Technician
- Commercial HVAC/R Technician
- Industrial HVAC/R Technician
- Mechanical Contractor HVAC/R Technician
- Facilities HVAC/R Technician
- Wholesale Service Representative

With additional education and/or work experience, graduates may find other opportunities for employment:

- Energy Management Technician
- Business Owner HVAC/R
- Practice Engineering of HVAC/R Systems

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10480105</td>
<td>Alternative Energy Overview</td>
<td>3</td>
</tr>
<tr>
<td>32601300</td>
<td>Air Conditioning Fundamentals ▲</td>
<td>2</td>
</tr>
<tr>
<td>32601301</td>
<td>Basic Mechanical Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>32601302</td>
<td>Refrigeration Fundamentals ▲</td>
<td>2</td>
</tr>
<tr>
<td>32601303</td>
<td>Principles of AC/DC ▲</td>
<td>3</td>
</tr>
<tr>
<td>32601304</td>
<td>Heating Systems ▲</td>
<td>2</td>
</tr>
<tr>
<td>32601305</td>
<td>Electrical Controls and Systems</td>
<td>3</td>
</tr>
<tr>
<td>32601306</td>
<td>HVAC/R Print Reading ▲</td>
<td>2</td>
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<tr>
<td>32601307</td>
<td>Heating System Applications ▲</td>
<td>3</td>
</tr>
<tr>
<td>32601308</td>
<td>Electronic Energy Management ▲</td>
<td>3</td>
</tr>
<tr>
<td>32601309</td>
<td>Control Circuit Applications ▲</td>
<td>3</td>
</tr>
<tr>
<td>32601310</td>
<td>Sheet Metal Fabrication ▲</td>
<td>2</td>
</tr>
<tr>
<td>32601311</td>
<td>Hydraulic Heating ▲</td>
<td>3</td>
</tr>
<tr>
<td>32601312</td>
<td>Refrigeration Applications ▲</td>
<td>3</td>
</tr>
<tr>
<td>32601313</td>
<td>HVAC/R Electronic Troubleshooting/Repair (WBL) ▲</td>
<td>2</td>
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<tr>
<td>32601314</td>
<td>Heat Load Estimation ▲</td>
<td>1</td>
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<tr>
<td>32601315</td>
<td>Geothermal Systems ▲</td>
<td>2</td>
</tr>
<tr>
<td>32890305</td>
<td>Applied Information Resources ▲</td>
<td>2</td>
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</tbody>
</table>

PROGRAM REQUIREMENTS

55

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

See pages 41-43 for course descriptions.

Financial Aid Eligible

Campus: Superior
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

10480105  
Alternative Energy Overview - Credits: 3  
This course will introduce the learner to the basic concepts of geothermal heating and cooling. Students will be introduced to the concepts of geothermal heating and cooling using geothermal pumps, ground source heat exchangers, indoor heat exchangers, connecting devices, and circulating fluid configurations and fusions. PREREQUISITES: 32601301 Basic Mechanical Fundamentals, 32601302 Refrigeration Fundamentals, and 32601305 Electrical Controls and Systems.

32890305  
Applied Information Resources - Credits: 2  
This course will allow the learner to develop skills in research, evaluation, selection, and preparation of information resources useful to their career area. Learners will use various information resources, including computer software applications to develop sound information research strategies. Learners will be exposed to ethical use of information, information provided by various methods and stored in various management formats, communicating by e-mail, developing search and selection of information resources, analysis, and use of results. This discussion- and lab-based course will use individual and group work to search and share information resources. Competencies learned in this course will be able to be applied in other courses within your program and will continue to be valuable in lifelong learning. You should have experience in keyboarding and basic computer skills for this course.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/airhtgref/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information  
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>7</td>
<td>88%</td>
<td>$30,000-$41,597</td>
<td>$35,867</td>
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</table>
Human Resource Management
10-116-2  Associate Degree
Financial Aid Eligible

Program Overview
The Human Resource Management program prepares students to assist organizations in effectively recruiting, developing, and utilizing their human resources. This field of employment requires knowledge and skills in the following areas: occupational job analysis, compensation, benefits, training, staffing, employee relations, workers’ compensation, budgeting, labor relations, performance management and coaching, safety, and human resources information systems. Careers such as Human Resource Assistant or Human Resource Specialist can be found in a non-profit, service, or manufacturing organization. Human Resource Specialists focus on areas such as employee recruitment/interviewing, employee training and development, wages and compensation, benefits, employee wellness, and occupational analysis.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Human Resource Management students should be able to:
• Make judgments and decisions
• Communicate ideas verbally and in writing
• Learn new methods/concepts
• Assume responsibility
• Get along well with people
• Work under pressure and with multiple distractions
• Have basic computer and math skills
• Learn through a variety of delivery methods

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Business Math
• Computer skills
• Keyboarding
• Communications
• Recordkeeping
• English
• Accounting

Program Outcomes
Employers will expect Human Resource Management graduates to be able to:
• Create an organizational workforce plan
• Develop training programs
• Examine organizational total rewards programs
• Incorporate employment law into business practices
• Facilitate effective employee relations
Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Positions available to students after graduation may include:
• Compensation and Benefits Specialist
• Employment Specialist
• Human Resources Coordinator
• Human Resources Specialist
• Recruitment Specialist
• Training and Development Specialist
• Payroll Analyst
• Labor Relations Specialist
• Human Resources Assistant

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>10101176</td>
<td>Financial Accounting 1A</td>
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<tr>
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<td>MS PowerPoint</td>
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<td>10103146</td>
<td>MS Word A</td>
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<tr>
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<td>MS Excel A</td>
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<td>10103152</td>
<td>MS Excel B</td>
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<tr>
<td>10105100</td>
<td>Introduction to Business</td>
<td>3</td>
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<tr>
<td>10105125</td>
<td>Business Law</td>
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<tr>
<td>10116100</td>
<td>Human Resource Management</td>
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</tr>
<tr>
<td>10116101</td>
<td>Introduction to Payroll and HRIS</td>
<td>3</td>
</tr>
<tr>
<td>10116102</td>
<td>Employment Law</td>
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<tr>
<td>10116103</td>
<td>Compensation Management</td>
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<tr>
<td>10116104</td>
<td>Recruitment and Selection</td>
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<tr>
<td>10116105</td>
<td>Employee Relations and Labor Law</td>
<td>3</td>
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<tr>
<td>10116106</td>
<td>Orientation and Training</td>
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<tr>
<td>10116107</td>
<td>Benefit Administration</td>
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<td>10116108</td>
<td>Human Resource Capstone</td>
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<td>10196108</td>
<td>Customer Service</td>
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<td>10196136</td>
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<td>10196138</td>
<td>Conflict Resolution and Confrontation Skills</td>
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<tr>
<td>10196199</td>
<td>Ethics in Business</td>
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<table>
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<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>10801195</td>
<td>Written Communication ▲</td>
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<tr>
<td>10801196</td>
<td>Oral/Interpersonal Communication or</td>
<td>3</td>
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<tr>
<td>10801198</td>
<td>Speech</td>
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<tr>
<td>10804123</td>
<td>Math with Business Applications ▲</td>
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<td>10809172</td>
<td>Introduction to Diversity Studies</td>
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<td>10809195</td>
<td>Economics</td>
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<tr>
<td>10809196</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>10809198</td>
<td>Introduction to Psychology</td>
<td>3</td>
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</tbody>
</table>

Program Requirements 67

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▼ See pages 41-43 for course descriptions.

*combination of ITV (Interactive Television) or online instruction
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

10101176
Financial Accounting 1A - Credits: 2
This is a basic accounting course for non-accounting program students. The scope of study focuses on an introduction to business and accounting, analyzing and recording accounting transactions, performing the adjusting process, and completing the accounting cycle. Understanding is based on theory and application.

10103106
MS PowerPoint - Credits: 1
A course work presentation graphics course that allows you to produce professional-looking presentations. It gives you the flexibility to make informative presentations using overhead transparencies, electronic presentations, formal presentations using 35mm slides, or virtual presentations. Additionally, you can create paper printouts, outlines, speaker notes, and audience handouts.

10103146
MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103151
MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10103152
MS Excel B - Credits: 1
Students will learn to use MS Excel. Credit B activities will include using advanced features of formulas, object linking and embedding, multiple worksheets, 3-D references, macro basics, and database basics. PREREQUISITE: 10103151 MS Excel A.

10105100
Introduction to Business - Credits: 3
This is an introductory course designed to give an understanding of the activities, functions, and principles of business enterprises. The course helps to gain insight into the responsibilities and challenges of operating a business. Emphasis is on the interaction of the various functions required to operate businesses of all sizes. Specifically, the areas of business trends, ownership models, leadership, human resources, marketing, information management, and finance will be explored.

10105125
Business Law - Credits: 3
Business Law provides the student with a working knowledge of the legal system, business ethics, and essentials of contracts. Students gain knowledge in logical and analytical thinking, and are encouraged to challenge legal issues and defend their points of view.

10116100
Human Resource Management - Credits: 3
In Human Resource Management, the learner applies the skills and tools necessary to effectively value and apply employees’ abilities and needs to organization goals. Each learner will demonstrate the application of the supervisor's role in contemporary human resources management, impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies and procedures, training, performance management, employee counseling and development, and effective use of compensation and benefit strategies. It is recommended that the learner have experience using a PC/MAC, using the MS Windows operating systems and software suite, browsing Web pages, downloading files, using e-mail, and exchanging files prior to enrolling in this course.

10116101
Introduction to Payroll and HRIS - Credits: 3
In keeping in line with electronic recordkeeping, human resources and payroll have followed suit. Tracking employee information and payroll transactions is handled efficiently and securely using human resources information systems and payroll software. The learner will come to understand how this type of software works. Payroll calculation will be highly emphasized taking into account all the federal and state laws and filing requirements.

10116102
Employee Law - Credits: 3
Course examines employment, labor and social issues in the work environment through the laws that govern the employer/union and employer/employee relationships. Topics explored include: unemployment compensation; workers' compensation; hiring and firing practices; sexual harassment in the workplace; the Americans with Disabilities Act; and the intricacies of federal and Wisconsin equal employment opportunity laws. Students will use in-depth case analyses, oral presentation, and debates. PREREQUISITE: 10116100 Human Resource Management.

10116103
Compensation Management - Credits: 3
Compensation encompasses the remuneration issues of employment. It will cover all aspects of wage and salary administration including job design, job analysis, pay range development, salary surveys, bonus programs, state and federal compensation and performance management in regards to pay practices. PREREQUISITE: 10116100 Human Resource Management.

10116104
Recruitment and Selection - Credits: 3
Getting the right employees in the right job is really an art. Learn the methods of recruitment used to attract employees to your organization. Once recruitment takes place, then selection of the most suitable candidate for an opening takes place. This process is highly governed by state and federal law which must be learned and used as the basis for lawful selection of employees. PREREQUISITE: 10116100 Human Resource Management.

10116105
Employee Relations and Labor Law - Credits: 3
The course provides students with both the common and complex issues related to human behavior in the workplace as it relates to employee relations, state and federal mandates and laws, in-depth examination of relationships among workers, management, laws and government are the major focus of this course. PREREQUISITE: 10116100 Human Resource Management.

10116106
Orientation and Training - Credits: 3
The orientation and training course prepares participants to be able to orient, train and take new hires through the onboarding process so they have the greatest opportunity to be successful, productive employees in the workplace. Key topics are: training and development, delivery techniques, assessing employee strengths, and methods to determine where employees may focus talent improvement processes. Course will also explore the value of engaging in company culture including techniques for success within that culture. PREREQUISITE: 10116100 Human Resource Management.

10116107
Benefit Administration - Credits: 2
With the ever changing health care laws, this benefits course will address the evolution of benefit offerings in health insurance as well as the other benefit areas. Taking the total reward approach, other topics to be covered include dental insurance, disability insurance, paid time off, government mandated benefits and optional work arrangements. PREREQUISITE: 10116100 Human Resource Management.

10116108
Human Resource Capstone - Credits: 3
The Human Resource Capstone course emphasizes application of advanced principles of human resource management. These principles include the application of the EEOC regulations, recruitment and selection, orientation and training, payroll and benefit administration, interpersonal skills management and business management. Learners are required to design and complete a human resource management project that begins with the fundamentals and extends to application within their workplace. PREREQUISITE: Admitted to the Human Resource Management program and have completed a minimum of 30 credits (101, 103, 105, 116, 196) of coursework.

10196108
Customer Service - Credits: 1
This course examines customer service as it relates to organizational quality. It addresses service models for internal and external customers, systems and strategies applied to customer service, and tools and techniques for gathering customer feedback and handling complaints.

10196136
Safety in the Workplace - Credits: 3
An introduction to safety and loss prevention in the workplace with an emphasis on the supervisor’s responsibility for maintaining a safe, productive environment. Students will study safety concepts, hazard controls, developing safety and health programs, and federal- and state-mandated regulations.

10196138
Conflict Resolution and Confrontation Skills - Credits: 1
In Conflict Resolution and Confrontation Skills the learner applies the skills and tools necessary to deal with conflict and confrontation in the workplace. The learner will identify the major causes of conflict, develop a working plan of action to confront difficult situations, and establish guidelines for gaining resolution to difficult situations. The learner will build greater personal skill and confidence in their ability to deal with conflict in their personal and professional life.

10196199
Ethics in Business - Credits: 3
This course will focus on business practices from an ethical point of view. The student will examine such topics as morality/ethical theory, utilitarianism, Kantian ethics, justice and the market system, whistle blowing, trade secrets/conflict of interest, privacy, advertising, product safety, corporate social responsibility, international business.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)
The information below is based on graduates’ responses from the following technical colleges within the Wisconsin Technical College System (WITC) for 10-102-7 Human Resource Management and does not include WITC graduates: Madison Area Technical College, Mid-State Technical College and Western Technical College.

Number of graduates 18
Number of responses 13
Number available for employment 12

<table>
<thead>
<tr>
<th>Number employed</th>
<th>Percent employed</th>
<th>Employed in related field</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>92%</td>
<td>7</td>
</tr>
</tbody>
</table>

% employed in WITC district NA
Range of yearly salary $24,568-$35,000
Average yearly salary $30,134

800.243.9482 witc.edu 2015-2016
Human Services Associate
10-520-3 Associate Degree

Program Overview
The Human Services Associate program prepares people to provide information, support, care, and advocacy in a human service agency. Students acquire the skills needed to work with people of diverse racial, ethnic, and cultural backgrounds. Graduates are employed in county human services agencies, community-based organizations, residential treatment programs, schools, inpatient facilities, and other settings that assist people in need. Depending on area of interest, graduates work with elders, teens, families, people with disabilities, people in the criminal justice system, domestic and family violence, community development, and prevention. Upon graduation, students will have successfully met the required 360 hours of approved specialized education in substance use disorder counseling and in accordance with the Wisconsin Department of Safety and Professional Services, added to the Wisconsin Community-Based Residential Facility (CBRF) Employee Registry and receive a Red Cross First Aid and Choking certification card.

Special Features
• Throughout the program, students will have multiple opportunities to directly explore the Human Services field through community-based observation and extended field experiences within designated organizations and agencies
• Graduates may opt to directly enter the workforce and/or choose to complete their Bachelor’s Degree in Social Work or other Human Services-related field, as per existing articulation agreements
• Program graduates will meet requirements of State of Wisconsin-Department of Safety & Professional Services (DSPS) Approved Pre-Certification Program for Substance Abuse Counselors (SAC), http://www.dspss.wi.gov/ LicensesPermitsRegistrations/ Credentialing-Division-Home-Page/ Health-Professions-Homepage/ Substance-Abuse-Counselor/Substance-Abuse-Counselor-PreCredential-Education
• Graduates will be added to the Wisconsin Community-Based Residential Facility (CBRF) Employee Registry and will receive a Red Cross First Aid and Choking certification card.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
• Review and sign Functional Ability Statement of Understanding
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Students in this program must:
• Complete and sign Background Information Disclosure Form (BID)
• Submit Background Check fee
• Have an acceptable Wisconsin Caregiver Background Check or Minnesota Caregiver Background Check as applicable

Student Profile
Students entering the Human Services Associate program should:
• Have a responsible attitude and commitment to serve others
• Communicate effectively in writing and speech
• Think critically and use good judgment
• Exhibit cultural awareness and develop positive rapport with diverse groups
• Accept and respond appropriately to feedback
• Possess a positive attitude and commitment to serve others
• Demonstrate emotional stability and maturity

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Psychology
• Sociology
• Speech/Communication
• Health
• Parenting/Family Living

Program Outcomes
Employers will expect Human Services Associate graduates to be able to:
• Model a commitment to cultural competence
• Uphold the ethical standards and values for human service professionals
• Demonstrate professionalism
• Utilize community resources
• Apply human services interventions and best practices
• Cultivate professional relationships

Career Outlook
Positions available to students after graduation may include:
• Case Worker
• Community Outreach/Support Worker
• Income Maintenance Worker
• Human Services/Information and Referral Specialist
• Substance Abuse Counselor (with specialized field experience)

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10520101</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>10520102</td>
<td>Interviewing</td>
<td>3</td>
</tr>
<tr>
<td>10520103</td>
<td>Ethics in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>10520104</td>
<td>Issues in Alcohol and Other Drug Abuse</td>
<td>3</td>
</tr>
<tr>
<td>10520105</td>
<td>Introduction to Counseling</td>
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</tr>
<tr>
<td>10520106</td>
<td>Methods of Social Casework</td>
<td>3</td>
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<tr>
<td>10520107</td>
<td>Gerontology</td>
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<td>10520108</td>
<td>Child and Adolescent Behavior</td>
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<td>10520109</td>
<td>Disabilities and the Helping Profession</td>
<td>3</td>
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<tr>
<td>10520110</td>
<td>Group Facilitation</td>
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<tr>
<td>10520111</td>
<td>Psychopharmacology</td>
<td>3</td>
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<td>10520112</td>
<td>Family Systems</td>
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<td>10520113</td>
<td>Field Experience 1</td>
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<tr>
<td>10520114</td>
<td>Field Experience 2</td>
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<tr>
<td>10520115</td>
<td>Substance Abuse Assessment and Treatment</td>
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<td>10575100</td>
<td>CBRF Caregiver Fundamentals</td>
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<td>10801195</td>
<td>Written Communication</td>
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<td>10801198</td>
<td>Speech</td>
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<td>Math with Business Applications</td>
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<td>10804189</td>
<td>Introductory Statistics</td>
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<td>10809159</td>
<td>Abnormal Psychology</td>
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<td>10809172</td>
<td>Introduction to Diversity Studies</td>
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</tr>
<tr>
<td>10809198</td>
<td>Introduction to Psychology</td>
<td>3</td>
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</table>

Career Overview
- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
- See pages 41-43 for course descriptions.
- Students must earn a grade point of 2.0 or better in all required (105200XX) courses and the 10575100 CBRF Caregiver Fundamentals course.

Financial Aid Eligible
Campus: New Richmond Superior

800.243.9482
witc.edu
2015-2016
**Programs and Course Descriptions**

**50520101 Introduction to Human Services - Credits: 3**
Students examine the scope, values, and principles of the human service profession. Coursework introduces the typical roles and duties of human services workers. Students assess their own motivations, attitudes, and interests. In addition to the regular classroom hours, volunteer work in a community human services agency is required. Students must complete or have on file current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and Minnesota) forms, as part of this course.

**50520102 Interviewing - Credits: 3**
This course provides an introduction to interviewing and recordkeeping skills practiced in human service agencies. Students learn principles and techniques needed to conduct informational and supportive interviews including maintaining clinical records, documenting referrals, staffings, and supervision. Students practice interviewing skills during class.

**50520103 Ethics in Human Services - Credits: 3**
This course explores the ethical, legal, and professional issues facing the human services worker. It is designed to teach a process of ethical decision-making and to increase awareness of the complexities in practice. Students are introduced to the current state and federal statutes, regulations, and judicial decisions that govern the professional practice in human services. Standards, code of ethics, clients' rights, and confidentiality are emphasized.

**50520104 Issues in Alcohol and Other Drug Abuse - Credits: 3**
Students gain a basic understanding of the use and abuse of alcohol and other drugs. Emphasis is on historical and social perspectives of drug use, trends of use, and legal and social responses to problematic alcohol and illicit drug use. Additionally, this course provides an accurate description of the effects of psychoactive drugs, identifies methods of substance abuse treatment, and introduces the student to local treatment services.

**50520105 Introduction to Counseling - Credits: 3**
This course is designed to provide the student with an overview of the major counseling theories and techniques and applications to various situations. Students will apply concepts and skills through practice in initiating, structuring, and terminating counseling sessions. PREREQUISITE: 10520102 Interviewing.

**50520106 Methods of Social Casework - Credits: 3**
This course provides an introduction to case management theory, models, and techniques, along with the management and coordination of case records. Key components include intake assessment, creating a plan of service, coordinating care, referral techniques, client self-determination, and ethical issues.

**50520107 Gerontology - Credits: 3**
The focus of this course is on mental health issues, physical health issues, socioeconomic factors, and other issues that impact the aging process and the individual's adaptation to it. Dynamics of the individual, social support systems, community support systems, and the various programs that are in place to help those with special issues in the aging process will be examined.

**50520108 Child and Adolescent Behavior - Credits: 3**
This course examines issues related to child development, juvenile delinquency, and mental health. The course will explore healthy and appropriate child development and issues such as abuse and neglect, which alter development. Juvenile delinquency will explore common behavioral concerns of adolescents and what treatment options exist. Finally, prevalent mental health issues of children and adolescents will be explored as well as treatment including common medications.

**50520109 Disabilities and the Helping Profession - Credits: 3**
This course emphasizes awareness of physical, psychological, and developmental disabilities and examines the unique needs and resources available to people with disabilities. Emphasis is placed on developing effective strategies for working with clients who experience disabilities.

**50520110 Group Facilitation - Credits: 3**
An introduction to theory and practice of group dynamics and processes are covered in this course. Knowledge areas include ethical considerations, effective group leadership, and stages of group development. Learners will record and critique practice group sessions, function as group members, and demonstrate effective group facilitation skills. PREREQUISITE: 10520105 Introduction to Counseling.

**50520111 Psychopharmacology - Credits: 3**
This course is an introductory course in psychopharmacology that provides practical information to workers in a human services setting. It is designed to provide an overview of the psychopharmacology of therapeutic drugs, over-the-counter medications, illicit drugs, and alcohol. Emphasis will be on the nervous system structure, brain function, site of action theory, and on comprehending the effects of substances on these systems. Interactions, withdrawal, and maternal and fetal effects and effects on persons in different stages of development will also be addressed.

**50520112 Family Systems - Credits: 3**
This course focuses on issues related to families and family functioning relevant to the human services field. Major areas of focus will include child maltreatment, domestic violence, and addiction, with emphasis on relevant helping skills and services.

**50520113 Field Experience 1 - Credits: 3**
Students develop skills as human services professionals by working directly or indirectly with clients in community agencies. This experience is designed to enhance the knowledge, skills, and behaviors essential for human services workers in the professional setting. An agency supervisor and a faculty member facilitate this learning experience. Students must complete or have on file current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and Minnesota) forms, as part of this course. PREREQUISITES: All first and second semester core courses.

**50520114 Field Experience 2 - Credits: 3**
Students continue their on-the-job training in a community agency. Additional hands-on experiences working with clients and agency staff provide students with the opportunity to apply and refine skills learned in coursework areas. An agency supervisor and a faculty member facilitate this learning experience. Students must complete or have on file current, valid Background Information Disclosure (BID) and Caregiver Background Check (annual Wisconsin and Minnesota) forms, as part of this course. PREREQUISITE: 10520113 Field Experience 1.

**50575100 CBRF Caregiver Fundamentals - Credits: 2**
In this credit-based course, students will obtain the knowledge and skills required to become Community-Based Residential Facility (CBRF) caregivers. Coursework will include the following training modules: DHS 83.20 (2) (b) CBRF Fire Safety, DHS 83.20 (2) (d) CBRF Medication Administration and Management, DHS 83.20 (2) (a) CBRF Standard Precautions, DHS 83.20 (2) (c) CBRF First Aid and Choking, DHS 83.21 (1) CBRF Resident's Rights, and DHS 83.21 (3) CBRF Challenging Behaviors. Upon successful completion of this course, students are added to the Wisconsin CBRF Employee Registry and will receive the Red Cross CBRF First Aid and Choking certification card.

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**Career Vision**

**Graduate Employment Information**
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

- **Number of graduates**: 20
- **Number employed**: 15
- **Percent employed**: 94%
- **Number available for employment**: 16
- **Employed in related field**: 13
- **% employed in WITC district**: 54%
- **Range of yearly salary**: $18,719-$41,597
- **Average yearly salary**: $28,115

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**Contact Information**

- **Phone**: 800.243.9482
- **Email**: witic.edu
- **Year**: 2015-2016
Industrial Automation, Controls, and Networking
10-631-2 Associate Degree

Program Overview
This program prepares the student to be employed at the technician level or higher on computers, industrial computer networks, programmable logic controllers (PLCs), and instruments. PLCs are often the heart of the control portion of the manufacturing process. The student will have both classroom and hands-on laboratory instruction with several systems to help students understand computer and PLC interfacing, control systems, network installation, and administration.

Special Feature
This program is unique in the state.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Industrial Automation, Controls, and Networking two-year associate degree includes an embedded technical diploma option as documented below:

- 30-150-4 IT Network Technician

Admission Requirements
Students in this program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete Computer Literacy assessment
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
- Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm.

Student Profile
Industrial Automation, Controls, and Networking students should be able to:
- Apply scientific principles and technical knowledge
- Perform mathematical computations accurately
- Evaluate data from tests and observations
- Work with precise standards
- Enjoy scientific and technical work
- Enjoy mechanical work requiring precision
- Work independently and with others
- Communicate clearly
- Be self-motivated

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Algebra/Geometry
- English/Speech/Creative Writing
- Economics/Business
- Basic computer skills

Program Outcomes
Employers will expect Industrial Automation, Controls, and Networking graduates to be able to:
- Identify controls systems and network requirements
- Make recommendations for hardware and software
- Perform installations and supportive functions for LAN/communication busses
- Perform installations and maintenance of controls hardware/software/cabling
- Develop system documentation
- Maintain system documentation
- Troubleshoot hardware/software of PLCs, instrumentation, and control systems
- Integrate controls systems
- Perform programming and configuration of distributed control systems
Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of college-wide outcomes and indicators.

Career Outlook
The Industrial Automation, Controls, and Networking graduate will be ready to start a career as a(n):
- Computer Technician
- Network Technician
- Field Service Technician
- Control Systems Technician
- Instrument Technician
- Programmable Logic Controller (PLC) Technician
- Industrial Automation Technician

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>Cisco CCNA 1 Introduction to Networks</td>
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<tr>
<td>10150113</td>
<td>Cisco CCNA 2 Routing and Switching</td>
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<tr>
<td>10150117</td>
<td>MS LAN Administration - Infrastructure</td>
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<td>10150121</td>
<td>Hardware/Software Installation</td>
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<td>10150139</td>
<td>IT Essentials</td>
<td>2</td>
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<tr>
<td>10154103</td>
<td>Linux Operating Systems</td>
<td>3</td>
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<tr>
<td>10154149</td>
<td>Windows Operating Systems</td>
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<td>10631103</td>
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<td>Industrial Networks and Communication Buses</td>
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<td>10631106</td>
<td>Supervisory and Distributed Control Systems</td>
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<td>10631107</td>
<td>Industrial Automation Case Project</td>
<td>1</td>
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<tr>
<td>10631108</td>
<td>PLC Programming and Interfacing</td>
<td>3</td>
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<tr>
<td>10631109</td>
<td>Industrial AC, Motor Control, and Pilot Devices</td>
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</tr>
<tr>
<td>10631110</td>
<td>Advanced PLC Programming and Interfacing</td>
<td>3</td>
</tr>
</tbody>
</table>

General Studies Courses

- 10801195 Written Communication ▲ 3
- 10801196 Oral/Interpersonal Communication or 3
- 10801198 Speech
- 10801197 Technical Reporting ▲ 3
- 10804113 College Technical Mathematics 1A ▲ 3
- 10804114 College Technical Mathematics 1B ▲ 2
- 10809166 Introduction to Ethics: Theory and Application or 3
- 10809172 Introduction to Diversity Studies
- 10809195 Economics 3
- 10809198 Introduction to Psychology 3

Program Requirements 70

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41-43 for course descriptions.
10150111
Cisco CCNA 1 Introduction to Networks - Credits: 3
This course introduces the architecture, structure, function, components and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

10150113
Cisco CCNA 2 Routing and Switching Essentials - Credits: 3
This course describes the architecture, components and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIP, RIPng, Single area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. After this course, students should be prepared to sit for the Cisco CCENT certification exam. PREREQUISITE: 10150111 Cisco CCNA 1 Introduction to Networks.

10150117
MS LAN Administration - Infrastructure - Credits: 3
This course provides students with training in the configuration of services in a Microsoft Server environment. Students will learn how to setup and troubleshoot DHCP, DNS, printing, file sharing, and remote access services. Microsoft file permissions will be examined and Active Directory will be introduced. Other topics include Windows Firewall, Network Access Protection, and IPv6. PREREQUISITE: 10154149 Windows Operating Systems.

10150121
Hardware/Software Installation - Credits: 2
This course will prepare students to install hardware and software. You will learn to properly identify various types of hardware and software on an IBM-compatible personal computer. This lecture- and lab-based course will use both group and individual activities. PREREQUISITE: 10154149 Windows Operating Systems.

10150139
IT Essentials - Credits: 2
IT Essentials covers the fundamentals of computer hardware and software as well as advanced concepts. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software.

10154103
Linux Operating Systems - Credits: 3
In this course the Linux operating system is examined in-depth with emphasis on features, capabilities, tools, and configurations including an introduction to a variety of types of systems. Other topics will examine other operating systems like MAC OS.

10154149
Windows Operating Systems - Credits: 3
A review of the most common command line operations and study of more advanced commands necessary to configure the Windows operating system for a variety of environments. Topics to be studied include creating directories, batch files, menus, custom configurations, file management, multitasking, windowing, security, and disk management utilities. There will be an introduction to usage, configuration, and tools of the Windows operating system.

10605167
Electricity 1 - Credits: 2
Electricity 1 is a lecture/hands-on course designed to introduce students to basic electrical terminology, laws, concepts, instrumentation, and application. Hands-on activities will be stressed to reinforce electrical concepts related to practical applications dealing with computer networks. Topics covered will include electrical safety terminology and symbols, electrical laws, basic circuits, multimeter use, DC power supplies, and troubleshooting. Critical-thinking skills are emphasized to develop competencies in problem solving and troubleshooting. COREQUISITE: 10804113 College Technical Mathematics 1A or 10804415 College Technical Math 1.

10605168
Electricity 2 - Credits: 2
This course is designed to introduce students to the basic concepts of alternating current. Emphasis is placed on circuit analysis and problem-solving skills necessary for the maintenance of modern industrial electrical systems. PREREQUISITE: 10605167 Electricity 1.

10631100
Introduction to Process Control - Credits: 2
The Introduction to Process Control course explains the function of basic devices for measuring and controlling different kinds of variables in processes. It introduces closed-loop control, PID functions, analog and digital devices, and control system applications. It also covers instrumentation symbols and the interpretation and use of process diagrams. PREREQUISITE: 1065167 Electricity 1.

10631102
Industrial Power Electronics - Credits: 2
The Industrial Power Electronics course is a hands-on course dealing with the electronics that are used to control power, power and operate machines and processes in the modern manufacturing plant. The course includes the study and use of the oscilloscope and digital multimeter, thyristors, AC, DC, stepper and servo motor drive systems, photovoltaic electric switches, and miscellaneous field devices. PREREQUISITE: 1065167 Electricity 1 or equivalent.

10631103
Process Control and Instrumentation - Credits: 3
The Process Control and Instrumentation course offers hands-on skill exercises on controlling and manipulating temperature, pressure, flow, and level in the manufacturing process. Students will be able to identify, connect, operate, troubleshoot, and perform preventive maintenance on the components that form a process control system. PREREQUISITE: 1065167 Electricity 1 or equivalent and COREQUISITE: 10631100 Introduction to Process Control.

10631104
Smart Instruments - Credits: 2
The Smart Instruments course introduces students to smart instruments including temperature devices, pressure devices, and smart control valves. Students will be able to calibrate, configure, and troubleshoot smart devices. Students will be able to identify appropriate applications for smart instruments. PREREQUISITE: 10631100 Introduction to Process Control or equivalent.

10631105
Industrial Networks and Communication Busses - Credits: 2
This course introduces networks, communication busses, and protocols used in industrial applications. Students will be able to discuss strengths and weaknesses of each communications solution and pick the most appropriate for given applications.

10631106
Supervisory and Distributed Control Systems - Credits: 3
This course will provide an overview exposure to networked distributed control systems and data acquisition systems. Included are PLCs, data acquisition systems, Simple Loop Controllers, Smart Devices, and Distributed Control Systems. Students will connect, configure, and operate a simulated process that includes the elements of distributed control and data acquisition systems. PREREQUISITE: 10631100 Introduction to Process Control and 10631108 PLC Programming and Interfacing or equivalent.

10631107
Industrial Automation Case Project - Credits: 1
The primary focus of this course is to have the students receive exposure to and experience with an industrial process control or manufacturing automation system. Students will complete a project or research dealing with an existing process in an area industry or complete an advanced project in the lab dealing with applications of industrial networks, sensors, control, and data acquisition. PREREQUISITE: 10631100 Introduction to Process Control; 10631102 Industrial Power Electronics; 10631103 Process Control and Instrumentation; 10631108 PLC Programming and Interfacing; and 10631109 Industrial AC, Motor Control, and Pilot Devices.

10631108
PLC Programming and Interfacing - Credits: 3
PLC Programming and Interfacing offers students a hands-on approach to implementing industrial control by integrating typical plant floor electrical components with microprocessor-based controllers. Students will learn to identify and connect field inputs and outputs; communicate with, and program microprocessor-based controllers. Students will also connect, communicate with, and develop displays for computer-based operator interfaces. PREREQUISITE: 1065167 Electricity 1 or 32414358 (A) AC/DC Circuits or 32414359 (B) AC/DC Circuits.

10631109
Industrial AC, Motor Control, and Pilot Devices - Credits: 3
This course gives students the opportunity to learn about AC theory, circuits, and control devices used in industry. The course begins with an overview of AC theory including resistance, inductance, and capacitance. The course includes topics on AC and DC motors, motor controls, and pilot devices. The student will engage in hands-on activities with real industrial components to enable them to recognize, select, apply, and troubleshoot industrial electrical control circuit components. PREREQUISITE: 1065168 Electricity 2 or equivalent.

10631110
Advanced PLC Programming and Interfacing - Credits: 3
Advanced PLC offers students a hands-on approach to implementing industrial control using modern controllers to implement programs that utilize advanced functions. Students will complete hands-on activities with Allen Bradley ControlLogix PLCs. The course will examine the use of basic instructions and addressing with RSLogix 5000 and an industrial process controller (PLC) instructions in Ladder Logic and Function Block. Other topics include PLC configuration and commissioning, communications with RSLogix, OPC, and RSNetWorx, HMI configuration using PanelView, Wonderware and/or others. PREREQUISITE: 10631108 PLC Programming and Interfacing.
Industrial Maintenance Technician
32-462-1 Technical Diploma

Program Overview
The Industrial Maintenance Technician program will give the student practical, “hands-on” experience in welding, hydraulics, electricity, mechanical maintenance, maintenance machining, and PLC (programmable logic controller) equipment maintenance. Opportunities for advancement increase with further education.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Industrial Maintenance Technician students should:
• Be able to apply mechanical principles and repair techniques
• Be able to use good judgment
• Be able to follow procedures carefully
• Be able to handle equipment skillfully
• Be able to assume responsibility
• Be able to work under pressure
• Be able to lift 50 pounds
• Be interested in mechanics
• Enjoy working with their hands
• Be able to organize tasks
• Be able to work well under supervision
• Be able to accept constructive criticism
• Be interested in mechanics
• Enjoy working with their hands
• Be able to use good judgment
• Be able to follow procedures carefully
• Be able to handle equipment skillfully
• Be able to assume responsibility
• Be able to work under pressure
• Be able to lift 50 pounds
• Be interested in mechanics
• Enjoy working with their hands
• Be able to organize tasks
• Be able to work well under supervision
• Be able to accept constructive criticism
• Be able to work well under supervision

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• General mathematics
• Algebra
• Machine Shop
• Welding
• Science/Physics and Chemistry
• English/Communications
• Human Relations

Program Outcomes
Employers will expect Industrial Maintenance Technician graduates to be able to:
• Demonstrate safe work procedures
• Install industrial equipment and systems
• Maintain industrial equipment and systems
• Troubleshoot industrial equipment and systems
• Repair industrial equipment and systems
• Communicate technical information
Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Maintenance mechanics are in demand in all types of industries. Pay rates for people in the equipment maintenance field are among the highest of all trades. Typical careers available after graduation include:
• Maintenance Technician Assistant
• Maintenance Technician Foreperson
• Maintenance Machinist
• Maintenance Technician
• Maintenance Welding
Graduates may also enter the trades of Machine Repair, Machine Rebuilder, and Millwright. Graduates may advance to such positions as Maintenance Leadperson, Maintenance or Millwright Apprentice, Foreperson, or Superintendent.

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>31442340</td>
<td>Basic Electrical Theory</td>
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<td>32414341</td>
<td>Electrical Systems ▲</td>
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<td>32416301</td>
<td>Fluid Systems Repair Lab (WBL) ▲</td>
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<td>Pump Applications</td>
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<td>32462305</td>
<td>Fabrication Processes</td>
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<td>Gears, Belts, and Chain Drives</td>
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<td>32462312</td>
<td>Machine Leveling and Alignments</td>
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<td>31442370</td>
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<tr>
<td>32462308</td>
<td>Piping Systems</td>
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</tbody>
</table>

PROGRAM REQUIREMENTS 59

Extra courses required and/or corequisite that must be completed with a grade point of 2.0 or better.

Required courses and corequisite that must be completed with a grade point of 2.0 or better.
Programs and Course Descriptions
(See pages 41-43 for General Studies course descriptions)

31442370
Gas Metal Arc Welding 1 - Credits: 3
This course introduces the student to the basics of GMAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques.

31442373
Shielded Metal Arc Welding 1 - Credits: 3
This course introduces the student to the basics of SMAW welding. It includes the study of the type of metals and equipment utilized when welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard welding techniques. COREQUISITE: 31442373 Shielded Metal Arc Welding 1.

31442379
Gas Tungsten Arc Welding 1 - Credits: 2
This course introduces the student to the basics of GTAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques.

32419301
Hydraulics/Pneumatics - Credits: 3
This course is designed to introduce the student to the theory of fluid power. The common gas laws will be analyzed. The basic system of a hydraulic unit and pneumatic unit will be the focus of this laboratory-based course. Common applications of different circuits will be explored and constructed.

32420305
Maintenance Machining - Credits: 3
This course is designed to introduce the student to the basic machines and procedures of machines common to the industrial maintenance industry.

32420310
Print Reading - Credits: 2
During this course the student will be introduced to the safety procedures, the common hardware components, and the equipment used in industry for rigging to lift and move machines and equipment. The student will demonstrate industry standard rigging and lifting procedures in a laboratory-based environment.

32426205
Fabrication Processes - Credits: 2
This course is designed to introduce the student to the basics of fabrication processes that are common to the industrial maintenance field along with the tools and components used in these processes. This course is a theory-based course with hands-on lab applications.

32426208
Piping Systems - Credits: 2
This course is designed to introduce the student to basic plumbing of air, water, and other process systems found in industrial plants. Layout, cutting, threading, and installing these systems will be the focus of this course.

32426210
Pump Applications - Credits: 2
This course is designed to enable the student to explore the theory of fluid pumping applications common to industry. General troubleshooting and maintenance procedures will be stated and practiced during this competency lab-based course.

32426312
Bearing and Lubrication - Credits: 2
This course is designed to introduce the student to the applications of bearings and lubrication processes used in industries. Instruction will be given in the basic principles of operations, preventive maintenance, and repair procedures of all bearing types common to industry.

32462314
Machine Leveling and Alignments - Credits: 2
This course is designed to introduce the student to the standard applications of machine leveling and alignment of shafts, couplings, bearings, and machines common to industries. This course will cover several leveling and alignment procedures that meet industry standards.

32462317
Industrial Safety - Credits: 1
This course is designed to introduce the student to safety topics required by OSHA for general industries. Safety committees and their function in the workplace will also be discussed. The history of OSHA and the role it plays in industry, along with the roles of all workers and employers toward safety, will be the focus of this course.

32462320
Gears, Belts, and Chain Drives - Credits: 2
This course is designed to introduce the student to the applications of gears, belts, and chain drives used in industry. Instruction will be given in the basic principles of operation, installation, preventive maintenance, and repair procedures of these components to industry standards.

32462321
Conveyors (WBL) - Credits: 2
This course is designed to introduce the student to bulk handling belt conveyor systems common to many industries. While examining the different systems used that make up an effective belt conveyor, the student will design a system of their own. Standard applications, preventive maintenance, repair, and installation of conveyors will be the focus of this course. The screw, flat belt, and roller conveyors will also be examined. A strong background in mechanical drive and fabrication is recommended.

32462322
Conveyor Systems Repair Lab - Credits: 3
This course is designed to provide a "real" work-like environment where the student is placed in a team environment to build a conveyor from the design that was created in the conveyors theory class. All welding, machining, and the fabrication of the conveyor will be done by the team. The ordering of parts and components, along with creating a journal of the project, will be a team function. COREQUISITE: 32462321 Conveyors (WBL).

32462330
Fluid Systems Repair Lab (WBL) - Credits: 2
This course is designed to give the student a chance to apply fluid power system skills in a shop environment. Students will work on projects that will require troubleshooting of fluid systems and components, and construction of fluid systems common to industry. COREQUISITES: 32419301 Hydraulics/Pneumatics, 32462308 Piping Systems, and 32462309 Pump Applications.

Gainful employment information is available at this link: [http://www.witc.edu/pgmpages/industmaint/career.htm](http://www.witc.edu/pgmpages/industmaint/career.htm). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to wetc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>9</th>
<th>Number employed</th>
<th>5</th>
<th>% employed in WITC district</th>
<th>60%</th>
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<tr>
<td>Number of responses</td>
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<td>Percent employed</td>
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<tr>
<td>Number available for employment</td>
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<td>Employed in related field</td>
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<tr>
<td>Average yearly salary</td>
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</tbody>
</table>
Program Overview
The Information Technology - Network Specialist program will give students the skills to perform network design, installation, administration, and support for information systems.

Special Features
WITC is affiliated with the following industry partners providing students with access to a variety of materials and software: Cisco, CompTIA, Microsoft, and VMware.

WITC locations are Cisco academies, and WITC is a CompTIA academy partner and does VUE testing.

Students in the IT – Network Specialist program at Ashland and Rice Lake have the opportunity to dual major with the IT – Systems Administration Specialist program by completing additional coursework (see page 112 for more information on the IT - Systems Administration Specialist program).

Graduates have the option to transfer coursework to complete a Bachelor's Degree at UW-Stout, UW-Milwaukee, and other institutions with degree completion programs.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individual students to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Information Technology - Network Specialist two-year associate degree includes an embedded technical diploma option as documented below:

- 30-150-4 IT Network Technician

Admission Requirements
Students in this program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete Computer Literacy assessment
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
Students in this program must:
- Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at http://www.witc.edu/online/smartermeasure.htm.

Student Profile
Students who enter the program should:
- Be organized and logical
- Enjoy work that requires a high degree of accuracy
- Be able to handle setbacks and remain at task until a workable solution can be found
- Be able to work under stress

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Algebra
- Geometry
- Keyboarding
- Basic computer skills

Key to the student's success in this program is the ability to work well alone or with others to identify and solve problems.

Program Outcomes
Employers will expect graduates of the Information Technology - Network Specialist program to be able to:
- Implement computer networks
- Implement client systems
- Implement server operating systems
- Implement network security components
- Develop technical documentation
- Troubleshoot network systems

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
The use of computers and the Internet in business and industry has led to a strong demand for computer network specialists. Job opportunities after graduation include:
- Network Administrator
- Network Support Specialist
- Computer Support Specialist
- Network Technician
- Network Analyst

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>10150102</td>
<td>Information Security</td>
<td>3</td>
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<tr>
<td>10150106</td>
<td>Router and Firewall Security</td>
<td>3</td>
</tr>
<tr>
<td>10150109</td>
<td>Wireless LANs</td>
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</tr>
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<td>10150111</td>
<td>Cisco CCNA 1 Introduction to Networks</td>
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<td>10150112</td>
<td>Cisco CCNA 3 Scaling Networks</td>
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<td>10150113</td>
<td>Cisco CCNA 2 Routing and Switching Essentials</td>
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<td>10150114</td>
<td>Cisco CCNA 4 Connecting Networks</td>
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<tr>
<td>10150117</td>
<td>MS LAN Administration - Infrastructure</td>
<td>3</td>
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<td>10150118</td>
<td>MS LAN Administration - Active Directory</td>
<td>3</td>
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<td>10150121</td>
<td>Hardware/Software Installation</td>
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<td>10150139</td>
<td>IT Essentials</td>
<td>2</td>
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<tr>
<td>10150140</td>
<td>Introduction to VOIP (Voice Over IP) Technology</td>
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<td>10150160</td>
<td>Networking Capstone</td>
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<td>10154103</td>
<td>Linux Operating Systems</td>
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<td>10154149</td>
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<td>10809166</td>
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<td>10809172</td>
<td>Introduction to Diversity Studies</td>
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<tr>
<td>10809195</td>
<td>Economics</td>
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<td>10809198</td>
<td>Introduction to Psychology</td>
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<td>ELECTIVES</td>
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<td>PROGRAM REQUIREMENTS</td>
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<td>70</td>
</tr>
</tbody>
</table>

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▷ See pages 41-43 for course descriptions.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

10150102  Information Security - Credits: 3
This course will cover hardware, software, and the physical environment related to IT security. The processes of defense, prevention, detection, and response will be studied. Typical types of attacks will be studied and potential solutions or defenses will be explored. Networking and operating system experience is required along with a code of ethics. This course covers topics related to theCompTIA Security+ exam. PREREQUISITE: 10154103 Linux Operating Systems.

10150106  Router and Firewall Security - Credits: 3
This course is designed for students interested in securing the network infrastructure. Focus is on the overall security processes in a network with particular emphasis on hands-on skills, threat identification and secure management and reporting. Firewalls, AAA, ACLs, IPSec, and WPA will be implemented to secure the network. The course will help prepare students for the Cisco CCNA Security certification. COREQUISITE: 10150114 Cisco CCNA 4 Connecting Networks.

10150109  Wireless LANs - Credits: 3
Wireless LANs is an introductory course that will focus on the design, planning, implementation, operation and troubleshooting of wireless networks. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands-on skills. PREREQUISITE: 10150113 Cisco CCNA 2 Routing and Switching Essentials.

10150111  Cisco CCNA 1 Introduction to Networks - Credits: 3
This course introduces the architecture, structure, function, components and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

10150112  Cisco CCNA 3 Scaling Networks - Credits: 3
This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. PREREQUISITE: 10150111 Cisco CCNA 1 Introduction to Networks.

10150113  Cisco CCNA 2 Routing and Switching Essentials - Credits: 3
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPV1, RIPV2, Single area and multi-area OSPF, virtual LANs, and inter-WLAN routing in both IPv4 and IPv6 networks. After this course, students should be prepared to sit for the Cisco CCENT certification exam. PREREQUISITE: 10150111 Cisco CCNA 1 Introduction to Networks.

10150114  Cisco CCNA 4 Connecting Networks - Credits: 3
This course discusses the WAN technologies and network services required for converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network. After this course, students should be prepared to sit for the CCNA routing and switching certification exam. PREREQUISITE: 10150112 Cisco CCNA 3 Scaling Networks and 10150113 Cisco CCNA 2 Routing and Switching Essentials.

10150117  MS LAN Administration - Infrastructure - Credits: 3
This course provides students with training in the configuration of services in a Microsoft Server environment. Students will learn how to setup and troubleshoot DHCP, DNS, printing, file sharing, and remote access services. Microsoft file permissions will be examined and Active Directory will be introduced. Other topics include Windows Firewall, Network Access Protection, and IPv6. PREREQUISITE: 10154149 Windows Operating Systems.

10150118  MS LAN Administration - Active Directory - Credits: 3
This course provides the students with the concepts and techniques necessary to implement, secure and administer Microsoft’s Active Directory Services. Students will learn how to use administrative tools, integrate DNS and Active Directory, manage user and group accounts, configure system policies and configure multiple active directory sites. PREREQUISITE: 10154149 Windows Operating Systems.

10150121  Hardware/Software Installation - Credits: 2
This course will prepare students to install hardware and software. You will learn to properly install various types of hardware and software on an IBM-compatible personal computer. This lecture- and lab-based course will use both group and individual activities. PREREQUISITE: 10154149 Windows Operating Systems.

10150139  IT Essentials - Credits: 2
IT Essentials covers the fundamentals of computer hardware and software as well as advanced concepts. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software.

10150140  Introduction to VOIP (Voice Over IP) Technology - Credits: 3
This course is designed to introduce students to the concept of Voice Over IP (VOIP) and to give students the chance to build a basic VOIP system in a mixed classroom and lab environment. Students will use IP telephones, analog telephones, and voice gateways to design and build and manage a working VOIP telephone system. Cisco equipment and the call manager are used in the course. A background in routing and switch or telecommunications is recommended before taking this course. This course will cover topics related to the Cisco CCNA voice certification. PREREQUISITE: 10150113 Cisco CCNA 2 Routing and Switching Essentials.

10150160  Networking Capstone - Credits: 1
This course is the capstone work-based experience for the IT - Network Specialist program. Learners will design, develop, and perform a project either in an actual work experience or a simulated project. The project will be designed to utilize skills typical of a graduate in the field. Weekly simulated timesheets, job progress reports, and oral reports to management will be used to track project progress. Successful completion will require project documentation. COREQUISITE: 10150114 Cisco CCNA 4 Connecting Networks.

10150161  Networking Case Studies - Credits: 1
The primary focus of this course is to have the students receive exposure and experience with a business information system. To accomplish this goal, students will get involved with industry or complete a small business lab simulation by designing and implementing a small business project. PREREQUISITE: 10154155 PC Troubleshooting/Upgrading.

10150162  Network + - Credits: 1
Network + - Earning a CompTIA Network+ certification demonstrates that a candidate can describe the features and functions of networking components, and possesses the knowledge and skills needed to install, configure, and troubleshoot basic networking hardware, protocols, and services. IP addressing techniques and principles will be covered in detail. The exam tests technical ability in the areas of media and topologies, protocols and standards, network implementation, and network support. The new exam also covers new technologies such as wireless networking and gigabit Ethernet. Operating system experience is required, as is a basic knowledge of hardware. Students are required to take the Network + certification test as part of this course. PREREQUISITE: 10154103 Linux Operating Systems.

10154103  Linux Operating Systems - Credits: 3
In this course the Linux operating system is examined in-depth with emphasis on features, capabilities, tools, and configurations including an introduction to network configurations. Additional topics will examine other operating systems like MAC OS.

10154149  Windows Operating Systems - Credits: 3
A review of the most common command line operations and study of more advanced commands necessary to configure the Windows operating system for a variety of environments. Topics to be studied include creating directories, batch files, menus, custom configurations, file management, multitasking, windowing, security, and disk management utilities. There will be an introduction to usage, configuration, and tools of the Windows operating system.

10154155  PC Troubleshooting/Upgrading - Credits: 2
This course is intended to provide a student with basic technical skills necessary to install and troubleshoot computer hardware components. The student will learn how to identify the type and function of each hardware component as well as perform installation, testing, and replacement. This course utilizes A+ certification materials. PREREQUISITE: 10150121 Hardware/Software Installation.

10890105  Job Quest - Credits: 1
This course is designed to enhance the student's ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

- Number of graduates: 27
- Number employed: 20
- Percent employed: 91%
- Employed in related field: 18
- % employed in WITC district: 25%
- Range of yearly salary: $19,758 - $57,000
- Average yearly salary: $33,995

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witc.edu
2015-2016
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Programs and Course Descriptions
Program Overview

The first year of the Information Technology - Systems Administration Specialist program provides students with a foundation in computer systems along with strong LAN networking skills. These skills will allow students to support and manage computer systems and the networks connecting them. The first year of the curriculum is similar to the IT - Network Specialist program.

The second year of the program focuses on server administration, virtualization, and cloud computing concepts. Students learn how to install, configure and manage servers in a virtualized environment. The curriculum offers the technologies necessary to pass the Microsoft Certified Technology Specialist (MCTS), Microsoft Certified Information Technology Professional (MCITP), and VMware Certified Professional (VCP) certifications.

Special Features

• WITC is affiliated with the following industry partners providing students with access to a variety of materials and software: Cisco, CompTIA, Microsoft, and VMware.
• WITC locations are Cisco academies, and WITC is a CompTIA academy partner and does VUE testing.
• Students in the IT - Systems Administration Specialist program have a common first year with the IT - Network Specialist program and have the option in the second year to choose to complete the IT - Systems Administration Specialist program or IT - Network Specialist program.
• IT - Systems Administration Specialist second-year coursework at New Richmond and Superior available online.

Career Pathway Options

A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Information Technology - Systems Administration Specialist two-year associate degree includes an embedded technical diploma option as documented below:

• 30-150-4 IT Network Technician

Admission Requirements

Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete Computer Literacy assessment
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement

Students in this program must:
• Complete the SmarterMeasures Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/onlinemartersmeasures.htm.

Student Profile

Students who enter the program should:
• Be organized and logical
• Concentrate on details for long periods of time
• Enjoy work that requires a high degree of accuracy
• Be able to handle setbacks and remain at a task until a workable solution can be found
• Enjoy finding solutions to complex situations
• Work under stress

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:
• Basic computer skills
• Keyboarding
• Algebra
• Microsoft Windows
• Internet Browsers

Program Outcomes

Employers will expect graduates of the Information Technology - Systems Administration Specialist program to be able to:
• Manage information technology hardware
• Manage software
• Support computer networks
• Provide end user support
• Solve information technology problems
• Demonstrate customer service skills as an IT professional

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of college-wide outcomes and indicators.

Career Outlook

The use of computers in business and industry has led to a strong demand for systems administration specialists. Job opportunities after graduation include:
• Microsoft Certified Systems Administrator (MCSA)
• Microsoft Certified Systems Engineer (MCSE)
• Network Administrator
• Computer Operations Shift Supervisor
• Data Center Manager
• Chief Information Officer (CIO)
• Microsoft Certified Systems Engineer (MCSE)

Curriculum

Number Course Title Credits

Technical Studies Courses
10150111 Cisco CCNA 1 Introduction to Networks 3
10150113 Cisco CCNA 2 Routing and Switching Essentials 3
10150117 MS LAN Admin - Infrastructure 3
10150118 MS LAN Administration - Active Directory 3
10150121 Hardware/Software Installation 2
10150139 IT Essentials 2
10152100 Database Concepts and SQL 3
10154103 Linux Operating Systems 3
10154141 VMware Certified Professional 3
10154142 Storage Concepts 2
10154143 IT Scripting 3
10154144 Ethical Hacking 3
10154145 Database Administration and SharePoint 3
10154146 Cloud Computing 3
10154147 Capstone Project 2
10154148 IT Field Experience 1
10154149 Windows Operating Systems 3
10809015 Job Quest 1 46

General Studies Courses
10801195 Written Communication 3
10801196 Oral/Interpersonal Communication 3
10801198 Speech 3
10801197 Technical Reporting 3
10804123 Math with Business Applications 3
10804113 College Technical Mathematics 1A 3
10804133 Mathematics and Logic 3
10809166 Introduction to Ethics:Theory and Application 3
10809172 Introduction to Diversity Studies 3
10808195 Economics 3
10809198 Introduction to Psychology 3

ELECTIVES 3

PROGRAM REQUIREMENTS 70

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41-43 for course descriptions.
Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witic.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
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*Range of yearly salary and average yearly salary based on composite of graduates from Wisconsin's 16 technical colleges within the Wisconsin Technical College System (WITCS) and includes WITC graduates.

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10150111 Cisco CCNA 1 Introduction to Networks - Credits: 3
This course introduces the architecture, structure, function, components, and operation of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

10150113 Cisco CCNA 2 Routing and Switching Essentials - Credits: 3
This course describes the architecture, components and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPng, Single area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. After this course, students should be prepared to sit for the Cisco CCEN certification exam. PREREQUISITE: 10150111 Cisco CCNA 1 Introduction to Networks.

10150117 MS LAN Admin - Infrastructure - Credits: 3
This course provides students with training in the configuration of services in a Microsoft Server environment. Students will learn how to setup and troubleshoot DHCP, DNS, printing, file sharing, and remote access services. Microsoft file permissions will be examined and Active Directory will be studied from an ethical and defense point of view to help secure resources in the information technology. Other topics include Windows Firewall, Network Access Protection, and IPv6. PREREQUISITES: 10154149 Windows Operating Systems.

10150118 MS LAN Administration - Active Directory - Credits: 3
This course provides the students with the concepts and techniques necessary to implement, secure and administer Microsoft’s Active Directory Services. Students will learn how to use administrative tools, integrate DNS and Active Directory, manage user and group accounts, configure system policies, and configure multiple active directory sites. PREREQUISITE: 10154149 Windows Operating Systems.

10150121 Hardware/Software Installation - Credits: 2
This course will prepare students to install hardware and software. You will learn to properly install various types of hardware and software on an IBM-compatible personal computer. This lecture- and lab-based course will use both group and individual activities. PREREQUISITE: 10154149 Windows Operating Systems.

10150139 IT Essentials - Credits: 2
IT Essentials covers the fundamentals of computer hardware and software as well as advanced concepts. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software.

10152100 Database Concepts and SQL - Credits: 3
This course is a comprehensive introduction to database concepts. The interaction between software applications and databases will be discussed. Database terminology will be introduced. Students will learn how to manage, design, and construct relational databases. Structured Query Language (SQL) will be used to define and access databases. Other topics include normalization, entity relationship diagrams, foreign key constraints, and indexes.

10154103 Linux Operating Systems - Credits: 3
In this course the Linux operating system is examined in-depth with emphasis on features, capabilities, tools, and configurations including an introduction to network configurations. Additional topics will examine other operating systems like MAC OS.

10154141 VMware Certified Professional - Credits: 3
This course is an introduction to Enterprise virtualization using VMware vSphere, ESXi and vCenter. Students receive hands-on experience in the installation, configuration and management of VMware. This course also covers storage and networking concepts important to virtualization. This course fulfills the "VMware vSphere: Install, Configure, Manage" requirement to take the VCP certification exam. PREREQUISITE: 10150113 Cisco CCNA 2 Routing and Switching Essentials.

10154142 Storage Concepts - Credits: 2
This course will address the challenges and solutions for data storage and data management. Topics include RAID implementation and comparison, intelligent storage systems and UNIX configuration, storage area networks (Fibre Channel, SAN, iSCSI, SAN), Network-Attached Storage, business continuity, backup and recovery, and storage security. PREREQUISITES: 10150117 MS LAN Admin – Infrastructure and 10154103 Linux Operating Systems.

10154143 IT Scripting - Credits: 3
Scripting technologies are used to automate system management tasks and create system management utilities. Students will learn basic programming language concepts to develop scripts. Windows PowerShell is introduced to administer Microsoft Networks and Bash scripting will be utilized to automate tasks in a Linux environment. PREREQUISITES: 10150117 MS LAN Admin – Infrastructure and 10154103 Linux Operating Systems.

10154144 Ethical Hacking - Credits: 3
Ethical hacking students will scan, test and secure their own systems. Students in the lab environment will apply practical experience to implement essential security for systems. Studies will include how perimeter defenses are applied to their own networks. The processes of escalating privileges, Intrusion Detection, Policy Creation, Social Engineering, DoS/DDoS Attacks, Buffer Overflows and Viruses will be studied from an ethical and defense point of view to help secure resources in the information technology. PREREQUISITES: 10150117 MS LAN Admin – Infrastructure and 10154103 Linux Operating Systems.

10154145 Database Administration and SharePoint - Credits: 3
This course covers the basics concepts of database administration including setting up and securing users, tuning operations, database security, backups and monitoring. This course also covers the basics of SharePoint administration and design including creating intranets, team sites and calendars as well as customization of settings. SharePoint administration and security will also be addressed. PREREQUISITES: 10150118 MS LAN Administration - Active Directory and 10152100 Database Concepts and SQL.

10154146 Cloud Computing - Credits: 3
This course will examine how storage and virtualization technologies are making possible the enormous rise of cloud computing. The course will look at the impact that cloud computing is having on traditional datacenters. It will also discuss security issues in the cloud computing perspective. PREREQUISITE: 10154141 VMware Certified Professional.

10154147 Capstone Project - Credits: 2
This course is the capstone work-based experience for the IT - Systems Administration Specialist program. Learners will design, develop, and perform a project either in an actual work experience or a simulated project. The project will be designed to utilize skills typical of a graduate in the field. Weekly simulated timesheets, job progress reports, and oral reports to management will be used to track project progress. Successful completion will require project documentation. COREQUISITE: 10154146 Cloud Computing.

10154148 IT Field Experience - Credits: 1
Provides work experience in IT Field related to course work within the program. The experience should complement program courses to implement practical application of skills students obtain. By consent of instructor, a special project(s) may be substituted for the field experience. COREQUISITE: IT 10154146 Cloud Computing.

10154149 Windows Operating Systems - Credits: 3
A review of the most common command line operations and study of more advanced commands necessary to configure the Windows operating system for a variety of environments. Topics to be studied include creating directories, batch files, menus, custom configurations, file management, multithreading, windowing, security, and disk management utilities. There will be an introduction to usage, configuration, and tools of the Windows operating system.

10890105 Job Quest - Credits: 1
This course is designed to enhance the student’s ability to seek, obtain, and retain employment. Assessment of personal characteristics, job seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.
Program Overview

WITC’s Information Technology - Web and Software Developer program includes training in a variety of programming languages. Students will gain hands-on experience and become skilled in developing Web, mobile, and native applications.

Experienced instructors will help students develop and implement information technology solutions and improve interpersonal skills to be effective in the workplace.

The Information Technology - Web and Software Developer program offers students flexible course offerings, both on campus and online, to fit their life and learning style. The college continuously evolves program content based on recommendations from industry leaders, ensuring current expertise after graduation.

Special Feature

The Information Technology - Web and Software Developer program is available online.

Admission Requirements

Students in this program must:

• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete Computer Literacy assessment
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement

Students in this program must:

• Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm.

Student Profile

When students enter the Information Technology - Web and Software Developer program, they should be able to:

• Organize their work
• Think logically
• Concentrate on details for long periods of time
• Enjoy work that requires a high degree of accuracy
• Work under stress
• Handle setbacks and remain at a task until a working solution can be attained

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

• Basic computer skills
  - Keyboarding
  - File management
  - Math
  - Microsoft Windows
  - Internet browsers

Key to the student’s success in this program is organization, logic, accuracy, and follow-through.

Program Outcomes

Employers will expect graduates of the program to be able to:

• Design software systems
• Integrate database technologies
• Develop software applications
• Develop technical documentation

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Businesses are experiencing growth in Web-based environments such as intranets, extranets, and Internet applications. Organizations will look for programmers who can support existing enterprise systems and implement electronic commerce strategies. The demand for programmers with object-oriented programming skills, technical specialization in multimedia technology, and graphic user interface (GUI) development will continue to grow.

Typical positions available after graduation include:

• Web Developer
• Computer Programmer
• Database Developer

Program Outcomes

Employers will expect graduates of the program to be able to:

• Design software systems
• Integrate database technologies
• Develop software applications
• Develop technical documentation

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

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Typical positions available after graduation include:

• Web Developer
• Computer Programmer
• Database Developer

Curriculum

Number  Course Title  Credits

Technical Studies Courses
10152100 Database Concepts and SQL  3
10152101 Web Design and Development  3
10152102 Advanced Web Site Development  3
10152106 Java Programming - Beginning  3
10152107 Java Programming - Advanced  3
10152108 Enterprise Java Programming  3
10152110 Programming in SQL  3
10152111 Systems Analysis and Design  3
10152112 Server-Side Web Development  3
10152113 Applications Development  3
10152115 Beginning .NET Programming  3
10152116 Web Tools of the Trade  2
10152117 Advanced .NET Programming  3
10152118 Enterprise Programming in .NET  3
10152119 Development in Emerging Technologies  3
10152135 Program Logic  3

General Studies Courses
108001195 Written Communication  3
108001196 Oral/Interpersonal Communication or  3
108001198 Speech  3
108001197 Technical Reporting  3
108004123 Math with Business Applications or  3
108004113 College Technical Mathematics 1A or  3
108004133 Mathematics and Logic  3
108009166 Introduction to Ethics: Theory and Application or  3
108009172 Introduction to Diversity Studies  3
108009195 Economics  3
108009198 Introduction to Psychology  3

PROGRAM REQUIREMENTS  68

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

See pages 41-43 for course descriptions.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10152100
Database Concepts and SQL - Credits: 3
This course is a comprehensive introduction to database concepts. The interaction between software applications and databases will be discussed. Database terminology will be introduced. Students will learn how to manage, design, and construct relational databases. Structured Query Language (SQL) will be used to define and access databases. Other topics include normalization, entity relationship diagrams, foreign key constraints, and indexes.

10152101
Web Design and Development - Credits: 3
Students will plan and develop well-designed Web sites that combine effective navigation and a balanced use of text, images, and color. Emphasis will be placed on understanding the basics of HTML5, Cascading Style Sheets (CSS), and responsive Web design. Students will create Web sites that can be easily viewed across a wide range of devices.

10152102
Advanced Web Site Development - Credits: 3
Students will gain hands-on experience with the design and implementation of dynamic business Internet Web sites. Topics include JavaScript, jQuery, Ajax, and XML, with which students will thoroughly explore event-driven techniques, data storage, accessing the DOM, and JSON. Students will create Web sites that can be easily viewed across a wide range of devices. PREREQUISITE: 10152100 Web Design and Development and 10152115 Program Logic.

10152106
Java Programming - Beginning - Credits: 3
This Java course will familiarize the student with the fundamentals of the Java language including data types, operators, expressions, event-driven programming, and conditional statements. Students will learn how to set up an environment for developing Java programs, define classes and utilize class objects. Object-oriented topics including encapsulation, inheritance, and polymorphism will be explored. Other topics include string manipulation, Collections, Array Lists, Exception Handling, Packages and creating a graphical user interface (GUI). PREREQUISITE: 10152115 Program Logic.

10152107
Java Programming - Advanced - Credits: 3
This course will provide an in-depth look at how to apply some of the more advanced features of the Java language. It is intended for students with a solid grasp of Java language basics and object-oriented concepts. Students will create GUI applications that connect to a database. The Model View Controller framework will be explored. Topics covered include Swing, utility classes, threads, and database access. Students will develop a business application that interacts with a database. PREREQUISITE: 10152106 Java Programming - Beginning.

10152108
Enterprise Java Programming - Credits: 3
The third class of the Java sequence explores advanced Java topics within the Java EE application framework. Topics include JSPs, Servlets, session management, Expression Language, JSTL, JavaBeans, asynchronous processing, custom tags and tag files. Students will create applications utilizing a Model Viewer Controller framework. PREREQUISITE: 10152107 Java Programming - Advanced.

10152110
Programming in SQL - Credits: 3
This course covers database design techniques, database manipulation techniques, and database integrity techniques using the SQL programming language. Students will also learn management tasks and security features implemented by server administrators. PREREQUISITE: 10152100 Database Concepts and SQL.

10152111
Systems Analysis and Design - Credits: 3
This course covers the introduction to principles and techniques for analyzing and designing information systems. Included will be the definition of the problem, fact gathering, evaluation of alternative solutions, designing of input and output files, report design, and managing a system project. The Unified Modeling Language (UML) is included to provide a visual model of an information system. The use of a CASE tool is integrated throughout the course to enhance the design experience. PREREQUISITE: 10152107 Java Programming - Advanced.

10152112
Server-Side Web Development - Credits: 3
This course will familiarize the student with techniques to create server-side scripts for building fully functional Web applications. Topics covered include the use of scripting objects, database interaction, and session management. Students will learn the fundamental programming concepts to build an e-commerce solution such as an online shopping cart application. PREREQUISITES: 10152100 Database Concepts and SQL and 10152101 Web Design and Development.

10152113
Applications Development - Credits: 3
The purpose of this capstone course is to provide the student with experience developing applications in a business environment. Students will apply design, programming, and analysis techniques to develop a fully functional software application. The project will progress through all the stages of the development process including planning, analysis, design, construction, testing, and deployment. PREREQUISITES: 10152118 Enterprise Programming in .NET, 10152107 Java Programming - Advanced, and COREQUISITE: 10152111 Systems Analysis and Design.

10152115
Beginning .NET Programming - Credits: 3
Introduction to the concepts and techniques of programming in the .NET environment using C#. Topics covered include requirement analysis, program design, coding, and debugging. Emphasis is placed on the techniques needed to program graphical user interface applications using C# forms, events, and codes. COREQUISITE: 10152115 Program Logic.

10152116
Web Tools of the Trade - Credits: 2
In Web Tools of the Trade, students will explore ways to make use of third-party Web tools, libraries, and APIs. Besides working with Web tools, students will also explore current events and hot topics in technology. PREREQUISITE: 10152102 Advanced Web Site Development.

10152117
Advanced .NET Programming - Credits: 3
This course provides the student with an object-oriented view of the .NET development environment using C#. Topics covered include classes, array objects, encapsulation, inheritance, and error-handling routines. Windows forms will be created to present information retrieved from database using ADO.NET objects. PREREQUISITE: 10152115 Beginning .NET Programming.

10152118
Enterprise Programming in .NET - Credits: 3
This course is designed to provide students with an enterprise view of the .NET development environment. The course will use the Visual Studio development environment to create fully functional Web sites using ASP.NET and C#. Topics include; securing Web sites, techniques to safely update data, centralizing site design, and methods to enhance application performance. PREREQUISITE: 10152117 Advanced .NET Programming.

10152119
Development in Emerging Technologies - Credits: 3
This course focuses on the development of applications for mobile devices. Students will learn best practices for programming in this emerging environment. At the end of the course, students will be proficient in developing mobile applications and using device emulators for coding and testing. PREREQUISITES: 10152102 Advanced Web Site Development, 10152115 Beginning .NET Programming, and COREQUISITE: 10152107 Java Programming - Advanced.

10152135
Program Logic - Credits: 3
In Program Logic, students will learn to develop clear consistent strategies to solve problems. The student will analyze problems, review requirements, and then create solutions. Students will learn to focus on understanding the logic behind each solution. Students will also learn how to properly use data types, decision and repetition structures, functions, modules, arrays, as well as, how to use variables and understand variable scope. Although this course emphasizes programming logic, students will develop working programs.

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Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>7</td>
<td>14%</td>
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<table>
<thead>
<tr>
<th>Number of responses</th>
<th>Percent employed</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
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<tbody>
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</thead>
<tbody>
<tr>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

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800.243.9482  witic.edu  2015-2016  115
Program Overview
The one-year Machine Tool Operation program emphasizes core machining skills and will prepare the student for a career in the machining industry. Students will learn the machining skills required to set up and operate manual and computer-controlled machines. Students will learn to use hand tools, precision measuring instruments, read prints, and create parts using a computer-aided manufacturing system. Skilled machine tool operators work in job shops, production, and maintenance shops.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Machine Tool Operation students should be able to:
• Think mechanically
• Work well under pressure
• Enjoy working with their hands
• Work at repetitive tasks
• Give attention to detail
• Assume responsibility
• Organize their work
• Work with a variety of skilled and non-skilled workers and professionals
• Take constructive criticism
• Work well under supervision

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Communications
• Mechanical Design
• Geometry/Algebra I and II/Trigonometry
• General Metals
• Machine Shop
• Principles of Technology
• Keyboarding
• Print Reading/Computer-Aided Drafting

Employers will expect one-year Machine Tool Operation graduates to be able to:
• Apply basic safety practices in the machine shop
• Interpret industrial/engineering drawings
• Apply precision measuring methods to part inspection
• Perform basic machine tool equipment set-up and operation
• Perform programming, set up, and operation of CNC machine tools

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Graduates from the one-year Machine Tool Operation program will be ready to start their careers as:
• Machine Operators
• Machinist Apprentices
• Machine Setup Operators

With further training, graduates may advance to:
• All-round Machinist
• Tool and Die Maker
• Machine Programming
• Machine Shop Operator
• Tool-machine Setup Operator

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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</tr>
<tr>
<td>31420303</td>
<td>Machine Tool Operation 3</td>
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</tr>
<tr>
<td>31420304</td>
<td>Machine Tool Operation 4 (WBL)</td>
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</tr>
<tr>
<td>31420322</td>
<td>Print Reading for Machine Trades 1</td>
<td>1</td>
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<tr>
<td>31420323</td>
<td>Print Reading for Machine Trades 2</td>
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<tr>
<td>31420345</td>
<td>Machine Tool Theory 1</td>
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<td>32420361</td>
<td>Introduction to CAD/CAM</td>
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<td>32801361</td>
<td>Applied Communications 1</td>
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<tr>
<td>32801363</td>
<td>Applied Communications 2</td>
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<tr>
<td>32804355</td>
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<tr>
<td>32804364</td>
<td>Math 364</td>
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</tr>
<tr>
<td>32809371</td>
<td>Applied Human Relations</td>
<td>2</td>
</tr>
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</table>

Program Outcomes
Financial Aid Eligible

Campus: Ashland

PROGRAM REQUIREMENTS 36

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

See pages 41-43 for course descriptions.
Gainful employment information is available at this link: http://www.witc.edu/pgmpages/machop/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

### Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Number employed</th>
<th>% employed</th>
<th>Range of yearly salary</th>
<th>Average yearly Salary</th>
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</thead>
<tbody>
<tr>
<td>Number of graduates</td>
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<td>7</td>
<td>78%</td>
<td>$34,879-$36,397</td>
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<tr>
<td>Number of responses</td>
<td>13</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Number available for employment</td>
<td>9</td>
<td>6</td>
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<td></td>
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</tr>
</tbody>
</table>

**Programs and Course Descriptions**

(See pages 41-43 for General Studies course descriptions)

**31420301  Machine Tool Operation 1 - Credits: 5**
Students will be assigned introductory, specifically designed projects that will be machined using the engine lathe, milling machine, drill press, and various saws. Students will be in a job-like setting. The capability and safe use of machine tools will be stressed.

**31420302  Machine Tool Operation 2 - Credits: 4**
Students will be assigned basic, specifically designed projects that will be machined using the engine lathe, milling machine, drill press, and various saws. Students will also machine parts on conversationally-programmed CNC lathes and vertical mills. Students will be in a job-like setting. The capability and safe use of machine tools will be stressed. COREQUISITE: 31420301 Machine Tool Operation 1.

**31420303  Machine Tool Operation 3 - Credits: 5**
A continuation of Machine Tool Operation featuring advanced operations on milling machines, grinders, lathes, and drill presses. CNC operation and programming on a vertical mill and a turning center are introduced. Also included are machine maintenance and precision measurement. The capability and safe use of machine tools will be stressed. PREREQUISITE: 31420302 Machine Tool Operation 2.

**31420304  Machine Tool Operation 4 - Credits: 4**
Machine Tool Operation 4 features advanced operations on milling machines, grinders, lathes, and drill presses. CNC programming and operation on vertical mills and turning centers will be emphasized. The capability and safe use of machine tools will be stressed. COREQUISITE: 31420303 Machine Tool Operation 3.

**31420322  Print Reading for Machine Trades 1 - Credits: 1**
This course will cover the basic principles of print reading. The emphasis will be on object representation, geometric dimensioning and tolerances (GDT), threads, and section views. Strongly recommend a basic understanding of mathematics concepts.

**31420323  Print Reading for Machine Trades 2 - Credits: 1**
This advanced print reading course will cover drawing changes, auxiliary and section views, detail and assembly prints, machined features, gears, and CNC documents. PREREQUISITE: 31420322 Print Reading for Machine Trades 1.

**31420345  Machine Tool Theory 1 - Credits: 2**
This course will cover the basic principles of machine tool theory. The course will emphasize safety in the machine shop, measurement, metal cutting technology, basic lathe and mill operations, drilling machines, saws, layout procedures, and an introduction to CNC machining. The capability and safe use of machine tools will be stressed.

**31420347  Machine Tool Theory 2 - Credits: 2**
This course will cover principles of machine tool theory emphasizing conventional and CNC machining operations. There will be in-depth training on the engine lathe, milling machines, CNC programming and operation, grinding machines, and metallurgy. The capability and safe use of machine tools will be stressed. PREREQUISITE: 31420345 Machine Tool Theory 1.

**32420361  Introduction to CAD/CAM - Credits: 1**
This course will introduce students to computer-aided drafting (CAD) and computer-aided machining (CAM). Students will use appropriate CAD software to prepare mechanical drawings. Students will be introduced to CAD/CAM equipment.
Program Overview
The two-year Machine Tool Technician program will prepare the student to operate and set up machine tools for the machining industry. The student will learn general machining skills based on the skills and knowledge identified by the Metalworking Industry Skill Standards Board. The student will learn production planning and quality control and how to use metallurgical equipment, perform precision measuring, use an engineer's handbook, and interpret prints. Computer-aided machining and programming techniques are emphasized.

Admission Requirements
Students in this program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Machine Tool Technician students should be able to:
- Solve math problems
- Visualize shapes and forms
- Problem solve
- Be detail oriented and take criticism
- Enjoy doing mechanical work
- Lift 25 pounds
- Assume responsibility
- Follow procedures carefully
- Manage their time
- Work well with others and under supervision

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Communications
- Mechanical Design
- General Metals/Welding
- Machine Shop
- Print Reading
- Principles of Technology
- Algebra
- Trigonometry
- Geometry
- Keyboarding
- Economics
- Physics

Program Outcomes
Employers will expect the Machine Tool Technician graduate to be able to:
- Apply basic safety practices in the machine shop
- Interpret industrial/engineering drawings
- Apply precision measuring methods to part inspection
- Perform basic machine tool equipment set up and operation
- Perform programming, set up, and operation of CNC machine tools
- Perform advanced CNC machining operations

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Graduates from the two-year Machine Tool Technician program will be ready to start their careers as:
- Machine Tool Operators
- Apprentice Machinists
- Machine Setup Persons
- Tool Room Machinists
- CNC Machinists
- Maintenance Machinists
- CNC Programmers

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>CNC Turning Operations ▲</td>
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<td>32420320</td>
<td>CAD/CAM Applications ▲</td>
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<td>Semi-Precision Machining</td>
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<td>32420351</td>
<td>Print Reading for Machine Trades</td>
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<tr>
<td>32420353</td>
<td>Production Planning and Quality ▲</td>
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<td>Production Problems ▲</td>
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<td>32420366</td>
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<td>32420367</td>
<td>Turning Applications ▲</td>
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<tr>
<td>32420399</td>
<td>Precision Grinding ▲</td>
<td>3</td>
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</table>

Program Requirements 68

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
* See pages 41-43 for course descriptions.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

32420300
Metrology - Credits: 2
This course is for the beginner. The student will learn how to use semi-precision measuring tools such as steel rules, screw thread gauges, and also learn how to use precision measuring instruments such as assorted micrometer types, go/no go plug gauges, go/no go thread gauges, assorted calipers, etc. To do this, the student will start out by going over the number systems (decimal and fraction). The student will learn how to read and write numbers in both systems. This is a very basic course, but it represents the foundation that machining rests on measurement.

32420312
CNC Programming - Turning - Credits: 2
Students will learn about program structure (startup, work, shutdown), and basic G-codes including variations caused by machine type and programmer style. They will write simple programs and edit prewritten programs in order to hone their skill. The goal will be to start out simple and move to programs that are both efficient and effective. PREREQUISITE: 32420365 CNC Fundamentals or consent of instructor.

32420331
CNC Turning Operations - Credits: 2
This course will introduce students to the use of a computerized machine. The student will learn about general grinding operations such as threads and tapers. This course is a prerequisite for the CNC courses. Students will reinforce and build upon what they have learned in the basic turning course so that when they get to CNC machines they can focus on the unique aspects of the computerized machine.

32420351
Print Reading for Machine Trades - Credits: 2
This course will cover the basic principles of print reading. Emphasis will be on interpreting symbols and principles of single- and multiple-view working drawings. Topics will include print reading procedures, sketching, drawing changes, machine specifications, and the reading of prints in specialized areas including ANSI, ISO standards, and geometric dimensioning and tolerancing.

32420353
Production Planning and Quality - Credits: 2
This course is designed to develop the concepts of production planning for machined parts. The student will develop process plans for parts that will be machined in the Job Shop Machining class. The student will also develop a portfolio to document processes and quality assurance methods. PREREQUISITES: 32420366 Milling Applications, and 32420367 Turning Applications, and 32420399 Precision Gridding.

32420360
Production Problems - Credits: 2
This course will cover the introduction to the milling machines. Emphasis is on knowing the machine parts, their function, and performing simple lathe operations. Introductory subjects such as selecting the correct tool and cutter for the job, cutting speeds and feeds, and tooling for holding the work will be taught. Students will learn the basics of metal cutting on these machines so that when they get to CNC machines they can focus on the unique aspects of the computerized machine.

32420362
Milling Fundamentals - Credits: 2
This course will cover the introduction to the milling machines. Emphasis is on knowing the machine parts, their function, and performing simple lathe operations. Introductory subjects such as selecting the correct tool and cutter for the job, cutting speeds and feeds, and tooling for holding the work will be taught. Students will learn the basics of metal cutting on these machines so that when they get to CNC machines they can focus on the unique aspects of the computerized machine.

32420363
Turning Fundamentals - Credits: 3
This course is designed to teach the beginner how to use the manual engine lathes. Students will learn about lathes, associated processes, lathe tools, and related safety/maintenance issues. This course is prerequisite for advanced manual lathe courses and CNC courses. Students will learn the basics of metal cutting on these machines so that when they get to CNC machines they can focus on the unique aspects of the computerized machine.

32420365
CNC Fundamentals - Credits: 2
This course introduces the student to the development and editing of Computer numerical control (CNC) programs. The basic elements of CNC machine setup and operation are covered for the production of acceptable parts. Safety concerns are also addressed. Strongly recommend a basic understanding of algebra, geometry, and trigonometry.

32420366
Milling Applications - Credits: 3
This course is designed to teach the student to use the manual milling machine to perform more difficult milling operations. Students will learn about new tools and processes. This course is prerequisite for the CNC courses. Students will reinforce and build upon what they’ve learned in the basic milling class so that when they get to CNC machines they can focus on the unique aspects of the computerized machine.

32420367
Turning Applications - Credits: 3
This course is designed to teach the student how to use the manual engine lathe for more advanced machining operations such as threading and tapers. Students will expand their knowledge of turning. They will learn about new tools, procedures, and about the terminology that is associated with threads and tapers. This course is a prerequisite for the CNC courses. Students will reinforce and build upon what they have learned in the basic turning course so that when they get to CNC machines they can focus on the unique aspects of the computerized machine. PREREQUISITE: 32420363 Turning Fundamentals.

32420373
Production Machining 1 - Credits: 5
This course is designed to develop the advanced skills and knowledge needed for entry into a production machining environment. The student machinist will use knowledge and skills developed in previous study to solve machining problems. Emphasis will be placed on the efficient manufacture of parts in higher quantities. This course will also serve as a work-based learning experience. PREREQUISITES: 32420366 Milling Applications, 32420367 Turning Applications, and 32420399 Precision Gridding.

32420374
Production Machining 2 (WBL) - Credits: 5
This course will continue to develop the advanced skills and knowledge needed for entry into a production machining environment. The student machinist will use knowledge and skills developed in previous study to solve machining problems. Emphasis will be placed on the efficient manufacture of parts in higher quantities. This course will also serve as a work-based learning experience. PREREQUISITES: 32420366 Milling Applications, 32420367 Turning Applications, and 32420399 Precision Gridding.

32420375
Job Shop Machining 1 - Credits: 4
This course is designed to develop the skills and knowledge needed in a job shop environment. The student machinist will use knowledge and skills developed in previous study to solve typical job shop problems. PREREQUISITES: 32420366 Milling Applications, 32420367 Turning Applications, and 32420399 Precision Gridding.

32420376
Job Shop Machining 2 - Credits: 4
This course is designed to develop the advanced skills and knowledge needed in a job shop environment. The student machinist will use knowledge and skills developed in previous study to solve typical job shop problems. This course builds on Job Shop Machining 1 and provides additional skills in cutting tool selection and material characteristics. PREREQUISITES: 32420366 Milling Applications, 32420367 Turning Applications, and 32420399 Precision Gridding.

32420399
Precision Gridding - Credits: 3
This course is designed to teach the student to use grinding machines. The student will learn about general grinding machine operations. They will learn how to set up surface grinding operations and perform basic surface grinding operations. The outcome achieved in this course is a familiarity with the grinding processes that have broad application in industry. PREREQUISITES: 32420362 Milling Fundamentals and 32420363 Turning Fundamentals.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/machtool/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Program</th>
<th>Average yearly salary</th>
<th>Range of yearly salary</th>
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<tbody>
<tr>
<td>Metrology - Credits: 2</td>
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<td>$25,582-$45,299</td>
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<td>Production Problems - Credits: 2</td>
<td>100%</td>
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<td>% employed in WITC district 50%</td>
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<tr>
<td>Production Problems - Credits: 2</td>
<td>5</td>
<td>Average yearly salary  $36,352</td>
</tr>
</tbody>
</table>

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Career vision
Program Overview
The Machine Tooling Technics program emphasizes mold and toolmaking for the plastic injection molding industry including using computerized machining equipment. Basic machining skills are covered along with math and print reading. The student will gain skills in precision measurement, metallurgical processes, in-depth programming, operation of CNC milling machines and lathes, shop and theory courses in toolmaking, and CAD/CAM operation.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Machine Tooling Technics two-year technical diploma includes two embedded technical diploma options as documented below:
- 31-420-6 Entry Level Machining
- 30-420-3 Multi Axis CNC Milling

Admission Requirements
Students in this program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Machine Tooling Technics students should be able to:
- Solve math problems
- Visualize shapes and forms
- Concentrate
- Be detail oriented and take criticism
- Enjoy doing mechanical work
- Lift 75 pounds
- Assume responsibility
- Follow procedures carefully
- Manage their time
- Work well with others and under supervision

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Communications
- General Metals/Welding/Woodworking
- Machine Shop
- Print Reading
- Algebra/Trigonometry
- Geometry
- Keyboarding

Program Outcomes
Employers will expect the Machine Tooling Technics graduate to be able to:
- Apply basic safety practices in the machine shop
- Interpret industrial/engineering drawings
- Apply precision measuring methods to part inspection
- Perform basic machine tool equipment set up and operation
- Perform programming, set up, and operation of CNC machine tools
- Perform advanced tool, die, and mold operations

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Typical careers available after graduation include:
- Tool and Die Mold Maker
- Machinist Apprentice
- Machine Operator
- CNC Machinist
- Setup Person
- Programmer
- Maintenance Machinist

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<td>32420306</td>
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<td>32420307</td>
<td>Machine Shop Theory 2 ▲</td>
<td>2</td>
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<tr>
<td>32420308</td>
<td>Applied Machine Tooling 1</td>
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</tr>
<tr>
<td>32420309</td>
<td>Applied Machine Tooling 2 ▲</td>
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</tr>
<tr>
<td>32420311</td>
<td>Materials for Machine Tooling Technics 1</td>
<td>1</td>
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<tr>
<td>32420321</td>
<td>Print Reading for Machine Trades</td>
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</tr>
<tr>
<td>32420334</td>
<td>CAD/CAM Demo ▲</td>
<td>2</td>
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<tr>
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<td>Applied Machine Tooling 3 ▲</td>
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<td>32420338</td>
<td>CAD Basics ▲</td>
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<tr>
<td>32420339</td>
<td>Mastercam ▲</td>
<td>2</td>
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<tr>
<td>32420357</td>
<td>Advanced Machining Concepts</td>
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</tr>
<tr>
<td>32420370</td>
<td>Machine Tooling Technics 1 ▲</td>
<td>4</td>
</tr>
<tr>
<td>32420371</td>
<td>Machine Tooling Technics 2 ▲</td>
<td>4</td>
</tr>
<tr>
<td>32420372</td>
<td>Machine Tooling Technics 3 (WBL) ▲</td>
<td>5</td>
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<tr>
<td>32420391</td>
<td>Toolmaking Theory</td>
<td>2</td>
</tr>
</tbody>
</table>

PROGRAM REQUIREMENTS 57

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
★ See pages 41-43 for course descriptions.
**Programs and Course Descriptions**

**Course Descriptions**

(See pages 41-43 for General Studies course descriptions)

32420306  
**Machine Shop Theory 1 - Credits: 2**  
This course provides the student with knowledge in the areas of safety, speed and feed calculations, layout equipment, cutting tools, and machine tool equipment. Also introduces and studies the more technical shop operations of threading, tapping, boring, carbide tooling, and principles of metal cutting. Principles of metal cutting include the machinability of metals and how it relates to chip formation. Students will study the makeup of carbide tooling, how carbide is affected by operating conditions, and various carbide characteristics, sizes, shapes, grades, and applications as identified by the American Standards Association. The content supports activities in Applied Machine Tooling 1 and 2.

32420307  
**Machine Shop Theory 2 - Credits: 2**  
This course is a continuation of Machine Shop Theory 1. This lecture-based course will use lecture, group work, and individual projects to introduce you to surface grinding, CNC theory, application, programming, and inspection procedures. **PREREQUISITE: 32420306 Machine Shop Theory 1.**

32420308  
**Applied Machine Tooling 1 - Credits: 4**  
This lab-based course will provide instruction in shop safety, measuring, print reading, and basic setup and operation of saws, mills, and lathes.

32420309  
**Applied Machine Tooling 2 - Credits: 4**  
This lab-based course will introduce the student to threading, boring, precision and taper turning, and inspection procedures using optical comparators and coordinate measuring machines. **COREQUISITES: 32420308 Applied Machine Tooling 1 and 32420231 Print Reading for Machine Trades.**

32420311  
**Materials for Machine Tooling Technics - Credits: 1**  
During this course students will learn the basic principles of metalurgy related to mechanical, physical, and chemical properties of materials used for Machine Tooling Technics. Materials covered will be steel, cast iron, aluminum, copper, and plastics. Lab activities will include hardening, tempering, and hardness testing. This course will give the student the ability to make material selections and perform problem solving for specific applications that they will encounter in industry.

32420321  
**Print Reading for Machine Trades - Credits: 1**  
This course will cover the basic principles of print reading. The emphasis is on interpreting standard lines and symbols in single- and multiple-view working drawings. Topics include print reading procedures, drawing changes, machining specifications, and the reading of prints in specialized areas including ANSI and ISO standards. Strongly recommend a basic understanding of mathematics concepts.

32420334  
**CAD/CAM Demo - Credits: 2**  
This course builds on CAD Basics and Mastercam with additional CAD drawing concepts and CAM projects. Students will utilize SolidWorks and Mastercam applications to complete their learning objectives. Students will gain competency in file management by saving, converting, and working with different file types. Students will learn geometry in each application and convert files between CAD and CAM. Students will apply various tool paths to the designs they have created. Surface creation and machining exercises will be demonstrated by each individual. Each learner will design and detail a plastic part including a plotted final drawing to the correct scale. **PREREQUISITES: 32420321 Print Reading for Machine Trades and 32420339 Mastercam.**

32420336  
**Applied Machine Tooling 3 - Credits: 4**  
Students will further build their skills in machining and develop confidence in their ability to produce good workpieces. Students will continue to use the tools and procedures introduced in Machine Shop Theory 1. Students will also be introduced to surface grinding, coordinate measuring machine inspection, optical comparator, and CNC programming, setup, and machining. **PREREQUISITES: 32420306 Machine Shop Theory 1 and 32420309 Applied Machine Tooling 2.**

32420337  
**Applied Machine Tooling 4 - Credits: 4**  
This lab-based course further develops students’ skills in CNC vertical mill and CNC lathe setup, operation, and programming. Students will set up increasingly complex projects on both the CNC lathe and CNC vertical mill. Students will learn how to troubleshoot CNC setups, programs, and tooling variations. Students will also troubleshoot and run their own projects created in Machine Shop Theory 2 and Mastercam. Finally, students will complete surface grinding projects. **COREQUISITES: 32420307 Machine Shop Theory 2 and 32420336 Applied Machine Tooling 3.**

32420338  
**CNC Basics - Credits: 1**  
This course offers instruction on individual computer workstations in a computer lab. This computer-aided drafting (CAD) instruction uses SolidWorks software that is capable of creating 3D drawings. In this course you will spend a majority of the time creating 3D models and exploring the concepts of working in 3D space. Students will create complete and fully dimensioned 3-view part prints ready to be transferred to paper. **COREQUISITES: 32420321 Print Reading for Machine Trades.**

32420339  
**Mastercam - Credits: 2**  
This introductory course prepares students for using Computer-Aided Machining (CAM) software to create CNC machining programs. This CAM instruction utilizes Mastercam software that is capable of creating 2D and 3D wireframes, which toolpaths to machine part features can be generated. Students will complete a variety of exercises before working on 2D machining projects. Students will create complete CNC process projects including drawings, toolpaths, CNC code, and all setup sheets and diagrams. These projects will be shop ready for machining. **PREREQUISITE: 32420338 CAD Basics.**

32420357  
**Advanced Machining Concepts - Credits: 1**  
In this course students will learn about advanced CNC programming and setup techniques, electrical discharge machining, and advanced inspection techniques.

32420370  
**Machine Tooling Technics 1 - Credits: 4**  
In this course learners will learn to set up, program, and run CNC mills, lathes, and EDM equipment. Learners will continue to build competencies in surface grinding, tool and cutter grinding, and manual milling. Learners will create, program, and run CNC programs with helical interpolation, subroutines, cutter compensation, and multiple fixture offsets. Learners will practice final grinding and fitting operations. **COREQUISITE: 32420370 Machine Tooling Technics 1.**

32420372  
**Machine Tooling Technics 3 (WBL) - Credits: 5**  
In this course, the learner will build and polish one plastic injection mold. Learners will do several projects to gain competency, which will include electrical discharge machining, tool and cutter grinding, and a project that requires problem solving set-up problems. A work-based learning component will be completed by each individual; you will contact a manufacturer to get a job that you will bring back to the campus lab and complete the work as directed by the manufacturer and your instructor. Learners will gain additional skills in the operation of basic and advanced machine tools in the areas of milling, drilling, boring, reaming, grinding, CNC milling, and EDMing operations. **PREREQUISITES: 32420321 Print Reading for Machine Trades, 32420371 Machine Tooling Technics 2, and COREQUISITE: 32420391 Toolmaking Theory.**

32420391  
**Toolmaking Theory - Credits: 2**  
This course provides the classroom instruction that supports shop activities in semester four of the Machine Tooling Technics program. It is a lecture course that addresses the technology of various types of plastic injection mold dies. Major emphasis will be placed on the theory, design, and building of plastic injection molds. Small group activities will be utilized to enhance student learning.

Gainful employment information is available at this link: [http://www.witc.edu/pgmpages/machtooltech/career.htm](http://www.witc.edu/pgmpages/machtooltech/career.htm). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

### Graduate Employment Information

(WITC Graduate Survey Responses 2012-2013; for most recent data, go to [witc.edu](http://www.witc.edu))

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<th>Number of graduates</th>
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<tbody>
<tr>
<td>Number of responses</td>
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<tr>
<td>Number available for employment</td>
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</tr>
<tr>
<td>Number employed</td>
<td>12</td>
</tr>
<tr>
<td>Percent employed</td>
<td>100%</td>
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<tr>
<td>Employed in related field</td>
<td>12</td>
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<tr>
<td>% employed in WITC district</td>
<td>75%</td>
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<tr>
<td>Range of yearly salary</td>
<td>$33,277-$51,376</td>
</tr>
<tr>
<td>Average yearly salary</td>
<td>$38,393</td>
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</tbody>
</table>

**career vision**

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witc.edu  
2015-2016  
121
**Program Overview**

The student will be prepared for a career in the marina and marine service and repair business. This three-semester program includes instruction in marine engine service, operation, diagnosis, repair, equipment installation, maintenance, and rigging new boats. The student will work on two- and four-cycle gasoline engines, drive systems, transmissions, fiberglass boat hulls, electrical systems, and consumer-supplied products.

**Special Features**

- Unique in the state of Wisconsin
- Service school options
- 6,000-square-foot up-to-date lab
- EFI and direct injection engines
- American Boat and Yacht Council (ABYC)
- Association of Marine Technicians (AMTECH)
- Off-site training at local marinas and dealerships
- Actual service experience through community-supplied projects
- Students may enter the program either fall or spring semester

**Admission Requirements**

Students in this program must:

- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Review and sign the Functional Ability Statement of Understanding
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

**Student Profile**

Marine Repair Technician students should be able to:

- Demonstrate mechanical aptitude
- Demonstrate physical agility through fine and gross motor skills
- Work in a service environment
- Differentiate between colors

**Preparation for Admission**

Students should strive to reach a comfort level in the following courses or skills:

- English/Communications
- Mathematics
- Small Engine or Auto Mechanics
- Basic computer skills

**Program Outcomes**

Employers will expect the Marine Repair Technician graduate to be able to:

- Service, operate, diagnose, and repair outboard motors
- Service, operate, diagnose, and repair sterndrive and inboard engines
- Service and repair marine transmissions and sterndrive units
- Communicate technical information and data orally, in writing, mathematically, and visually
- Demonstrate safe and proper equipment and tool use
- Act responsibly in the workplace
- Demonstrate good customer service skills
- Use service materials
- Repair minor damage to fiberglass boat hulls

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

**Career Outlook**

Graduates of the Marine Repair Technician program find great demand for their skills. Typical positions available after graduation include:

- Inboard Engine Technician
- Outboard Motor Technician
- Boat Rigging Technician
- Electronic Equipment Installation Technician
- Marine Sales Representative
- Marine Service Technician
- Marine Service Supervisor

**Curriculum**

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>31461314</td>
<td>Outboard Motors</td>
<td>5</td>
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<tr>
<td>31461315</td>
<td>Marine Electricity/Electronics</td>
<td>2</td>
</tr>
<tr>
<td>31461316</td>
<td>Marine Welding</td>
<td>2</td>
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<tr>
<td>31461317</td>
<td>Marine Engine Systems</td>
<td>5</td>
</tr>
<tr>
<td>31461318</td>
<td>Outboard Gear Cases/Rigging</td>
<td>5</td>
</tr>
<tr>
<td>31461319</td>
<td>Sterndrive Systems</td>
<td>5</td>
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<tr>
<td>31461321</td>
<td>Introduction to Can-Bus Systems</td>
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<tr>
<td>31461322</td>
<td>Inboard Engines</td>
<td>5</td>
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<tr>
<td>31461323</td>
<td>Inboard Transmission Systems</td>
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<td>31461325</td>
<td>Marine Diesel</td>
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<tr>
<td>31461326</td>
<td>Marine Engine Computer Control Systems</td>
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<td>Boating Safety</td>
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<td>32804373</td>
<td>Math 373</td>
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</table>

**FINANCIAL AID ELIGIBLE**

**Campus:** Ashland

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122 800.243.9482  witc.edu  2015-2016
Outboard Motors - Credits: 5
This course provides an introduction to the marine industry. Students will learn about fuel, ignition, manual and electric starting systems, and charging systems. Small gearcase operation and repair are also covered.

31461315
Marine Electricity/Electronics - Credits: 2
This course is designed to teach the theory of DC electricity. Students will learn how to read electrical schematics and build and repair electrical circuits found in typical boats. Upon completion, the student will be able to diagnose, troubleshoot, and correctly use test equipment to repair boat and engine electrical problems. Emphasis is placed on safety, tools, proper use of test equipment, specifications, and schematics. Practical applications will include real world shop experiences that will reinforce learned electrical concepts. COREQUISITE: 31461314 Outboard Motors.

31461316
Marine Welding - Credits: 2
Marine Welding is intended to provide the technician with a sound basic background in the marine welding field. Upon completion, the student will be able to select the proper materials for repairing or fabricating welding projects, choose the correct welding method for a specific application, and complete a welding project safely. Tig welding for repair of aluminum fabrication items; Mig, Arc, and Oxy acetylene principles are covered in this course. COREQUISITE: 31461314 Outboard Motors.

31461317
Marine Engine Systems - Credits: 5
This course will provide students with advanced theory and hands-on experience to troubleshoot and repair marine engine fuel, oiling, cooling, starting, charging, and ignition systems. Also, students will learn about carburetor/ignition system synchronization and linkage adjustments, and storage procedures. Students will complete complex troubleshooting projects on running marine engines. PREREQUISITES: 31461314 Outboard Motors.

31461318
Outboard Gear Cases/Rigging - Credits: 5
Outboard motor gearcases, hydraulic trim and tilt, and steering systems are covered in this course. Students will learn how to diagnose failures, rebuild, and shim a variety of gearcases. Different types and brands of steering systems are covered. Students will learn how to repair, install, and replace steering systems. Trim and tilt units will be tested and repaired. This will give students a good working knowledge of hydraulics and troubleshooting procedures for various brands of trim and tilt systems. Installation of outboard motors on boat transoms and mechanical, fuel, oil, and electrical connections will be covered. PREREQUISITE: 31461314 Outboard Motors.

31461319
Sterndrive Systems - Credits: 5
Sterndrive transmissions, sterndrive transom plates, sterndrive trim and tilt, and power steering are covered in this course. Students will learn how to diagnose failures, rebuild, and shim a variety of gearcases. Different types of transom plates will be covered and will include shift, bellows, gimble ring, and bell housing repairs. Hydraulic lift systems will be studied and the student will learn how to repair and diagnose failures of cylinders, pumps, motors, and electrical systems related to trim systems. Marine power steering systems include the study of control valves, power steering pumps, and boat steering systems. PREREQUISITE: 31461314 Outboard Motors.

31461321
Introduction to Can-Bus Systems - Credits: 2
This course will provide students with the operational theory of marine can-bus communication network systems. Students will understand how the marine engine and its accessories communicate with display systems located at the boat’s helm. Students will view different manufacturers’ systems and be able to adapt specialized connectors to NMEA standard connectors and aftermarket accessories. Students will assemble and calibrate a working can-bus system onto an engine and helm display unit and engine control assembly. PREREQUISITE: 31461314 Outboard Motors.

31461322
Inboard Engines - Credits: 5
This course will teach students the theory of how a four-stroke marine engine operates. Students will gain the skills needed to rebuild inboard four-stroke marine engines. Students will also learn the fundamentals of inboard fuel, ignition, starting, and charging systems. COREQUISITE: 31461314 Outboard Motors.

31461323
Inboard Transmission Systems - Credits: 2
Inboard straight shaft transmissions are covered in this course. Velvet Drive transmissions will be the main training project. Hurth and Paragon transmissions will be covered to a lesser degree. Related components such as engine alignment, shafts, couplers, stuffing boxes, struts, strut bearing replacement, etc., will be examined also. PREREQUISITE: 31461314 Outboard Motors.

31461325
Marine Diesel - Credits: 1
This course provides a basic working knowledge of marine diesel engines and their systems. Marine diesel theory, fuel and air delivery, and lubrication and cooling systems will be covered. Bleeding of fuel systems, adjustment of valve trains and injector pumps, and other maintenance issues will also be studied. COREQUISITE: 31461314 Outboard Motors.

31461326
Marine Engine Computer Control Systems - Credits: 4
In this course, students will understand the theory of computer-controlled fuel, ignition, oiling, and control systems used on inboard and outboard engines. Systems included are sterndrive and outboard motor EFI, and outboard direct fuel injection. Students will repair and troubleshoot these systems using a variety of computer diagnostic software. PREREQUISITE: 31461314 Outboard Motors.

31461327
Boating Safety - Credits: 1
Students will learn basic boating safety items such as securing a boat to a dock, rules of the road, emergency procedures, and boating terms. Students will also learn how to repair, maintain, and adjust boat trailers. PREREQUISITE: 31461314 Outboard Motors.

Gainful employment information is available at this link: [http://www.witc.edu/pgmpages/marinetech/career.htm](http://www.witc.edu/pgmpages/marinetech/career.htm). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

### Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
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<tbody>
<tr>
<td>6</td>
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<td>33%</td>
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### Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of responses</th>
<th>Percent employed</th>
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</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

800.243.9482
witc.edu
2015-2016
Program Overview

This Marketing program will prepare the student for a career in marketing management, selling, buying, merchandising, financing, customer relations, and entrepreneurship. This program is for the student that has creative ideas, an interest in working with people, and a desire to develop product or service promotions.

The Marketing program is based on a cohort model - a select group of learners who start together and move together through the program, following a prescribed course sequence and plan. The majority of courses will follow an eight-week structure. It is designed for busy schedules and people who can commit to completing their degree in a two-year, six-semester model.

Admission Requirements

Students in this program must:

- Complete application form and submit with fee (waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete and submit the Marketing Admissions Quiz after viewing the online information presentation
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement

Students in this program must:

- Complete the SmarterMeasure Learning Readiness Indicator assessment for online learning at: http://www.witc.edu/online/smartermeasure.htm.
- Attend a mandatory program orientation session (in person or online)

Student Profile

The following traits are essential for students who plan to enter this “people-oriented” field:

- Good verbal and written communication skills
- A positive, outgoing attitude
- Good human relations skills
- Good grooming
- Sound judgment
- Ability to accept responsibility for financial decisions

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

- Mathematics
- English/BASIC Grammar
- Keyboarding
- Basic computer skills
- Time management skills

Key to the student’s success in the Marketing program is being able to work in a competitive environment while working as a team member.

Program Outcomes

Employers will expect Marketing graduates to be able to:

- Develop strategies to anticipate and satisfy market needs
- Promote products, services, images, and/or ideas to achieve a desired outcome
- Evaluate information through the market research process to make business decisions
- Prepare selling strategies

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 for a list of collegewide outcomes and indicators.

Career Outlook

Marketing graduates are trained to have high performance standards in order to compete for entry-level positions in the industry. Typical positions available after graduation include:

- Market Analyst
- Marketing Assistant, Coordinator
- Marketing Manager
- Marketing/Sales Manager
- Marketing Services Coordinator
- Buyer
- Account Executive
- Sales Consultant
- Store Manager
- Inside and/or Outside Sales

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>1010176</td>
<td>Financial Accounting 1A</td>
<td>2</td>
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<tr>
<td>1010306</td>
<td>MS PowerPoint</td>
<td>1</td>
</tr>
<tr>
<td>1010312</td>
<td>Introduction to MS Office</td>
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<tr>
<td>1010315</td>
<td>MS Excel A</td>
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<tr>
<td>1010402</td>
<td>Marketing Principles</td>
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<td>1010404</td>
<td>Selling Principles</td>
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<tr>
<td>1010410</td>
<td>Technological Applications in Marketing</td>
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</tr>
<tr>
<td>1010412</td>
<td>Multi-Media Marketing</td>
<td>3</td>
</tr>
<tr>
<td>1010416</td>
<td>Sales Promotion/Imaging</td>
<td>3</td>
</tr>
<tr>
<td>1010418</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>1010417</td>
<td>Marketing Research</td>
<td>3</td>
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<td>1010420</td>
<td>Business and Marketing Field Study</td>
<td>2</td>
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<td>1010425</td>
<td>Retail Principles</td>
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<tr>
<td>1010428</td>
<td>Managing Human Resources or</td>
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<tr>
<td>1016100</td>
<td>Human Resource Management</td>
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<td>1010512</td>
<td>Business Law</td>
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<tr>
<td>1014501</td>
<td>Entrepreneurship</td>
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<tr>
<td>1019608</td>
<td>Customer Service</td>
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<tr>
<td>1080919</td>
<td>Written Communication</td>
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<tr>
<td>1080919</td>
<td>Technical Reporting</td>
<td>3</td>
</tr>
<tr>
<td>1080198</td>
<td>Speech or</td>
<td></td>
</tr>
<tr>
<td>1080196</td>
<td>Oral/Interpersonal Communication</td>
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</tr>
<tr>
<td>1080412</td>
<td>Math with Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>1080919</td>
<td>Economics</td>
<td>3</td>
</tr>
<tr>
<td>1080919</td>
<td>Intro to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>1080919</td>
<td>Intro to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Requirements

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
- See pages 41-43 for course descriptions.

WISCONSIN INDUSTRY-READY TECHNICAL COLLEGE

A new cohort begins in the fall of 2016. New pre-program students will not be admitted until possibly Spring 2016.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

10101176 Financial Accounting 1A - Credits: 2
This is a basic accounting course for non-accounting program students. The scope of study focuses on an introduction to business and accounting, analyzing and recording accounting transactions, performing the adjusting process, and completing the accounting cycle. Understanding is based both on theory and application.

10103106 MS PowerPoint - Credits: 1
A complete presentation graphics course that allows you to produce professional-looking presentations. It gives you the flexibility to make informal presentations using overhead transparencies, electronic presentations, formal presentations using 35mm slides, or virtual presentations. Additionally, you can create paper printouts, outlines, speaker notes, and audience handouts.

10103129 Introduction to MS Office - Credits: 1
Learners will create, edit, view, and print basic documents using word processing, spreadsheets, database, and presentation software.

10103146 MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103151 MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10104102 Marketing Principles - Credits: 3
This course focuses on the marketing process as it relates to the operation of a business enterprise. The intent is to provide students with an understanding of how the marketing function fits within the overall structure of the organization. Special attention is given to the role and significance of evaluating customer needs, pricing, distribution, and promotion of products and services.

10104104 Selling Principles - Credits: 3
This introductory course is designed to acquaint the student with the principles of selling and applications to the marketing of goods and services. Special emphasis is given to developing the selling process. Included are customer relations, sales psychology, steps to successful presentation, closing techniques, and sales motivation.

10104110 Technological Applications in Marketing - Credits: 3
This course is designed to expose the student to current and upcoming technologies impacting the field of marketing. PREREQUISITE: 10103129 Introduction to MS Office.

10104125 Multi-Media Marketing - Credits: 3
Multi-Media Marketing provides an overview of advertising and public relations efforts in today’s business environment. The course will explore what is done in advertising and the reasons why. Public relations activities and their effectiveness will be discussed using real-world examples. Additional topics of study include the social and economic aspects of promotion. PREREQUISITE: 10104102 Marketing Principles.

10104126 Sales Promotion/Imaging - Credits: 3
An overview of the field of Sales/Visual promotion designed to provide knowledge of the role sales promotion and visual merchandising play in marketing. Emphasis is placed on planning, execution, and evaluation of these promotional components. PREREQUISITE: Minimum of 12 credits of 104-level courses or equivalent business experience.

10104150 Marketing Research - Credits: 3
This course studies the established principles of management as they apply to the practice of marketing. Specifically, it considers the planning, organizing, directing, and controlling of the marketing function of a contemporary business. Applications of leadership principles, functions, and styles as they relate to marketing are also included. PREREQUISITE: Minimum of 12 credits of 104-level courses or equivalent business experience.

10104175 Market Planning - Credits: 3
This course presents marketing information management as a means of solving marketing problems and making better marketing decisions. It focuses on the systematic gathering, analysis, and distribution of information to achieve that goal. Topics include problem definitions, planning studies, use of secondary data, questionnaire design and development, instrument administration, and data collection and interpretation. The use of current technology to gather and manage marketing information is emphasized throughout the course. Students will conduct an actual research study. PREREQUISITE: 10104102 Marketing Principles.

10104180 Business and Marketing Field Study - Credits: 2
This course will allow the student to analyze what specific occupational field(s) they are best suited for. Included will be an in-depth self-analysis, simulated job application and interviews, a career research report, and work-based experience(s). PREREQUISITE: Minimum of 40 credits of program coursework must be completed prior to enrolling in this course.

10104190 Retail Principles - Credits: 3
This introductory course explores successful retail formats employed today. Major topics will include the language of retail, store formats, segmentation and target markets. The concepts of trading area analysis, daily operations, pricing, image, social media, and latest trends will be investigated. As retailers are a critical component of the economy, this course is a peek behind the scenes as to how retailers operate.

10104199 Managing Human Resources - Credits: 3
Introduces the functions of Human Resource Management in the legal and social context of today’s dynamic business environment. Topics include human resource development, employee selection, performance, appraisal, compensation, training, labor relations, affirmative action, and career management.

10116100 Human Resource Management - Credits: 3
In Human Resource Management, the learner applies the skills and tools necessary to effectively value and apply employees’ abilities and needs to organization goals. Each learner will demonstrate the application of the supervisor’s role in contemporary human resource management, impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies and procedures, training, performance management, employee counseling and development, and effective use of compensation and benefit strategies. It is recommended that the learner have experience using a PC/MAC, using the MS Windows operating systems and software suite, browsing Web pages, downloading files, using e-mail, and exchanging files prior to enrolling in this course.

10105125 Business Law - Credits: 3
Business Law provides the student with a working knowledge of the legal system, business ethics, and essentials of contracts. Students gain knowledge in logical and analytical thinking, and are encouraged to challenge legal issues and defend their point of view.

10145101 Entrepreneurship - Credits: 3
This course is designed to develop the planning, organizing, financing, and management functions needed to start a small business. Included are research methods and identification of the resources to create, develop, and implement solutions to problems. Students will also develop appropriate strategies to initiate or maintain a small business.

10196108 Customer Service - Credits: 1
This course examines customer service as it relates to organizational quality. It addresses service models for internal and external customers, systems and strategies applied to customer service, and tools and techniques for gathering customer feedback and handling complaints.

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Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
<th>Average yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>5</td>
<td>80%</td>
<td>$33,000-$45,000</td>
<td>$40,082</td>
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</tbody>
</table>

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Percent employed 100%

800.243.9482 witc.edu 2015-2016
Medical Administrative Specialist
10-106-4 Associate Degree

Program Overview
This associate degree program will prepare the student for a career in a hospital, clinic, HMO, private practice, insurance and billing company, nursing home, educational institution, or a pharmaceutical company. In addition to occupational-related classroom activities, the student will have the opportunity to gain on-the-job experience through a required externship.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Medical Administrative Specialist two-year associate degree includes an embedded technical diploma option as documented below:

31-106-2 Medical Office Specialist (page 132)

Admission Requirements
Students in this program must:

• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Medical Administrative Specialist students should be able to:

• Follow instructions quickly and accurately under pressure
• Express ideas orally and in writing
• Keep records and prepare reports
• Be outgoing and tactful when dealing with patients

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:

• Keyboarding
• Computer Applications
• English/Grammar
• Accounting

Key to the student's success in this program is attentiveness to detail and effective human relations skills.

Program Outcomes
Employers will expect Medical Administrative Specialist graduates to be able to:

• Perform medical administrative procedures including registration, reception, scheduling, and other general office management tasks
• Efficiently and accurately use computer application software and medical terminology to prepare, transcribe, and maintain medical documents
• Communicate professionally, maintaining confidentiality and high ethical standards
• Manage and maintain charts and financial records
• Prepare and process insurance claims using procedural and diagnostic coding

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Medical administrative specialist is one of the fastest growing occupations in the healthcare industry. They are in demand because of their knowledge of medical transcription, coding, and insurance. The typical positions available after graduation include:

• Medical Administrative Specialist
• Medical Secretary
• Medical Receptionist
• Hospital Admissions Representative
• Medical Transcriptionist
• Insurance Specialist
• Patient Account Representative
• Clinic Coder
• Health Unit Coordinator (HUC)

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<td>10101176</td>
<td>Financial Accounting 1A</td>
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<tr>
<td>10103125</td>
<td>MS Outlook</td>
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</tr>
<tr>
<td>10103146</td>
<td>MS Word A</td>
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<tr>
<td>10103147</td>
<td>MS Word B</td>
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<tr>
<td>10103151</td>
<td>MS Excel A</td>
<td>1</td>
</tr>
<tr>
<td>10105115</td>
<td>Professional Profile ▲</td>
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</tr>
<tr>
<td>10105160</td>
<td>Medical Externship ▲</td>
<td>1</td>
</tr>
<tr>
<td>10106110</td>
<td>Document Formatting</td>
<td>2</td>
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<tr>
<td>10106130</td>
<td>Medical Terminology 1</td>
<td>3</td>
</tr>
<tr>
<td>10106131</td>
<td>Medical Terminology 2 ▲</td>
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</tr>
<tr>
<td>10106132</td>
<td>Electronic Health Records</td>
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</tr>
<tr>
<td>10106134</td>
<td>Medical Insurance Claims ▲</td>
<td>3</td>
</tr>
<tr>
<td>10106135</td>
<td>Healthcare Documentation ▲</td>
<td>3</td>
</tr>
<tr>
<td>10106136</td>
<td>Medical Office Procedures ▲</td>
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<td>10106146</td>
<td>Proofreading for the Office</td>
<td>3</td>
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<tr>
<td>10106148</td>
<td>Medical Transcription 1: Techniques &amp; Procedures ▲</td>
<td>3</td>
</tr>
<tr>
<td>10106149</td>
<td>Medical Transcription 2: Editing &amp; Voice Recognition ▲</td>
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<tr>
<td>10106165</td>
<td>Information Management</td>
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<td>10106167</td>
<td>Computer and Business Technologies</td>
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<td>10510135</td>
<td>Anatomy, Physiology, and Disease Concepts</td>
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<td>Job Quest</td>
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General Studies Courses ▲

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<tbody>
<tr>
<td>10801195</td>
<td>Written Communication ▲</td>
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<tr>
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<td>Oral/Interpersonal Communication</td>
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<tr>
<td>10801197</td>
<td>Technical Reporting ▲</td>
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<td>10804123</td>
<td>Math with Business Applications ▲</td>
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<tr>
<td>10809195</td>
<td>Economics or</td>
<td>3</td>
</tr>
<tr>
<td>10809166</td>
<td>Introduction to Ethics: Theory and Application</td>
<td>3</td>
</tr>
<tr>
<td>10809196</td>
<td>Introduction to Sociology or</td>
<td>3</td>
</tr>
<tr>
<td>10809172</td>
<td>Introduction to Diversity Studies</td>
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</tr>
<tr>
<td>10809198</td>
<td>Introduction to Psychology</td>
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Electives

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Program Requirements

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<th>Credits</th>
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<tbody>
<tr>
<td>64</td>
</tr>
</tbody>
</table>

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41–43 for course descriptions.
▲ Criminal background checks may be required for this course.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

10101176 Financial Accounting 1A - Credits: 2
This is a basic accounting course for non-accounting program students. The scope of study focuses on business and accounting, analyzing and recording accounting transactions, preparing the adjusting process, and completing the accounting cycle. Understanding is based both on theory and application.

10103125 MS Outlook - Credits: 1
This course introduces the basics of Microsoft Outlook. Participants will use e-mail, calendar, files, and other features to effectively manage business and personal information.

10103146 MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103147 MS Word B - Credits: 1
Students will learn word processing using MS Word. Credit B activities include tables, mail merge, sort graphics, and special features of MS Word. COREQUISITE: 10103146 MS Word A

10103151 MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10103155 Professional Profile - Credits: 1
The purpose of this course is to strengthen the professional image. Students begin to develop self-awareness of elements affecting their personal and work relationships. Guidelines for determining appropriate grooming, dress, and poise will be covered. Personal life management along with career/life goal setting will be reinforced. This class should be taken in the last semester of the program.

10105160 Medical Externship - Credits: 1
An externship is actual work experience in a medical office which provides the student with a variety of tasks. The sites are usually clinics or hospitals but can be other medical-related offices as well. The instructor and student will work together to secure an externship which will be acceptable to all parties. COREQUISITE: Prior to enrolling in this course, students must have successfully completed or are in good standing in all program courses and have the approval of program faculty.

10106110 Document Formatting - Credits: 2
This hands-on course covers formatting styles of business letters, business and academic reports, memos, tables, and business documents. The course also includes drill work for improving keying speed and accuracy. Students should be able to key 40 words per minute.

10106130 Medical Terminology 1 - Credits: 3
This course presents the principles of medical word construction through identification of root words, prefixes, suffixes, combining forms, and methods of building medical terms. Emphasis is placed on correct medical word spelling, pronunciation, and definition, while introducing terminology specific to various body systems. The course is arranged by body system so that the student will recognize organs and anatomical terms as they relate to each system.

10106131 Medical Terminology 2 - Credits: 3
This course will prepare the learner to use and understand the language of medicine for accurate medical documentation. Students will learn to spell, pronounce, analyze, and define medical terms. Use of reference materials to aid in this process along with identification of common medical abbreviations and pharmacological and anatomical terminology will also be incorporated. This lab- and project-based course uses oral and written communication skills and group work. The learner should have experience in identifying the basic medical terminology components (prefixes, suffixes, word roots, and combining forms) including spelling, defining, and pronouncing word components and complete terms. COREQUISITE: 10106130 MS Medical Terminology 1.

10106132 Electronic Health Records - Credits: 1
This course familiarizes students with the basic functioning of medical records in facilities with electronic medical records. Students will also be exposed to the jobs and duties involved in the health information management department of hospitals and clinics. Hands-on training with an electronic medical records program will be included, as well as discussion of paper medical record functions.

10106134 Medical Insurance Claims - Credits: 1
This course introduces the basics of the medical insurance claims process and selected private and government insurance coverages. Students are introduced to basic principles of disease coding and procedural coding from the physician/provider perspective and follow the life cycle of the medical insurance claim with the aim of accurate and efficient reimbursement for services provided. This is not for experienced coders. COREQUISITE: 10106130 Medical Terminology 1.

10106135 Healthcare Documentation - Credits: 3
This course is designed to expand the student’s medical vocabulary and develop skill in keyboarding, formatting, editing, storing, and printing medical documents. Emphasis is placed on speed, accuracy, and improvement. COREQUISITE: 10106130 Medical Terminology 1 and 10106110 Document Formatting or 10103146 MS Word A and 10103147 MS Word B.

10106136 Medical Office Procedures - Credits: 3
This course develops professional skills and attitudes needed in a medical business environment. Skills developed include an ability to work independently as a team member, manage time effectively, schedule patients, greet patients, use the telephone properly, process mail, plan travel, apply ergonomics and office safety, set up an office records system, prepare medical documents, and use medical computer software efficiently. COREQUISITE: 10106135 Healthcare Documentation.

10106146 Proofreading for the Office - Credits: 3
This course provides the learner with techniques used in proofreading office documents from both hard and soft copy (computer screen). Learners will incorporate the use of office reference manuals. This project-based course uses individual and group activities as well as in-class and out-of-class work.

10106148 Medical Transcription 1: Techniques & Procedures - Credits: 3
Students are introduced to clinic and hospital transcription covering most medical specialties. Correct spelling, grammar, punctuation, and formatting of medical reports are emphasized through review and practice, using computers and transcribing equipment. COREQUISITE: 10106135 Healthcare Documentation.

10106149 Medical Transcription 2: Editing & Voice Recognition - Credits: 3
This course introduces the student to more difficult hospital-based transcription covering many medical specialties including radiology, oncology, cardiology, hematology, infectious diseases, general surgery, plastic surgery, dentistry, oral surgery, neurology/neurosurgery, psychiatry, urology/ nephrology, obstetrics/gynecology, pediatrics, neonatology, otolaryngology, ophthalmology, respiratory/pulmonary medicine, gastroenterology, and pathology. Students will practice editing of reports generated by voice-recognition software. COREQUISITE: 10106148 Medical Transcription 1: Techniques & Procedures.

10106165 Information Management - Credits: 2
This course will include coverage of the different indexing systems (alphabetic, numeric, subject, geographic, and chronological) as well as an overview of the entire records management function -- planning, designing, classifying, controlling, and evaluation. Electronic filing methods are utilized at locations where equipment is available.

10106167 Computer and Business Technologies - Credits: 1
Learners will gain knowledge on computer hardware, basic computer operating systems, and the operating system. An emphasis will be placed on file/document management in a network environment and on a standalone personal computer. Learners will become familiar with the World Wide Web by accessing the Internet through browser software. Learners will use e-mail and learn how to communicate properly through e-mail and optional online vehicles. Learners will use search engines/databases for research purposes and proper validation techniques.

10510135 Anatomy, Physiology, and Disease Concepts - Credits: 2
This course is a study of human anatomical structure, physiology, and the basic mechanisms of disease. It is designed to meet the unique educational needs of the medical secretary/office personnel. The course focuses on assessment, diagnosis, and treatment of commonly occurring medical conditions. The course will be structured to application of the content through case studies and group discussions. It is meant to provide a solid knowledge base for students entering work in healthcare settings. It is recommended that the student have a basic knowledge of medical terminology.

10890105 Job Quest - Credits: 1
This course is designed to enhance the student’s ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witic.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Average yearly salary</th>
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<tbody>
<tr>
<td>27</td>
<td>23</td>
<td>86%</td>
<td>$22,878-$35,357</td>
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<tr>
<td>Number of responses</td>
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<tr>
<td>27</td>
<td>88%</td>
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<tr>
<td>Number available for employment</td>
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</tbody>
</table>
Medical Assistant
31-509-1 Technical Diploma

Program Overview
Medical assistants are multi-skilled health professionals specifically educated to work in ambulatory settings performing administrative and clinical duties. The practice of medical assisting directly influences the public’s health and well-being, and requires mastery of a complex body of knowledge and specialized skills requiring both formal education and practical experience that serve as standards for entry into the profession.

The Medical Assistant program prepares individuals to assist physicians in their offices or other medical settings. Medical assistants, sometimes referred to as clinical assistants, perform a wide range of duties. The medical assistant is responsible for medical and surgical asepsis, taking vital signs, drawing blood, giving injections, assisting the physician with examinations and surgery, administering ECGs, and administering medications. The business/administrative duties include patient reception, appointment making, record keeping, filing, bookkeeping, insurance handling, typing medical correspondence and transcription, and computer applications. Laboratory functions include specimen collection, performance of basic laboratory tests, and microscopic work.

The minimum goal for the Medical Assistant program, as identified by the AAMA, is to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.


Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Medical Assistant one-year technical diploma includes an embedded technical diploma option as documented below:

30-509-2 Patient Services Specialist

Admission Requirements
Students in this program must:

• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Demonstrate keyboarding skills of 25 words per minute
• Review and sign the Functional Abilities Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Students in this program must:

• Submit Background Check fee
• Have an acceptable Wisconsin Caregiver Background Check, National Criminal Background Check, Minnesota Caregiver Background Check (if applicable), and other states, if applicable (required at program start and prior to practicum)
• Pass a physical exam, have current immunizations, and demonstrate negative status for tuberculosis (Tb)
• Possess current certification of First Aid and “CPR for Healthcare Providers” or equivalent
• Review and sign Allied Health Division Confidentiality Statement
• Attend a mandatory program orientation session

Student Profile
Students in the program should be able to:

• Follow instructions and procedures carefully
• Work with people
• Accept responsibility
• Demonstrate initiative
• Lift 50 pounds
• Work in stressful situations
• Work long and irregular hours
• Accept criticism
• Organize time and tasks
• Maintain personal hygiene
• Respect and maintain confidentiality

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:

• Hygiene/Health
• Accounting
• English
• Grammar
• Speech
• Biology and General Science
• Algebra
• Keyboarding
• Office Machines

Key to the student’s success in the Medical Assistant program is the ability to be empathetic, tactful, and understanding when dealing with patients and coworkers.

Program Outcomes
Graduates of the program will be able to:

• Perform medical office administrative functions
• Provide patient care in accordance with regulations, policies, laws, and patient rights
• Perform medical laboratory procedures
• Demonstrate professionalism in a healthcare setting
• Demonstrate safety and emergency practices in a healthcare setting

College-wide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of college-wide outcomes and indicators.

Graduates of the program are eligible to sit for the Certified Medical Assistant examination.

Career Outlook
Graduates of the program will be qualified for a variety of positions including:

• Medical Assistant
• Clinical Assistant
• Medical Laboratory Assistant
• Phlebotomist
• Medical Insurance Clerk
• Electrocardiogram Technician
• Medical Receptionist

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>31501308</td>
<td>Pharmacology for Allied Health</td>
<td>2</td>
</tr>
<tr>
<td>31509301</td>
<td>Medical Assistant Administrative Procedures</td>
<td>2</td>
</tr>
<tr>
<td>31509302</td>
<td>Human Body in Health and Disease</td>
<td>3</td>
</tr>
<tr>
<td>31509303</td>
<td>Medical Assistant Laboratory Procedures</td>
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</tr>
<tr>
<td>31509304</td>
<td>Medical Assistant Clinical Procedures</td>
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</tr>
<tr>
<td>31509305</td>
<td>Medical Assistant Laboratory Procedures</td>
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<td>31509306</td>
<td>Medical Assistant Clinical Procedures</td>
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</tr>
<tr>
<td>31509307</td>
<td>Medical Office Insurance and Finance</td>
<td>2</td>
</tr>
<tr>
<td>31509309</td>
<td>Medical Law, Ethics and Professionalism</td>
<td></td>
</tr>
<tr>
<td>31509310</td>
<td>Medical Assistant Practicum</td>
<td>3</td>
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<tr>
<td>10501101</td>
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<td>10501109</td>
<td>Healthcare Computing</td>
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<tr>
<td>10801195</td>
<td>Written Communication</td>
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PROGRAM REQUIREMENTS 33

• Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

See pages 41-43 for course descriptions.

Students must earn a grade point of 2.0 or better in all required courses.

Note: program may be completed in two or more semesters.
**Course Descriptions**

(See pages 41-43 for General Studies course descriptions)

**31509304 Medical Assistant Clinical Procedures 1 - Credits: 4**
Introduces medical assistant students to the clinical procedures performed in the medical office setting. Students perform basic examining room skills including screening, vital signs, patient history, minor surgery and patient preparation for routine and specialty exams in the ambulatory care setting. PREREQUISITE: Admission to the Medical Assistant program and COREQUISITES: 31509302 Human Body in Health and Disease, 10501101 Medical Terminology, and 31509306 Medical Assistant Clinical Procedures 2.

**31509305 Medical Assistant Laboratory Procedures 1 - Credits: 2**
Prepares students to perform phlebotomy and CLIA waived hematology, chemistry, immunology and laboratory procedures commonly performed by medical assistants in the ambulatory care setting. PREREQUISITE: 31509302 Medical Assistant Laboratory Procedures 1 and COREQUISITE: 31509306 Medical Assistant Clinical Procedures 2.

**31509306 Medical Assistant Clinical Procedures 2 - Credits: 3**
Prepares medical assistant students to perform patient care skills in the medical office setting. Students perform clinical procedures including administering medications, performing an electrocardiogram, assisting with respiratory testing, educating patients/community, assisting with emergency preparedness in an ambulatory care setting. PREREQUISITE: 31509303 Medical Assistant Laboratory Procedures 1, and 31509304 Medical Assistant Clinical Procedures 1 and COREQUISITE: 31509308 Pharmacology for Allied Health.

**31509307 Medical Office Insurance and Finance - Credits: 2**
Introduces medical assistant students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students use medical coding and managed care terminology to perform insurance-related duties. PREREQUISITES: 10501109 Healthcare Computing, 10501101 Medical Terminology, and 31509302 Human Body in Health and Disease.

**31509309 Medical Law, Ethics and Professionalism - Credits: 2**
Prepares students to display professionalism and perform within ethical and legal boundaries in the health care setting. Students maintain confidentiality, examine legal aspects of the medical record, perform quality improvement procedures, examine legal and bioethical issues, and demonstrate awareness of diversity.

**31509310 Medical Assistant Practicum - Credits: 3**
Requires medical assistant students to integrate and apply knowledge and skills from all previous medical assistant courses in actual ambulatory health care settings. Learners perform medical assistant administrative, clinical, and laboratory duties under the supervision of trained mentors to effectively transition to the role of a medical assistant. This is a supervised, unpaid, clinical experience. AAMA required Practicum - 160 minimum hours (AAMA minimum) up to 216 hours. PREREQUISITES: Current Health Care Provider CPR and first aid, successful completion or standing in all other program courses, approval of program faculty, compliance with Wisconsin Caregiver Law, and program Health Requirements are met.

**10501101 Medical Terminology - Credits: 3**
Focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

**10501109 Healthcare Computing - Credits: 2**
This course provides an introduction to basic computer applications used in healthcare settings, including common software packages, operating systems, file management, word processing, spreadsheets, databases, the Internet and e-mail. Students are introduced to the hardware and software components of computer systems and electronic medical records.

Gainful employment information is available at this link: [http://www.witc.edu/pgmpages/medasst/career.htm](http://www.witc.edu/pgmpages/medasst/career.htm). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

### Graduate Employment Information

(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witic.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
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<thead>
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<table>
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</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>$28,252</td>
</tr>
</tbody>
</table>

800.243.9482
witic.edu

2015-2016
**Program Overview**

The Medical Coding Specialist program prepares individuals for employment as entry-level coding specialists in healthcare facilities such as hospitals, clinics, physician practice groups, surgery centers, long-term care facilities and home healthcare agencies. Coding specialists are also employed in consulting firms, coding and billing services, insurance companies, governmental agencies and computer software companies. The medical coding specialist reviews medical documentation provided by physicians and other healthcare providers and translates this into numeric codes. The coding specialist assigns and sequences diagnostic and procedural codes using universally-recognized coding systems. Several uses of coded data are for payment of healthcare claims, statistics, and medical research.

**Special Features**

- All courses will be offered online
- The program may be completed in a full-time or part-time format
- Students completing the one-year Medical Coding Specialist program have the option of returning to complete the associate degree Health Information Technology program; see page 98 for information on the Health Information Technology program

**Admission Requirements**

Students in this program must:

- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply if acceptable alternative test scores and/or postsecondary degree completion)
- Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
- Complete one year of high school chemistry or one term of college-level chemistry with a 2.0 or better
- Review and sign the Functional Abilities Statement of Understanding
- Complete Computer Literacy assessment
- Complete admissions interview with a WITC counselor (above steps must be completed prior to interview)

**Program-Specific Requirements**

Students in this program must:

- Attend a mandatory program orientation session

**Student Profile**

Medical Coding Specialist students should:

- Be able to communicate effectively orally and in writing
- Be detail oriented and accurate
- Have good reasoning and organizational skills
- Be able to learn through a variety of delivery methods

**Preparation for Admission**

Students should strive to reach a comfort level in the following courses or skills:

- Health
- English/Grammar
- Basic math
- Keyboarding
- Computer applications

**Program Outcomes**

Employers will expect the Medical Coding Specialist graduate to be able to:

- Collect health data
- Model professional behaviors and ethics
- Use electronic applications to support coding and data collection
- Apply coding and reimbursement systems

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

**Career Outlook**

Graduates of the program will be qualified for a variety of positions including:

- Medical Coding Specialist
- Clinical Coding Specialist

- Claims Analyst
- Coding Specialist
- Biller/Coder
- Ambulatory Coder
- Physician Specialty Coder
- Inpatient Coder
- Coding Analyst
- Outpatient Coder

Graduates are eligible to take the National Clinical Coding Associate (CCA) certification examination through the American Health Information Management Association (AHIMA).

**Curriculum**

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<td>10530182</td>
<td>Human Disease for the Health Professions</td>
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<td>10530184</td>
<td>CPT Coding</td>
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<tr>
<td>10530185</td>
<td>Healthcare Reimbursement</td>
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<td>10530195</td>
<td>Applied Coding</td>
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<td>10530197</td>
<td>ICD Diagnosis Coding</td>
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<td>ICD Procedure Coding</td>
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**Occupational Specific Courses**

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<tr>
<td>10103129</td>
<td>Introduction to MS Office</td>
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<tr>
<td>10103146</td>
<td>MS Word A</td>
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<tr>
<td>10501101</td>
<td>Medical Terminology</td>
<td>3</td>
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<tr>
<td>10806177</td>
<td>General Anatomy and Physiology</td>
<td>4</td>
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</tbody>
</table>

**Program Requirements**

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
- See pages 41-43 for course descriptions.

Students must earn a grade point of 2.0 or better in all required courses.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10530176 Health Data Management - Credits: 2
Introduces the use and structure of healthcare data elements, data sets, data standards, their relationships to primary and secondary record systems and health information processing. PREREQUISITE: Admission to plan 105301 Health Information Technology or 315302 Medical Coding Specialist and COREQUISITE: 10530181 Intro to the Health Record.

10530181 Intro to the Health Record - Credits: 1
 Prepares learners to illustrate the flow of health information in various health care delivery systems and within the health information department. Prepares learners to retrieve data from health records. Professional ethics, confidentiality and security of information are emphasized. PREREQUISITE: Admission to plan 105301 Health Information Technology or 315302 Medical Coding Specialist.

10530182 Human Disease for the Health Professions - Credits: 3
 Prepares learners to interpret clinical documentation that they will encounter in a variety of healthcare settings. Emphasis is placed on understanding the common disorders and diseases of each body system to include the etiology (cause), signs and symptoms, diagnostic tests and results, and medical treatments and surgical procedures. PREREQUISITES: Admission to plan 105301 Health Information Technology or 315302 Medical Coding Specialist, 10501101 Medical Terminology, and 10806177 General Anatomy and Physiology.

10530184 CPT Coding - Credits: 3
Apply CPT instructional notations, conventions, rules, and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation. PREREQUISITES: 10501101 Medical Terminology, 10530181 Intro to the Health Record, and 10806177 General Anatomy and Physiology and COREQUISITE: 10530182 Human Disease for the Health Professions.

10530185 Healthcare Reimbursement - Credits: 2
This course prepares learners to compare and contrast healthcare payers, illustrate the reimbursement cycle, and to comply with regulations related to fraud and abuse. Learners assign Diagnosis Related Groups (DRGs), Ambulatory Payment Classifications (APCs) and Resource Utilization Groups (RUGs) with entry-level proficiency using computerized encoding and grouping software. PREREQUISITES: 10501101 Medical Terminology, 10806177 General Anatomy and Physiology, 10530181 Intro to the Health Record, and COREQUISITES: 10530182 Human Disease for the Health Professions, and 10530197 ICD Diagnosis Coding, 10530184 CPT Coding and 10530199 ICD Procedure Coding.

10530195 Applied Coding - Credits: 2
 Prepares students to assign ICD and CPT/HCPCS codes supported by medical documentation with intermediate level of proficiency. Students will prepare appropriate physician queries in accordance with compliance guidelines and will assign codes to optimize appropriate reimbursement. COREQUISITES: 10530197 ICD Diagnosis Coding, 10530199 ICD Procedure Coding, 10530184 CPT Coding, and 10530185 Healthcare Reimbursement.

10530197 ICD Diagnosis Coding - Credits: 3
 Prepares students to assign ICD diagnosis codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation. PREREQUISITES: 10501101 Medical Terminology, 10530181 Intro to the Health Record, and 10806177 General Anatomy and Physiology, and COREQUISITE: 10530182 Human Disease for the Health Professions.

10530199 ICD Procedure Coding - Credits: 2
 Prepares students to assign ICD procedure codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation. PREREQUISITES: 10501101 Medical Terminology, 10530181 Intro to the Health Record, and 10806177 General Anatomy and Physiology and COREQUISITE: 10530182 Human Disease for the Health Professions.

10103129 Introduction to MS Office - Credits: 1
 Learners will create, edit, view, and print basic documents using word processing, spreadsheets, database, and presentation software.

10103146 MS Word A - Credits: 1
 Students will learn word processing using MS Word. Credit activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10501101 Medical Terminology - Credits: 3
 Focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/medical-coding/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
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<th>Average yearly salary</th>
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<td>$30,980*</td>
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*Range of yearly salary and average yearly salary based on composite of graduates from Wisconsin’s 16 technical college districts (including WITC graduates).
Program Overview

This technical diploma combines medical office skills with computer skills to prepare graduates of the program for employment on the administrative side of healthcare working in physician’s offices, clinics, hospitals, nursing homes, and other health organizations.

Admission Requirements

Students in this program must:

• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile

Medical Office Specialist students should be able to:

• Follow instructions quickly and accurately
• Express ideas in oral and written form
• Keep records and prepare reports
• Deal tactfully and confidentially with patients

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

• Keyboarding
• Computer Applications
• English/Grammar

Key to the student’s success in this program is attention to detail and effective human relations skills.

Program Outcomes

Employers will expect Medical Office Specialist graduates to be able to:

• Perform medical administrative procedures including registration, reception, scheduling, and other office management tasks
• Efficiently and accurately use computer application software and medical terminology to prepare and maintain medical documents
• Communicate professionally, maintaining confidentiality and high ethical standards
• Manage and maintain charts and financial records

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Medical office specialist is a fast-growing area of the healthcare industry. Typical positions available after graduation include:

• Medical Secretary
• Medical Receptionist
• Hospital Admissions Representative
• Customer Service Representative
• Medical Scheduler
• Medical Records Clerk

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>10101176</td>
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<tr>
<td>10103125</td>
<td>MS Outlook</td>
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<td>10103146</td>
<td>MS Word A</td>
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<tr>
<td>10103147</td>
<td>MS Word B</td>
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<td>10103151</td>
<td>MS Excel A</td>
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<tr>
<td>10106110</td>
<td>Document Formatting</td>
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<td>10106130</td>
<td>Medical Terminology</td>
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<td>10106135</td>
<td>Healthcare Documentation</td>
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<td>10106136</td>
<td>Medical Office Procedures</td>
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<tr>
<td>10106146</td>
<td>Proofreading for the Office</td>
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<td>10106165</td>
<td>Information Management</td>
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<td>10890105</td>
<td>Job Quest</td>
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</table>

Program Requirements

Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

See pages 41-43 for course descriptions.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

10101176
Financial Accounting 1A - Credits: 2
This is a basic accounting course for non-accounting program students. The scope of study focuses on an introduction to business and accounting, analyzing and recording accounting transactions, performing the adjusting process, and completing the accounting cycle. Understanding is based both on theory and application.

10103125
MS Outlook - Credits: 1
This course introduces the basics of Microsoft Outlook. Participants will use e-mail, calendar, files, and other features to effectively manage business and personal information.

10103146
MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103147
MS Word B - Credits: 1
Students will learn word processing using MS Word. Credit B activities include tables, mail merge, sort, graphics, and special features of MS Word. COREQUISITE: 10103146 MS Word A.

10103151
MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10106110
Document Formatting - Credits: 2
This hands-on course covers formatting styles of business letters, business and academic reports, memos, tables, and business documents. The course also includes drill work for improving keying speed and accuracy. Students should be able to key 40 words per minute.

10106130
Medical Terminology 1 - Credits: 3
This course presents the principles of medical word construction through identification of root words, prefixes, suffixes, combining forms, and methods of building medical terms. Emphasis is placed on correct medical word spelling, pronunciation, and definition, while introducing terminology specific to various body systems. The course is arranged by body system so that the student will recognize organs and anatomical terms as they relate to each system.

10106131
Medical Terminology 2 - Credits: 3
This course will prepare the learner to use and understand the language of medicine for accurate medical documentation. Students will learn to spell, pronounce, analyze, and define medical terms. Use of reference materials to aid in this process along with identification of common medical abbreviations and pharmacological and anatomical terminology will also be incorporated. This lab- and project-based course uses oral and written communication skills and group work. The learner should have experience in identifying the basic medical terminology components (prefixes, suffixes, word roots, and combining forms) including spelling, defining, and pronouncing word components and complete terms. PREREQUISITE: 10106130 Medical Terminology 1.

10106135
Healthcare Documentation - Credits: 3
This course is designed to expand the student's medical vocabulary and develop skill in keyboarding, formatting, editing, storing, and printing medical documents. Emphasis is placed on speed building and accuracy improvement. PREREQUISITES: 10106130 Medical Terminology 1 and 10106110 Document Formatting or 10103146 MS Word A and 10103147 MS Word B.

10106136
Medical Office Procedures - Credits: 3
This course develops professional skills and attitudes needed in a medical business environment. Skills developed include an ability to work independently and as a team member, manage time effectively, schedule patients, greet patients, use the telephone property, process mail, plan travel, apply ergonomics and office safety, set up an office records system, prepare medical documents, and use medical computer software efficiently. COREQUISITE: 10106135 Healthcare Documentation.

10106146
Proofreading for the Office - Credits: 3
This course provides the learner with techniques used in proofreading office documents from both hard and soft copy (computer screen). Learners will incorporate the use of office reference manuals. This project-based course uses individual and group activities as well as in-class and out-of-class work.

10106165
Information Management - Credits: 2
This course will include coverage of the different indexing systems (alphabetical, numeric, subject, geographic, and chronological) as well as the overview of the entire records management function — planning, designing, classifying, controlling, and evaluating. Electronic filing methods are utilized at locations where equipment is available.

10106167
Computer and Business Technologies - Credits: 1
Learners will gain knowledge on computer hardware, basic computer operations, and the operating system. An emphasis will be placed on file/document management in a network environment and on a standalone personal computer. Learners will become familiar with the World Wide Web by accessing the Internet through browser software. Learners will use e-mail and learn how to communicate properly through e-mail and optional online vehicles. Learners will use search engines/databases for research purposes and proper validation techniques.

10890105
Job Quest - Credits: 1
This course is designed to enhance the student's ability to seek, obtain, and retain employment. Assessment of personal characteristics, job-seeking and retention skills, preparation of employment-related documents, and interviewing strategies are included.

Gainful employment information is available at this link: [http://www.witc.edu/pgmpages/medoffspec/career.htm](http://www.witc.edu/pgmpages/medoffspec/career.htm). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WTCS Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WTCS district</th>
<th>Range of yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>100%</td>
<td>%*</td>
</tr>
<tr>
<td>Number of responses</td>
<td>Percent employed</td>
<td>50%</td>
<td>Range of yearly salary</td>
</tr>
<tr>
<td>3</td>
<td>50%</td>
<td></td>
<td>%*</td>
</tr>
<tr>
<td>Number available for employment</td>
<td>Employed in related field</td>
<td>Average yearly salary</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td>%*</td>
</tr>
</tbody>
</table>

*There was insufficient data to report.

800.243.9482
witc.edu
2015-2016
Motorcycle, Marine, and Outdoor Power Products Technician
31-461-2 Technical Diploma

Program Overview
The Motorcycle, Marine, and Outdoor Power Products Technician program will prepare the student to troubleshoot, service, and repair recreational equipment. Theories of construction and operation of two- and four-cycle engines, new developments in environmental concerns, and engine overhaul are studied, as well as transmissions and chassis service techniques.

Special Feature
WITC is an accredited Equipment & Engine Training Council (EETC) testing facility providing students with the opportunity to become industry certified.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Motorcycle, Marine, and Outdoor Power Products students should be able to:
• Apply scientific principles and technical knowledge
• Use independent judgment
• Visualize using diagrams
• Handle and manipulate equipment
• Work well with others
• Follow precise procedures
• Assume responsibility
• Stand for long periods
• Work with dust, dirt, oil, and grease

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Automobile Mechanics
• Chemistry
• Physics
• Small Engine Repair
• English/Communications
• Computer knowledge
• Electricity

Program Outcomes
Employers will expect Motorcycle, Marine, and Outdoor Power Products (MMOPP) Technician graduates to be able to:
• Repair brake systems
• Repair 2-stroke engine
• Repair 4-stroke engines
• Repair drive lines
• Repair electrical systems
• Repair suspensions
• Repair fuel systems
• Repair hydraulic systems
• Develop a customer work order

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Typical positions available after graduation include:
• Motorcycle, Marine, and Outdoor Power Products Technician
• Motorcycle Technician
• Outboard Motor Technician
• Small Engine Technician
• Chainsaw Technician
• Lawn and Garden Equipment Technician
• ATV Technician
• Industrial Equipment Technician
• Parts person
• Small Engine Shop Owner

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>31461301</td>
<td>Small Engine and Chassis Repair 1 ▲</td>
<td>5</td>
</tr>
<tr>
<td>31461302</td>
<td>Small Engine and Chassis Repair 2 ▲</td>
<td>4</td>
</tr>
<tr>
<td>31461310</td>
<td>Introduction to 12-Volt Electrical Theory</td>
<td>1</td>
</tr>
<tr>
<td>31461311</td>
<td>Introduction to Power Trains</td>
<td>1</td>
</tr>
<tr>
<td>31461312</td>
<td>Introduction to Mobile Hydraulics</td>
<td>1</td>
</tr>
<tr>
<td>31461313</td>
<td>Introduction to Diesel Engines</td>
<td>1</td>
</tr>
<tr>
<td>31461335</td>
<td>Small Engine and Chassis Theory ▲</td>
<td>2</td>
</tr>
<tr>
<td>31461339</td>
<td>Small Engine and Chassis Repair 3</td>
<td>3</td>
</tr>
<tr>
<td>31461342</td>
<td>Motorcycle Service ▲</td>
<td>3</td>
</tr>
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<td>31461343</td>
<td>ATV Service ▲</td>
<td>3</td>
</tr>
<tr>
<td>32442307</td>
<td>Welding for Mechanics</td>
<td>2</td>
</tr>
</tbody>
</table>

Program requirements 34
▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
• See pages 41-43 for course descriptions.
31461301
Small Engine and Chassis Repair 1 - Credits: 5
You will diagnose, troubleshoot, tune up, and overhaul engines and service chassis on lawn and garden equipment and industrial equipment. Practical hands-on experience is gained in engine disassembly, measuring parts for wear, cylinder reconditioning, valve train servicing, governor adjusting, fuel and ignition system servicing, and reassembly techniques. You will service drive and chassis systems to ensure the operation of the complete unit. You will also order repair parts, prepare service report forms, and learn customer relations. COREQUISITES: 31461302 Small Engine and Chassis Repair 2 and 31461335 Small Engine and Chassis Theory.

31461302
Small Engine and Chassis Repair 2 - Credits: 4
You will diagnose, troubleshoot, tune-up, and overhaul engines and service chassis on chain saws and snowmobiles. Practical hands-on experience is gained in engine disassembly, measuring parts for wear, cylinder reconditioning, valve train servicing, governor adjusting, fuel and ignition system servicing, and reassembly techniques. You will service drive and chassis systems to ensure the operation of the complete unit. You will also order repair parts, prepare service report forms, and learn customer relations. COREQUISITES: 31461301 Small Engine and Chassis Theory.

31461310
Introduction to 12-Volt Electrical Theory - Credits: 1
This course is designed for the learner to understand basic 12-volt electrical circuits, wiring diagrams, starting, charging, and lighting systems. Classroom trainers will be used to apply electrical theory. Using hands-on activities, this course will help the learner to better understand basic 12-volt electrical systems.

31461311
Introduction to Power Trains - Credits: 1
This course will provide a general overview of clutches, sliding gear, and hydrostatic drives. Design, operation, adjustment, and maintenance will be discussed.

31461312
Introduction to Mobile Hydraulics - Credits: 1
This course will provide a practical understanding of mobile hydraulic components. Their design, application, operation and maintenance will be studied. A hydraulic training bench will be used in the classroom.

31461313
Introduction to Diesel Engines - Credits: 1
This course will provide the learner with a basic understanding of the diesel engine. The design and operating principles of the engine, cooling, fuel, and lubrication systems will be examined.

31461325
Small Engine and Chassis Theory - Credits: 2
This course provides the theory necessary to understand and perform the hands-on tasks of troubleshooting and repairing small gas engines, their drive mechanisms, and their chassis. Theory is presented on the principles of operation and service of 4-cycle, 2-cycle, and small diesel engines in the outdoor power equipment and snowmobile areas. Drive and chassis operation is explained to enable the student to service the complete unit. COREQUISITE: 31461302 Small Engine and Chassis Repair 1 and 31461335 Small Engine and Chassis Theory.

31461335
Small Engine and Chassis Theory - Credits: 2
This course provides the theory necessary to understand and troubleshoot the components and systems unique to the outboard marine engine area. Theory will be given in the specialty areas of fuel systems, ignition systems, cooling systems, lubrication systems, and gear cases. You learn to apply basic troubleshooting techniques and repair procedures of small engine service and repair to marine engines with emphasis on practical hands-on experience. PREREQUISITES: 31461302 Small Engine and Chassis Repair 1 and 31461335 Small Engine and Chassis Theory.

31461339
Marine Service - Credits: 5
This course will provide the theory necessary to understand and troubleshoot the components and systems unique to the outboard marine engine area. Theory will be given in the specialty areas of fuel systems, ignition systems, cooling systems, lubrication systems, and gear cases. You learn to apply basic troubleshooting techniques and repair procedures of small engine service and repair to marine engines with emphasis on practical hands-on experience. PREREQUISITES: 31461302 Small Engine and Chassis Repair 1 and 31461335 Small Engine and Chassis Theory.

31461342
Motorcycle Service - Credits: 3
This course provides the theory necessary to understand and troubleshoot the components and systems unique to motorcycles. Theory is given in the specialty areas of carburetion, ignition, transmissions, clutches, and running gear. You will learn to apply basic techniques and procedures of small engine service and repair to motorcycles. This is a lecture- and lab-based course. Specialty areas dealing with transmissions and chassis on these units are covered with practical hands-on experience. Refinishing techniques of fiberglassing, plastic welding, and spray painting are presented. PREREQUISITES: 31461302 Small Engine and Chassis Repair 1 and 31461335 Small Engine and Chassis Theory, and COREQUISITE: 31461343 ATV Service.

31461343
ATV Service - Credits: 3
This course provides the theory necessary to understand and troubleshoot the components and systems unique to ATVs. Theory is given in the specialty areas of carburetion, ignition, transmissions, clutches, and running gear. You will learn to apply basic techniques and procedures of small engine service and repair to ATVs. This is a lecture- and lab-based course. Specialty areas dealing with transmissions and chassis on these units are covered with practical hands-on experience. Refinishing techniques of fiberglassing, plastic welding, and spray painting are presented. PREREQUISITES: 31461302 Small Engine and Chassis Repair 1, 31461335 Small Engine and Chassis Theory, and COREQUISITE: 31461342 Motorcycle Service.

32442307
Welding for Mechanics - Credits: 2
Instruction in safe setup and operation of plasma cutting (PAC), oxy-fuel cutting (OFC), SMAW (Stick), GMAW (Mig), FCAW, and/or GTAW (Tig) welding in applications related to general industry practices. Selection of appropriate welding processes with a specific emphasis on typical repair situations including metal identification will be stressed.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/mmopp/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of responses</td>
<td>13</td>
</tr>
<tr>
<td>Number available for employment</td>
<td>10</td>
</tr>
<tr>
<td>% employed in WITC district</td>
<td>90%</td>
</tr>
<tr>
<td>Range of yearly salary</td>
<td>$22,878-$37,437</td>
</tr>
<tr>
<td>Average yearly salary</td>
<td>$27,318</td>
</tr>
</tbody>
</table>

Percent employed: 90%
% employed in WITC district: 50%
Number employed: 9
Number of graduates: 13
Number of responses: 13
Number available for employment: 10
Range of yearly salary: $22,878-$37,437
Average yearly salary: $27,318

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2015-2016
135
Program Overview
The Nursing Assistant program provides classroom, laboratory instruction, and supervised practice in area nursing homes and hospitals. The program is approved by the Wisconsin Department of Health Services, Office of Quality Assurance. After successfully completing this program, students will be eligible to complete the written and skills exams to be placed on the Wisconsin Nurse Aide Registry. Exam cost is $115.

Admission Requirements
Students in this program must:
- Be at least 16 years old
- Complete application/registration process and submit fee
- Successfully complete reading entrance assessment (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding Form
- Submit Background Check fee
- Have an acceptable Wisconsin Caregiver Background Check
- Attend a mandatory orientation session scheduled two weeks prior to the start of class
- Review and sign the Functional Ability Statement of Understanding

Program-Specific Requirements
Students in this program must:
- Pass a physical exam, have current immunizations, and demonstrate negative status for tuberculosis (Tb)
- Review and sign Allied Health Division Confidentiality Statement

Student Profile
Nursing Assistant students should be able to:
- Display a caring attitude toward ill patients
- Be flexible, empathetic, and non judgmental
- Be emotionally stable
- Adjust to diverse personalities and backgrounds
- Work under stress

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Basic Anatomy
- Communications - Written and Oral

Program Outcomes
Employers will expect Nursing Assistant graduates to be able to:
- Communicate effectively with clients, families, and the healthcare team
- Perform safe and effective basic nursing skills
- Provide personal care for clients
- Promote fullest possible level of client functioning
- Promote clients’ rights
- Meet the basic needs of clients with dementia

College-wide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of college-wide outcomes and indicators.

Career Outlook
Typical careers that will be available to graduates include:
- Nursing Assistant
- Nurses’ Aide
- Home Health Aide

Curriculum
<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3054300</td>
<td>Nursing Assistant ▲</td>
<td>3</td>
</tr>
</tbody>
</table>

▲ This course requires a prerequisite and/or corequisite.

Qualifications for Entry on the Wisconsin Nurse Aide Registry. Upon completion of the program, students will be eligible to complete the written and skills exams to be placed on the Wisconsin Nurse Aide Registry.
### 30543300
#### Nursing Assistant - Credits: 3

This course focuses on the physical and emotional care you will provide for clients in a healthcare setting. Through classroom, lab, and supervised practice in area nursing homes, you will learn to provide for the physical, emotional, and environmental client needs; communicate effectively, carry out skilled procedures and treatments, and promote client rights. Teamwork, role responsibilities, and an awareness of cultural diversity are stressed throughout the course. **PREREQUISITE:** Admission to Nursing Assistant program.

### Graduate Employment Information

(WITC Graduate Survey Responses 2012-2013; for most recent data, go to [witc.edu](http://witc.edu))

<table>
<thead>
<tr>
<th>Metric</th>
<th>Number</th>
<th>% Employed</th>
<th>Salary Range</th>
<th>Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of graduates</td>
<td>529</td>
<td>246</td>
<td>90%</td>
<td>$18,344-$39,517</td>
</tr>
<tr>
<td>Number of responses</td>
<td>425</td>
<td>158</td>
<td>71%</td>
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</tr>
<tr>
<td>Number available for employment</td>
<td>274</td>
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</tr>
</tbody>
</table>
Nursing - Associate Degree

Program Overview
Nursing is the dynamic interpersonal goal-directed process that seeks to promote optimal health within the context of individuals, family, community, and society. The concept of caring, which is central to nursing, is communicated through the holistic care of individuals, families, and groups within the healthcare system. Through collaboration with other healthcare professionals, nursing is responsive to the needs of the community across the health-illness continuum.

Special Features
An agreement between the Wisconsin Technical College System (WTCS) and the University of Wisconsin System was established to provide for the sharing of some other private colleges allows graduates of the WTCS Nursing - Associate Degree program to transfer, with junior standing, into their baccalaureate nursing program. For the student that is a licensed practical nurse (LPN) and is interested in becoming a registered nurse (RN), WITC offers an "LPN Progression to ADN" track. The LPN Progression pathway provides advanced standing for nursing courses in ADN Semesters 1 and 2 of the WITC ADN program. Additionally, credits may be transferred from the practical nursing program if the General Studies and/or elective credits were at an associate degree level. Contact the campus admissions advisor for more information.

Pre-Nursing Admission Requirements
Students in the pre-Nursing program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete an ALEKS entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion); note: required for ALEKS entrance assessment score higher than current WITC Nursing nursing course is higher than the pre-Nursing course.
- Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
- Complete WITC Pre-ADN Admissions Quiz
- Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
- Review and sign the Functional Ability Statement of Understanding
- Complete admission interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Pre-Nursing students must complete the petition process to be eligible for the core Nursing program (go to: http://www.witc.edu/gmpagescontent/nurseassoc/pdfs/admission/ADN-ADN-Admissions-Procedures-01-23-2012.pdf for detailed requirements). In addition to the requirements above, students in this program must:
- Complete one year of high school chemistry or one term of college-level chemistry with a 2.0 or better
- Complete a Nursing Assistant course with grade of C (2.0) or better
- Review the online informational presentation at www.witc.edu/gmpagescontent/nurseassoc/admissions
- Complete priority petition for admission forms
- WITC transcripts to verify course completion (priority admission is given to students who have completed the ADN program-required General Studies courses)
- Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
- Review and sign the Functional Ability Statement of Understanding
- Complete and sign Intent to Enter form
- Prior to attendance in core Nursing coursework, student must:
  - Submit Background Check fee
  - Have an acceptable Wisconsin Caregiver Background Check, National Criminal Background Check, Minnesota Caregiver Board Score (IWS and some other states if applicable), and other states if applicable
  - Complete an ALEKS entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion); note: required for ALEKS entrance assessment score higher than current WITC Nursing nursing course is higher than the pre-Nursing course.
- Possess current certification of “CPR for Healthcare Providers” or the equivalent
- Review and sign Allied Health Division Confidentiality Statement
- Attend a mandatory orientation session

Student Profile
Students in the ADN program should be able to:
- Be flexible and empathetic
- Handle emotional situations
- Adjust to diverse personalities and backgrounds
- Work under stress
- Communicate in writing and verbally
- Have good reasoning skills
- Think logically and be organized
- Use a computer to word process documents and search the Internet

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Algebra/Biology/Chemistry
- Anatomy/Physiology
- Medical Terminology
- Communications - written and oral
- Human Relations
- Keyboarding and computer applications

Program Outcomes
Employers will expect graduates of the ADN program to be able to:
- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving professional identity as a nurse
- Work towards evidence-based practice, caring, advocacy, and quality care
- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts
- Integrate social, mathematical, and physical sciences, pharmacology, and pathophysiology in clinical decision making
- Provide patient centered care by utilizing the nursing process across diverse populations and healthcare settings
- Minimize risk of harm to patients, members of the healthcare team, and self through safe individual performance and participation in system effectiveness
- Lead the multidisciplinary healthcare team to provide effective patient care throughout the lifespan
- Use information and technology to communicate, manage data, mitigate error, and support decision-making

Special Features
Colleges allow graduates of the WTCS Nursing - Associate Degree program or questions about current status may be communicated to the Accreditation Commission for Education in Nursing, Inc. (ACEN), formerly NLNAC, located at 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, phone 404-975-5000. Concerns may also be directed to the Wisconsin State Board of Nursing, PO Box 8935, Madison, WI 53708-8935, phone (877) 617-1565.

Number Course Title Credits
Technical Studies Courses
10543101 Nursing Fundamentals \* 2
10543102 Nursing Skills \* 3
10543103 Nursing Pharmacology \* 2
10543104 Nursing: Intro to Clinical Practice \* 2
10543105 Nursing Health Alterations \* 3
10543106 Nursing Health Promotion \* 1
10543107 Nursing: Clinical Care Across Lifespan \* 2
10543108 Nursing: Intro to Clinical Care Management \* 2
10543109 Nursing: Complex Health Alterations \* 3
10543110 Nursing: Mental Health and Community Concepts \* 2
10543111 Nursing: Intermediate Clinical Practice \* 1
10543112 Nursing Advanced Skills \* 1
10543113 Nursing: Complex Health Alterations \* 3
10543114 Nursing: Management and Professional Concepts \* 2
10543115 Nursing: Advanced Clinical Practice \* 3
10543116 Nursing: Clinical Transition \* 2

General Studies Courses
10809195 Written Communication 3
10809196 Oral/Interpersonal Communication 3
10806177 General Anatomy and Physiology 4
10806179 Advanced Anatomy and Physiology 4
10806197 Microbiology 4
10809188 Developmental Psychology 3
10809196 Introduction to Psychology 3
10809198 Introduction to Psychology 3

Electives

Program Requirements

\* Requires a prerequisite and/or corequisite that must be completed with a grade of 2.0 or better.
\* See pages 41-43 for course descriptions.
\* The second time a student withdraws from this class, it counts as an “F” (see ADN student handbook for details).

All courses in the ADN program must be completed with a grade of “C” (2.0) or better, except 10806177 General Anatomy & Physiology and 10806179 Advanced Anatomy & Physiology, which must be completed with a “B” or better.
10543101 Nursing Fundamentals - Credits: 2
This course focuses on basic nursing concepts that the beginning nurse will need to provide care to diverse patient populations across the lifespan. Current and historical issues impacting nursing will be explored within the scope of nursing practice. The nursing process will be introduced as a framework for organizing the care of patients with alterations in cognition, elimination, and comfort, grief/loss, mobility, integration, and fluid/electrolyte balance. PREREQUISITE: Admission to Nursing program and COREQUISITE: 10806177 General Anatomy and Physiology.

10543102 Nursing Skills - Credits: 3
This course focuses on the development of clinical skills and physical assessment across the lifespan. Content includes mathematical calculations and conversions related to clinical skills, blood pressure assessment, aseptic technique, wound care, oxygen administration, tracheostomy care, suctioning, management of enteral tubes, basic medication administration, glucose testing, enemas, ostomy care, and catheterization. In addition, the course includes techniques related to obtaining a health history and basic physical assessment skills using a body systems approach. PREREQUISITE: Admission to Nursing program or current LPN license and COREQUISITE: 10806177 General Anatomy and Physiology.

10543103 Nursing Pharmacology - Credits: 2
This course introduces the principles of pharmacology, including drug classifications and their effects on the body. Emphasis is placed on understanding the use of the nursing process when administering medications. PREREQUISITE: Admission to Nursing program and COREQUISITE: 10806177 General Anatomy and Physiology.

10543104 Nursing: Intro to Clinical Practice - Credits: 2
This introductory clinical course emphasizes basic nursing skills and application of the nursing process in meeting the needs of diverse clients. Emphasis is placed on performing basic nursing skills, the formation of nurse-client relationships, communication, data collection, documentation, and medication administration. COREQUISITES: 10543101 Nursing Fundamentals, 10543102 Nursing Pharmacology, 10801195 Written Communications, 10809188 Developmental Psychology, and 10806177 General Anatomy and Physiology.

10543105 Nursing Health Alterations - Credits: 3
This course elaborates upon the basic concepts of health and illness as presented in Nursing Fundamentals. It applies theories of nursing in the care of clients through the lifespan, utilizing comfort, grief/loss, mobility, integration, and fluid/electrolyte balance. PREREQUISITE: Admission to Nursing program and COREQUISITE: 10806177 General Anatomy and Physiology.

10543106 Nursing Health Promotion - Credits: 3
This course will cover topics related to health promotion for individuals and families throughout the lifespan. We will cover nursing care of the developing family, which includes reproductive issues, pregnancy, labor and delivery, postpartum, the newborn, and the child. Recognizing the spectrum of healthy families will help us discern patterns associated with adaptive and maladaptive behaviors applying mental health principles. An emphasis is placed on teaching and supporting healthy lifestyles choices for individuals of all ages. Nutrition, exercise, stress management, empowerment, and risk reduction practices are highlighted. Study of the family will cover dynamics, functions, discipline styles, and stages of development. PREREQUISITE: 10543103 Nursing Fundamentals, 10543105 Nursing Skills, 10543103 Nursing Pharmacology, 10543104 Nursing: Introduction to Clinical Practice, 10806177 General Anatomy and Physiology, and 10809188 Developmental Psychology and COREQUISITE: 10806179 Advanced Anatomy and Physiology.

10543107 Nursing: Clinical Care Across Lifespan - Credits: 2
This course focuses on the care of healthy and sick individuals and families across the lifespan. The course also provides an introduction to teaching and learning. Extended care to include the family is emphasized. COREQUISITE: 10543106 Nursing Health Promotion.

10543108 Nursing: Intro to Clinical Care Management - Credits: 2
Corequisite: 10543105 Nursing Health Alterations, 10543107 Nursing: Clinical Care Across Lifespan, and 10543109 Nursing: Complex Health Alterations 1. Nursing: Clinical Care Management 1 introduces students to the role of the nurse in nursing management, including the use of the nursing process in managing patients with diverse health conditions. It includes topics such as fundamentals of care, health maintenance, diagnostic reasoning, and treatment planning. PREREQUISITE: 10543108 Nursing: Clinical Care Across Lifespan, and 10801195 Oral/Personal Communication.

10543109 Nursing: Complex Health Alterations 1 - Credits: 3
Complex Health Alterations 1 prepares the learner to expand knowledge from previous courses in caring for clients across the lifespan with alterations in cardiovascular, respiratory, endocrine, and hematologic systems as well as clients with fluid/electrolyte and acid-base imbalances and alterations in comfort. PREREQUISITE: 10543105 Nursing Health Alterations, 10543106 Nursing: Clinical Care Across the Lifespan, and 10543108 Nursing: Introduction to Clinical Care Management. PREREQUISITE: 10543110 Nursing: Complex Health Alterations 2, 10806179 Advanced Anatomy and Physiology, and 10809188 Developmental Psychology.

10543110 Nursing: Mental Health and Community Concepts - Credits: 2
This course will cover topics related to the delivery of community and mental health care. Basic health needs of individuals, families, and groups will be addressed across the lifespan. Attention will be given to diverse and at-risk populations. Mental health concepts will concentrate on adaptive and maladaptive behaviors specific to mental health disorders. Community resources will be examined in relation to specific types of support offered to racial, ethnic, economically diverse individuals and groups. PREREQUISITE: 10543105 Nursing Health Alterations, 10543106 Nursing Health Promotion, 10543107 Nursing: Clinical Care Across the Lifespan, and 10543108 Nursing: Introduction to Clinical Care Management. PREREQUISITE: 10543109 Nursing: Complex Health Alterations 1, 10806179 Advanced Anatomy and Physiology, and COREQUISITE: 10809198 Introduction to Psychology.

10543111 Nursing: Intermediate Clinical Practice - Credits: 3
This intermediate level clinical course develops the RN role when working with clients with complex health care needs. A focus of the course is developing skills needed for managing multiple clients across the lifespan and priorities. Using the nursing process, students will gain experience in adapting nursing practice to meet the needs of clients with diverse needs and backgrounds. COREQUISITES: 10543109 Nursing Complex Health Alterations 1, 10543110 Nursing: Mental Health and Community Concepts, and 10543112 Nursing Advanced Skills, 10809198 Introduction to Psychology, and 10809197 Microbiology.

10543112 Nursing Advanced Skills - Credits: 1
This course focuses on the development of advanced clinical skills. Content includes advanced IV skills, blood product administration, central catheter systems, basic EKG interpretation and nasogastric/feeding tube insertion. PREREQUISITE: 10543105 Nursing Health Alterations, 10543106 Nursing Health Promotion, 10543107 Nursing: Clinical Care Across the Lifespan, 10543108 Nursing: Introduction to Clinical Care Management, and 10806179 Advanced Anatomy and Physiology.

10543113 Nursing: Complex Health Alterations 2 - Credits: 3
Complex Health Alterations 2 prepares the learner to expand knowledge and skills from previous courses in caring for clients across the lifespan with alterations in the immune, nervous, musculoskeletal, gastrointestinal, hepatobiliary, renal/urinary, and reproductive systems. The learner will also focus on management of care for clients with high-risk perinatal conditions, high-risk newborns and the ill child. Use of family and application of previously learned concepts will be evident in the management of clients with complex health alterations. PREREQUISITES: 10543109 Nursing Complex Health Alterations 1, 10543110 Nursing: Mental Health and Community Concepts, 10543111 Nursing: Intermediate Clinical Practice, 10543112 Nursing Advanced Skills, and 10809197 Microbiology.

10543114 Nursing: Management and Professional Concepts - Credits: 2
This course develops management and professional issues related to the role of the RN. Emphasis is placed on preparing for the RN role. PREREQUISITE: 10543109 Nursing Complex Health Alterations 1, 10543110 Nursing: Mental Health and Community Concepts, 10543111 Nursing: Intermediate Clinical Practice, and 10543112 Nursing Advanced Skills.

10543115 Nursing: Advanced Clinical Practice - Credits: 3
This advanced clinical course requires the student to integrate concepts from all previous courses in the management of groups of clients facing complex health alterations. Students will have the opportunity to further develop critical thinking skills using the nursing process in making clinical decisions. Continuity of care through interdisciplinary collaboration is emphasized. COREQUISITES: 10543113 Nursing Complex Health Alterations 2, and 10809196 Introduction to Sociology.

10543116 Nursing Clinical Transition - Credits: 2
This clinical experience integrates all knowledge learned in the previous courses in transitioning to the role of the graduate nurse. The course promotes relatively independent clinical decisions, delegation, and works collaboratively with others to achieve client and organizational outcomes. Continued professional development is fostered. PREREQUISITE: 10543113 Nursing Complex Health Alterations 2, 10543114 Nursing Management and Professional Concepts, and 10543115 Nursing Advanced Clinical Practice.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witic.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>Percent employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
</tr>
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<td>82</td>
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<td>56%</td>
<td>$25,551-$77,994</td>
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<td>84</td>
<td>80</td>
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Program Overview
This associate degree program prepares the student to become a Certified Occupational Therapy Assistant (COTA), or for employment in related jobs. In the traditional setting, the COTA provides services under the supervision of an occupational therapist using goal-directed activities to prevent, lessen, or overcome difficulty in attaining, maintaining, or developing occupations: daily living skills, play, leisure, and/or work skills. Services are provided in various environments including hospitals, geriatric centers, schools, homes, and communities.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
• Review and sign Caregiver Background Check and/or Criminal History Record Check Statement of Understanding
• Complete one year of high school or one term of college-level chemistry with a 2.0 or better
• Review and sign the Functional Ability Statement of Understanding
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements
Students in this program must:
• Submit Background Check fee
• Have an acceptable Wisconsin Caregiver Background Check, National Criminal Background Check, Minnesota Caregiver Background Check (if applicable), and other states, if applicable
• Pass a physical exam, have current immunizations, and demonstrate negative status for tuberculosis (Tb)
• Possess current certification of “CPR for Healthcare Providers” or equivalent
• Review and sign Allied Health Division Confidentiality Statement
• Attend a mandatory program orientation session

Student Profile
Occupational Therapy Assistant students should:
• Be flexible and empathetic
• Be able to handle emotional situations
• Be able to adjust to diverse personalities and backgrounds
• Be able to work under stress
• Be able to communicate effectively
• Have good reasoning and organizational skills

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Biology
• Anatomy
• Communications
• Psychology
• Basic computer skills

Program Outcomes
Employers will expect graduates of the program to be able to:
• Practice within the distinct role and responsibility of the occupational therapy assistant
• Serve a diverse population in a variety of systems that are consistent with entry-level practice
• Value lifelong learning and the need to keep current with best practice
• Apply occupational therapy principles and intervention tools to achieve expected outcomes
• Demonstrate professional behaviors, ethical standards, values, and attitudes of the occupational therapy profession
• Advocate for the profession, services, and consumers

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Graduates of this program will be qualified for the following positions:
• Occupational Therapy Assistant
• Certified Occupational Therapy Assistant (COTA)
• Activities Director/Coordinator
• Case Manager
• Community Support Worker
• Life Skills Trainer
• Mental Health Technician

The Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449, Web site www.acoteonline.org, phone 301-652-2682. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

A felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>Introduction to Occupational Therapy</td>
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<tr>
<td>10514172</td>
<td>Medical and Psychosocial Conditions</td>
<td>3</td>
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<tr>
<td>10514173</td>
<td>Activity Analysis and Applications</td>
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<td>10514174</td>
<td>OT Performance Skills</td>
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<td>Psychosocial Practice</td>
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<td>Geriatric Practice</td>
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<td>10514179</td>
<td>Community Practice</td>
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<td>10514182</td>
<td>Physical Rehabilitation Practice</td>
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<td>10514183</td>
<td>Pediatric Practice</td>
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<td>10514184</td>
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<tr>
<td>10514185</td>
<td>OTA Practice and Management</td>
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<td>10514186</td>
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<td>10809172</td>
<td>Introduction to Diversity Studies</td>
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<tr>
<td>10809188</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>10809196</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>10809198</td>
<td>Introduction to Psychology</td>
<td>3</td>
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</table>

General Studies Courses
• 10081195 Written Communication 3
• 10801196 Oral/Interpersonal Communication 3
• 10806177 General Anatomy and Physiology 4
• 10809172 Introduction to Diversity Studies 3
• 10809188 Developmental Psychology 3
• 10809196 Introduction to Sociology 3
• 10809198 Introduction to Psychology 3

ELECTIVES 3

Program Requirements 70

Fieldwork: Fieldwork IIA and IIB will be completed in two different settings under the supervision of a COTA or OTR. OTA students must complete Level II Fieldwork within 18 months following completion of the academic preparation.

• Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
• See pages 41-43 for course descriptions.

Students must earn a grade point of 2.0 or better in all required courses.
Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

10514171 Introduction to Occupational Therapy - Credits: 3
Provides an overview of history, philosophy, ethics, and scope of occupational therapy practice. Examines legal responsibilities, professional resources, and organization. Students practice basic skills related to therapeutic relationships and determine their own suitability to a career in occupational therapy.

10514172 Medical and Psychosocial Conditions - Credits: 3
Introduces medical and psychosocial conditions as they relate to occupational therapy practice. Topics include etiology, symptomology, treatment, and contraindications. PREREQUISITE: Admission to OTA program and COREQUISITES: 10514171 Introduction to Occupational Therapy, 10514173 Activity Analysis and Applications, and 10806177 General Anatomy and Physiology.

10514173 Activity Analysis and Applications - Credits: 2
Provides instruction in activity analysis with hands-on experience in activities across the lifespan. Students apply the teaching/learning process and adhere to safety regulations. PREREQUISITE: Admission to OTA program and COREQUISITES: 10514171 Introduction to Occupational Therapy, 10514172 Medical and Psychosocial Conditions, and 10806177 General Anatomy and Physiology.

10514174 OT Performance Skills - Credits: 4
Emphasis on the development of skills related to assessment and intervention in the areas of sensory, motor, cognition and communication. PREREQUISITES: 10514171 Introduction to Occupational Therapy, 10514172 Medical and Psychosocial Conditions, 10514173 Activity Analysis and Applications, 10806177 General Anatomy and Physiology and COREQUISITES: 10514175 Psychosocial Practice, 10514176 OT Theory and Practice, 10514177 Assistive Technology and Adaptations, and 10514178 Geriatric Practice.

10514175 Psychosocial Practice - Credits: 3
Examines the theoretical foundations that guide OT practice. Applies group dynamics and demonstrates leadership skills. PREREQUISITES: 10514171 Introduction to Occupational Therapy, 10514172 Medical and Psychosocial Conditions, 10514173 Activity Analysis and Applications, and 10806177 General Anatomy and Physiology and COREQUISITES: 10514174 OT Performance Skills, 10514175 Psychosocial Practice, 10514177 Assistive Technology and Adaptations, and 10514178 Geriatric Practice.

10514176 OT Theory and Practice - Credits: 3
Examines the role of the OT in the service delivery to elders in a variety of settings. Includes analysis of the impact of age-related changes and disease processes on the function of the elderly. PREREQUISITES: 10514171 Introduction to Occupational Therapy, 10514172 Medical and Psychosocial Conditions, 10514173 Activity Analysis and Applications, and 10806177 General Anatomy and Physiology and COREQUISITES: 10514174 OT Performance Skills, 10514175 Psychosocial Practice, 10514176 OT Theory and Practice, and 10514178 Geriatric Practice.

10514177 Assistive Technology and Adaptations - Credits: 2
Explores technologies that support delivery of OT services. Emphasis on competency related to computer skills, ergonomics, adaptive devices, and environments. PREREQUISITES: 10514171 Introduction to Occupational Therapy, 10514172 Medical and Psychosocial Conditions, 10514173 Activity Analysis and Applications, and 10806177 General Anatomy and Physiology and COREQUISITES: 10514174 OT Performance Skills, 10514175 Psychosocial Practice, 10514176 OT Theory and Practice, and 10514178 Geriatric Practice.

10514178 Geriatric Practice - Credits: 3
Examines the role of the OT in the service delivery to elders in a variety of settings. Includes analysis of the impact of age-related changes and disease processes on the function of the elderly. PREREQUISITES: 10514171 Introduction to Occupational Therapy, 10514172 Medical and Psychosocial Conditions, 10514173 Activity Analysis and Applications, and 10806177 General Anatomy and Physiology and COREQUISITES: 10514174 OT Performance Skills, 10514175 Psychosocial Practice, 10514176 OT Theory and Practice, and 10514178 Geriatric Practice.

10514179 Community Practice - Credits: 2
Examines the role of the OTA in the service delivery to individuals affected by mental health conditions. Provides opportunities to practice clinical management skills, continuous quality improvement measurement, and administrative concepts and procedures. Students create a professional development plan. PREREQUISITES: All required courses with a grade point of 2.0 or better and COREQUISITES: 10514186 OTA Fieldwork IIA or 10514187 OTA Fieldwork IIB.

10514180 OT Practice and Management - Credits: 2
Provides opportunities to practice clinical management skills, continuous quality improvement measurement, and administrative concepts and procedures. Students create a professional development plan. PREREQUISITES: All required courses with a grade point of 2.0 or better and COREQUISITES: 10514186 OTA Fieldwork IIA or 10514187 OTA Fieldwork IIB.

10514181 OTA Fieldwork I - Credits: 2
Explores classroom theory and practice into a Fieldwork Level I experience. Provides experiences to assist in the development of communication, professional and observational skills. PREREQUISITES: 10514174 OT Performance Skills, 10514175 Psychosocial Practice, 10514176 OT Theory and Practice, 10514177 Assistive Technology and Adaptations, and 10514178 Geriatric Practice and COREQUISITES: 10514179 Community Practice, 10514182 Physical Rehabilitation Practice, and 10514183 Pediatric Practice.

10514182 Physical Rehabilitation Practice - Credits: 3
Explores interventions relative to major pediatric diagnoses seen in OT practice. Evaluation, treatment interventions, and documentation are emphasized relative to the biomechanical, neurodevelopmental, and rehabilitative approaches to practice. PREREQUISITES: 10514174 OT Performance Skills, 10514175 Psychosocial Practice, 10514176 OT Theory and Practice, 10514177 Assistive Technology and Adaptations, and 10514178 Geriatric Practice and COREQUISITES: 10514179 Community Practice, 10514183 Pediatric Practice, and 10514184 OTA Fieldwork I.

10514183 Pediatric Practice - Credits: 3
Explores interventions relative to major pediatric diagnoses seen in OT practice. Evaluation, treatment interventions, and documentation are emphasized relative to the biomechanical, neurodevelopmental, and rehabilitative approaches to practice. PREREQUISITES: 10514174 OT Performance Skills, 10514175 Psychosocial Practice, 10514176 OT Theory and Practice, 10514177 Assistive Technology and Adaptations, and 10514178 Geriatric Practice and COREQUISITES: 10514179 Community Practice, 10514182 Physical Rehabilitation Practice, 10514184 OTA Fieldwork I, and 10809188 Developmental Psychology.

10514184 OTA Fieldwork II - Credits: 2
Integrates classroom theory and practice into a Fieldwork Level II experience. Provides experiences to assist in the development of communication, professional and observational skills. PREREQUISITES: 10514174 OT Performance Skills, 10514175 Psychosocial Practice, 10514176 OT Theory and Practice, 10514177 Assistive Technology and Adaptations, and 10514178 Geriatric Practice and COREQUISITES: 10514179 Community Practice, 10514182 Physical Rehabilitation Practice, and 10514183 Pediatric Practice.

10514185 OT Practice and Management - Credits: 2
Provides opportunities to practice clinical management skills, continuous quality improvement measurement, and administrative concepts and procedures. Students create a professional development plan. PREREQUISITES: All required courses with a grade point of 2.0 or better and COREQUISITES: 10514186 OTA Fieldwork IIA or 10514187 OTA Fieldwork IIB.

10514186 OTA Fieldwork IIA - Credits: 5
Develop skills and behaviors necessary for entry-level occupational therapy assistant practice. Provides a different clinical practice setting than OTA Fieldwork IIB. PREREQUISITES: All required courses with a grade point of 2.0 or better and COREQUISITES: 10514183 OT Practice and Management and 10514187 OTA Fieldwork IIB.

10514187 OTA Fieldwork IIB - Credits: 5
Develop skills and behaviors necessary for entry-level occupational therapy assistant practice. Provides a different clinical practice setting than OTA Fieldwork IIA. PREREQUISITES: All required courses with a grade point of 2.0 or better and COREQUISITES: 10514183 OT Practice and Management and 10514186 OTA Fieldwork IIA.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>22</th>
<th>Number employed</th>
<th>17</th>
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<tbody>
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<td>Employed in related field</td>
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<td>Average yearly salary</td>
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Office Support Specialist
31-106-8 Technical Diploma

Program Overview
The Office Support Specialist program prepares students for employment in the rapidly changing field of office technology. Students will become skilled in human relations, customer service, and communication. The ability to work independently, as well as in a team environment will be emphasized. Students will become proficient in various computer applications necessary to work in today's electronic office. This program is offered with a career ladder approach and can be used to advance into the Administrative Professional program.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Office Support Specialist students should:
• Be focused and detail oriented
• Be problem solvers
• Be able to follow instructions and established procedures
• Enjoy working in an office environment
• Be able to communicate effectively
• Be able to adapt to change
• Use good time management

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Keyboarding
• Basic computer skills
• English/Basic Grammar
• Accounting
• General Math

Key to the student's success in this program is attentiveness to detail and effective human relations skills.

Program Outcomes
Future employers will expect Office Support Specialist graduates to be able to:
• Demonstrate effective workplace communications
• Apply technology skills to business and administrative tasks
• Perform routine administrative procedures
• Manage administrative projects
• Model professionalism in the workplace

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Office Support Specialist graduates are in demand because they know how to operate today's high-tech office equipment. Positions available after graduation include:
• Office Support Specialist
• Receptionist/Secretary
• Data Entry Operator
• Customer Service Representative

Curriculum

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<thead>
<tr>
<th>Number</th>
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<th>Credits</th>
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<td>10103106</td>
<td>MS PowerPoint</td>
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<tr>
<td>10103125</td>
<td>MS Outlook</td>
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<td>10103146</td>
<td>MS Word A</td>
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<tr>
<td>10103147</td>
<td>MS Word B ▲</td>
<td>1</td>
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<td>MS Word C ▲</td>
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<tr>
<td>10103151</td>
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<td>10103162</td>
<td>MS Access A</td>
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<td>10105115</td>
<td>Professional Profile</td>
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<td>10106110</td>
<td>Document Formatting</td>
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<td>10106139</td>
<td>Administrative Office Procedures</td>
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<td>10106146</td>
<td>Proofreading for the Office</td>
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Program Requirements
34

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
• See pages 41-43 for course descriptions.
### Programs and Course Descriptions

(See pages 41-43 for General Studies course descriptions)

**10101176 Financial Accounting 1A - Credits: 2**

This is a basic accounting course for non-accounting program students. The scope of study focuses on an introduction to business and accounting, analyzing and recording accounting transactions, preparing the adjusting process, and completing the accounting cycle. Understanding is based both on theory and application.

**10103106 MS PowerPoint - Credits: 1**

A complete presentation graphics course that allows you to produce professional-looking presentations. It gives you the flexibility to make informal presentations using overhead transparencies, electronic presentations, formal presentations using 35mm slides, or virtual presentations. Additionally, you can create paper printouts, outlines, speaker notes, and audience handouts.

**10103125 MS Word A - Credits: 1**

This course introduces the basics of Microsoft Word. Participants will use e-mail, calendar, files, and other features to effectively manage business and personal information.

**10106139 MS Word B - Credits: 1**

Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

**10106147 MS Word C - Credits: 1**

Students will learn word processing using MS Word. Credit B activities include tables, mail merge, sort, graphics, and special features of MS Word. COREQUISITE: 10103146 MS Word A.

**10101351 MS Excel A - Credits: 1**

Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

**10103142 MS Access A - Credits: 1**

Learners create, edit, sort, and query a database. They also learn how to create and print basic forms and reports.

**10105115 Professional Profile - Credits: 1**

The purpose of this course is to strengthen the professional image. Students begin to develop self-awareness of elements affecting their personal and work relationships. Guidelines for determining appropriate grooming, dress, and poise will be covered. Personal life management along with career/life goal setting will be reinforced. This class should be taken in the last semester of the program.

**10106110 Document Formatting - Credits: 2**

This hands-on course covers formatting styles of business letters, business and academic reports, memos, tables, and business documents. The course also includes drill work for improving keying speed and accuracy. Students should be able to key 40 words per minute.

**10106139 Administrative Office Procedures - Credits: 3**

This course is designed to develop professional skills and attitudes needed in today's global business environment. Topics include making ethical decisions, working independently and as a team member, and managing time. Telecommunications, mail processing, travel arrangements and conferences, public relations, and ergonomics will be included. Previous word processing and proofreading experience is recommended.

**10106146 Proofreading for the Office - Credits: 3**

This course provides the learner with techniques used in proofreading office documents from both hard and soft copy (computer screen). Learners will incorporate the use of office reference manuals. This project-based course uses individual and group activities as well as in-class and out-of-class work.

**10106165 Information Management - Credits: 2**

This course will include coverage of the different indexing systems (alphabetic, numeric, subject, geographic, and chronological) as well as an overview of the entire records management function -- planning, designing, classifying, controlling, and evaluation. Electronic filing methods are utilized at locations where equipment is available.

**10106167 Computer and Business Technologies - Credits: 1**

Learners will gain knowledge on computer hardware, basic computer operations, and the operating system. An emphasis will be placed on file/document management in a network environment and on a standalone personal computer. Learners will become familiar with the World Wide Web by accessing the Internet through browser software. Learners will use e-mail and learn how to communicate properly through e-mail and optional online vehicles. Learners will use search engines/databases for research purposes and proper validation techniques.

**10804123 Math with Business Applications - Credits: 3**

This course integrates algebraic concepts, proportions, percents, simple interest, compound interest, annuities, and basic statistics with business/consumer scenarios. It also applies math concepts to the purchasing/buying and selling processes. PREREQUISITE: Successful scores on placement test or 10834109 Pre-Algebra.

Gainful employment information is available at this link: [http://www.witc.edu/pgmpages/offsup/career.htm](http://www.witc.edu/pgmpages/offsup/career.htm). This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

### Graduate Employment Information

(WITC Graduate Survey Responses 2012-2013; for most recent data, go to [witc.edu](http://www.witc.edu))

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[800.243.9482](tel:800.243.9482)  [witc.edu](http://www.witc.edu)  2015-2016
Program Overview

The Paramedic Technician program offers students the opportunity to further their professional EMS careers by pursuing a two-year associate degree, which includes general studies courses. The program is based upon the U.S. DOT Administration/Wisconsin Bureau of Local Health Support and EMS Curriculum - Paramedic Technician Curriculum. Students are prepared with the knowledge and skills to work competently as an EMT-Paramedic. The program consists of classroom lectures, practical skills labs, laboratory simulations, and hospital and pre-hospital clinical experiences. Additional certifications in Advanced Cardiac Life Support, Pre-Hospital Trauma Life Support, and Pediatric Advanced Life Support are offered, as well as neonatal advanced life support competencies. Students who successfully complete the program are eligible to take the National Registry of EMT's written and practical examinations for paramedic level of certification.

The technical studies 531 courses will be scheduled over a one-year period. Students are required to complete Medical Terminology and all General Studies courses either prior to the 531 technical studies coursework or following completion of the 531 technical studies coursework. It is recommended this additional coursework be completed prior to the 531 technical studies coursework. Students in this program must be dual enrolled in the EMT-Paramedic program.

Special Features

• Core lecture coursework will be offered via ITV (interactive television) on four evenings per week to all campus locations and the Hayward Outreach Center (days and originating site to be determined)
• On-site skills labs will be scheduled every other Saturday at the Rice Lake Campus

Career Pathway Options

A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry certifications and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Paramedic Technician two-year Associate Degree includes an embedded technical diploma option as documented below:

• 31-531-1 EMT - Paramedic (page 90)

Admission Requirements

Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Have earned a high school diploma or GED certificate; current high school seniors must provide documentation upon graduation
• Complete current “CPR for Healthcare Providers” certification
• Provide proof of current Wisconsin licensure with a completed EMT Proof of Licensure and Statement of Understanding Form
• Review and sign Caregiver Background Check and/or Criminal History Record check Statement of Understanding
• Review and sign the Functional Ability Statement of Understanding
• Complete one year of high school or one term of college-level chemistry with a 2.0 or better
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirements

In order to be admitted to the program, the student must:
• Attend a mandatory program orientation session
• Pass a physical exam, have current immunizations, and demonstrate negative status for tuberculosis (Tb)
• Have acceptable results based on the Wisconsin Criminal History Record Check, Wisconsin Caregiver Background Check, Minnesota Caregiver Background Check (if applicable), and/or other states if applicable

Student Profile

Paramedic Technician students should be able to:
• Think critically
• Adjust to diverse personalities and backgrounds
• Work well under stressful situations
• Have good reasoning skills
• Communicate effectively in writing and verbally
• Be detail oriented and accurate
• Be flexible and empathetic
• Handle emotional situations
• Have good physical stamina
• Lift 125 pounds (250 pounds with assistance)
• Perform well and make decisions under stress
• Deal with adverse social situations involving the location of the emergency
• Work modified shifts up to 24 hours in length
• Have good coordination and balance
• Be self-confident

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:
• Chemistry
• Health
• First Aid/CPR
• Physical Education
• Psychology
• Biology/Physiology
• English/Grammar
• Speech
• Business English
• Basic Math

Program Outcomes

Employers will expect graduates of this program to be able to:
• Prepare for incident response and EMS operations
• Integrate pathophysiologic principles and assessment findings to provide appropriate patient care
• Demonstrate paramedic skills associated with established standards and procedures for a variety of patient encounters
• Communicate effectively with others
• Demonstrate professional behavior
• Meet state and national competencies listed for paramedic certification(s)

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism.

See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Graduates of the program will be ready to start their career as paramedic technicians in a variety of healthcare settings including:
• Ambulance services
• Dispatch centers
• First responder units
• Hospitals/Emergency Departments
• Industrial Safety Departments
• Rescue squads
• Urgent care facilities

Curriculum

Number Course Title Credits

Technical Studies Courses

10501101 Medical Terminology 3
10531911 EMS Fundamentals ▲ 2
10531912 Paramedic Medical Principles ▲ 4
10531913 Adv. Patient Assessment Principles ▲ 3
10531914 Adv. Pre-hospital Pharmacology ▲ 3
10531915 Paramedic Respiratory Management ▲ 2
10531916 Paramedic Cardiology ▲ 4
10531917 Paramedic Clinical/Field 1 ▲ 3
10531918 Advanced Emergency Resuscitation ▲ 1
10531919 Paramedic Medical Emergencies ▲ 4
10531920 Paramedic Trauma ▲ 3
10531921 Special Patient Populations ▲ 3
10531922 EMS Operations ▲ 1
10531923 Paramedic Capstone ▲ 1
10531924 Paramedic Clinical/Field 2 ▲ 1
10804138 Math for Health Professionals ▲ 2

General Studies Courses

10801195 Written Communication ▲ 3
10801196 Oral/Interpersonal Communication or ▲ 3
10801197 Technical Reporting or ▲ 3
10801198 Speech ▲ 1
10806177 General Anatomy and Physiology ▲ 4
10806178 Advanced Anatomy and Physiology ▲ 4
10806197 Microbiology ▲ 4
10809196 Introduction to Sociology ▲ 3
10809172 Introduction to Diversity Studies ▲ 3
10809198 Introduction to Psychology ▲ 3

Program Requirements

67

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
* These courses will be offered in various regional hospitals and clinical settings.

Students must earn a grade point of 2.0 or better in all required courses.
10531911
**EMS Fundamentals - Credits: 2**
This course provides the paramedic student with comprehensive knowledge of EMS systems, safety, well-being, legal issues, and ethical issues, with the intended outcome of improving the health of EMS personnel, patients, and the community. The students will obtain fundamental knowledge of public health principles and epidemiology as related to public health emergencies, health promotion, and illness/injury prevention. Introducing students to comprehensive anatomical and medical terminology and abbreviations will foster the development of effective written and oral communications with colleagues and other health care professionals. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531912
**Paramedic Medical Principles - Credits: 4**
This course addresses the complex depth of anatomy, physiology, and pathophysiology of major human systems while also introducing the paramedic students to the topics of shock, immunology, and bleeding. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531913
**Adv. Patient Assessment Principles - Credits: 3**
This course teaches the paramedic student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. By utilizing a structured and organized assessment process with knowledge of anatomy, physiology, pathophysiology, life span development, and changes that occur to the human body with time, the students will learn to develop a list of differential diagnoses through clinical reasoning, along with the ability to modify the assessment as necessary to formulate a treatment plan for their patients. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531914
**Adv. Pre-Hospital Pharmacology - Credits: 3**
This course provides the paramedic student with the comprehensive knowledge of pharmacology required to formulate and administer a pharmaceutical treatment plan intended to mitigate emergencies and improve the overall health of the patient. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531915
**Paramedic Respiratory Management - Credits: 2**
This course teaches the paramedic student to integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan, with the goal of assuring a patient airway, adequate mechanical ventilation, and respiration for patients of all ages. Specific knowledge pertaining to the respiratory system is also provided to ensure the student is prepared to formulate a field impression and implement a comprehensive treatment plan for a patient with a respiratory complaint. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531916
**Paramedic Cardiology - Credits: 4**
This course teaches the paramedic student to integrate assessment findings with principles of cardiovascular anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a cardiovascular complaint. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531917
**Paramedic Clinical/Field 1 - Credits: 3**
This course provides the student with the opportunity to enhance his or her learning through the practice of paramedicine in field and health care environment experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531918
**Advanced Emergency Resuscitation - Credits: 1**
By teaching Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) methodologies and protocols, this course prepares the paramedic student in the integration of comprehensive knowledge of causes and pathophysiology into the management of shock, respiratory failure, respiratory arrest, cardiac arrest, and peri-arrest states with an emphasis on early intervention to prevent respiratory and cardiac arrest if possible. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531919
**Paramedic Medical Emergencies - Credits: 4**
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a medical complaint. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531920
**Paramedic Trauma - Credits: 3**
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for an acutely injured patient. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531921
**Special Patient Populations - Credits: 3**
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for patients with special needs. Gynecological emergencies, along with special considerations in trauma are also included within this course. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531922
**EMS Operations - Credits: 1**
This course provides the paramedic student with the knowledge of operational roles and responsibilities to ensure patient, public, and EMS personnel safety. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531923
**Paramedic Capstone - Credits: 1**
This course provides the student with a final opportunity to incorporate their cognitive knowledge and psychomotor skills through labs and scenario-based practice and evaluations prior to taking the National Registry written and practical examinations. Technical skills attainment (TSA) for each student will be compiled and/or documented within this course as required by the DHS-approved paramedic curriculum. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.

10531924
**Paramedic Clinical/Field 2 - Credits: 4**
This course provides the student with the opportunity to enhance his or her learning through the practice of paramedicine in field and health care environment experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course. Successful completion of this course requires the student to meet all clinical and field competency requirements at the paramedic level as defined by WI DHS EMS. PREREQUISITE: Emergency Medical Technician - Paramedic (315311) or Paramedic Technician AAS (105311) program admission.
Residential Construction and Cabinetmaking
32-410-2 Technical Diploma

Program Overview
The Residential Construction and Cabinetmaking program will provide students with the knowledge and skills necessary for job success in the construction industry. Students will learn the fundamentals of building design, energy efficiency concepts, construction, layout operation, related mathematics, print reading, estimating, cabinet design, and materials of industry. Students will use the hand and power tools that are commonly used in construction and fabrication to assemble wood products and to build a house.

Curriculum

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<tr>
<th>Number</th>
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<td>Advanced Construction Framing (WBL) ▲</td>
<td>5</td>
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<td>CNC Machine Operation ▲</td>
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<td>32410326</td>
<td>Site Surveying</td>
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<td>Building Materials Estimating ▲</td>
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Program Outcomes
Employers will expect Residential Construction and Cabinetmaking graduates to be able to:
- Read and interpret construction prints
- Follow standard safety procedures while operating and maintaining woodworking machines
- Interpret building codes
- Design residential plans and manufacture related projects using CNC/CAD and traditional formats
- Estimate building material costs from plans
- Survey building sites
- Construct light frame structures while demonstrating safe work practices
- Use critical-thinking skills to solve construction and manufacture-related problems
- Demonstrate applications of woodworking and joinery

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Typical positions available after graduation include:
- Carpenter (Construction)
- Woodworking Machine Operator
- Furniture Finisher
- Millperson
- Machine Setup Person
- Cabinetmaker
- Wood Machinist
- Salesperson
- Estimator
- Draftsperson
- Material Handling Specialist

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Machine Shop Practices
- Woodworking
- Cabinetmaking
- Wood Turning and Pattern Making
- Basic Math
- Print Reading
- Architectural Drawing

Program Requirements
65

Special Feature
This is a unique two-year program in the state that combines cabinetry and residential construction.
Second-year students build a custom home as a capstone project.

Admission Requirements
Students in this program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
Residential Construction and Cabinetmaking students should be able to:
- Move arms, hands, and fingers rapidly and accurately
- Visualize forms and shapes from sketches
- Organize work
- Stand for long periods of time
- Lift 50 pounds
- See variations in wood color
- Work with wood dust
- Perform basic arithmetic and measuring
- Work well with others
- Work carefully and safely
- Enjoy working with machinery
- Assume responsibility for their work

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Machine Shop Practices
- Woodworking
- Cabinetmaking
- Wood Turning and Pattern Making
- Basic Math
- Print Reading
- Architectural Drawing

Campus:
Rice Lake

Wisconsin Indianhead Technical College

Financial Aid Eligible
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

32410300
Cabinet and Furniture Making 1 - Credits: 5
This is a lab/shop/theory application. This course covers the basics of cabinet and furniture construction. Fundamental machine operations and safety rules are taught. The students are required to construct, by approved machine methods, the common joints used in good construction. The study of wood and other materials, hand tools and bench work, shop drawing, design, and layout are a part of the basic course.

32410302
Cabinet and Furniture Making 2 - Credits: 5
This is a lab/shop applications course. The student will be involved in projects according to his/her abilities to provide practical application of the operations learned. COREQUISITE: 32410300 Cabinet and Furniture Making 1.

32410303
Construction Framing 1 - Credits: 4
This is a lab/shop applications course that runs concurrently with and companion to Construction Framing 2. This course covers the operations required in building layout, installation of concrete and masonry, and the framing of floors and walls to meet Wisconsin State Code. Competencies are learned through actual hands-on applications. PREREQUISITES: 32410302 Cabinet and Furniture Making 2, 32410339 Print Reading for Building Construction, and 32804355 Math 355.

32410304
Advanced Construction Framing (WBL) - Credits: 5
This is a lab/shop/theory application. This course provides instruction in current application techniques of various building materials as applied to construction work on residential/light commercial buildings. The course of study encompasses the procedures of appropriate safe skills and knowledge required to construct/install rafters, roofing, flooring, siding, insulations, stairs, platforms, decks, floor coverings, wall coverings, and related materials. PREREQUISITE: 32410315 Construction Framing 2.

32410320
CNC Machine Operation - Credits: 2
This course introduces the student to the development and editing of CNC programs. The basic elements of CNC machine setup and operation are covered for the production of acceptable parts. Safety concerns are also addressed. PREREQUISITE: 32804365 Math 365.

32410326
Site Surveying - Credits: 1
This course is designed to provide the student with the understanding of site plans, the recontouring of sites, the use of builder’s surveying equipment, and other related information. PREREQUISITES: 32410339 Print Reading for Building Construction and 32804355 Math 355.

32410329
Building Materials Estimating - Credits: 3
This course introduces the student to the basic methods of estimating and develops a system for doing quantity surveys. The course also prepares the student to make some of the kinds of estimates that are commonly used in architecture and building construction. PREREQUISITES: 32410333 Drafting for Carpentry 2 and 32804355 Math 355 or equivalent.

32410332
Drafting for Carpentry 1 - Credits: 5
This course introduces students to the subject of residential design and construction. The problems faced by builders and designers before actual construction begins are emphasized. Students complete a series of detail drawings to acquaint them with the materials used and the methods of fabrication in sketching, lettering, line weights, and use of the scale are stressed. Standard house plans are utilized to acquaint the student with the drawings used in home construction. Students are also introduced to state, federal, and local codes. PREREQUISITE: 32410339 Print Reading for Building Construction.

32410333
Drafting for Carpentry 2 - Credits: 5
This course introduces students to the subject of residential design and construction. The problems faced by builders and designers before actual construction begins are emphasized. Students complete a series of detail drawings to acquaint them with the materials used and the methods of fabrication. Emphasis is placed on building terminology and learning conventional techniques of communicating building methods from the designer to the builder. Students learn to visualize the structure and to interpret elevations, plan views, details, and sections from drawings. They also learn to read and interpret building specifications.

32410334
Production Cabinetmaking 1 - Credits: 5
This is a lab/shop/theory application that deals with finishing and fine tolerances of the construction trade. Hands-on techniques of hanging and trimming doors and windows, installing trim and molding, hanging drywall, and other wall finishes are covered. PREREQUISITE: 32410302 Cabinet and Furniture Making 2.

32410335
Production Cabinetmaking 2 - Credits: 5
This is a lab/shop/theory application that deals with finishing and fine tolerances of the construction trade. Hands-on techniques of installing trim and molding, and designing and building cabinets are covered. PREREQUISITE: 32410302 Cabinet and Furniture Making 2 and COREQUISITE: 32410334 Production Cabinetmaking 1.

32410339
Print Reading for Building Construction - Credits: 2
This course provides instruction in reading and interpreting shop drawings, residential drawings, and commercial building plans. Emphasis is placed on building terminology and learning conventional techniques of communicating building methods from the designer to the builder. Students learn to visualize the structure and to interpret elevations, plan views, details, and sections from drawings. They also learn to read and interpret building specifications.

32410353
Construction Framing 2 - Credits: 4
This is a lab/theory course that runs concurrently with and companion to Construction Framing 1. This course covers the operations required in building layout and the framing of floors, walls, roofs, and stairs. The student will be introduced to the use of models and perspective drawings in selecting a design to a client. UC regulations are stressed throughout the drawings. PREREQUISITE: 32410332 Drafting for Carpentry 1.

Gainful employment information is available at this link: http://www.witc.edu/residential-construction/. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

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Program Overview
The Supervisory Management program is designed for people who are, or plan to be, supervisors and leaders in the workplace. The program will upgrade leadership and management skills and increase the student's ability to handle day-to-day employee issues common in supervisory or management positions. In addition, the program will prepare the non-experienced lead person for a supervisory role. Students will learn how to introduce new skills that will improve productivity, quality, human relations, and communication. The program is primarily designed for working adults, with courses scheduled on evenings and weekends.

Special Feature
An accelerated learning (ACCEL) option is available at Ashland, New Richmond, Rice Lake, and Superior and the outreach centers of Hayward and Ladysmith.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Program-Specific Requirement
• Attend orientation with Supervisory Management faculty

Student Profile
Supervisory Management students should be able to:
• Make judgments and decisions
• Communicate ideas verbally and in writing
• Learn new methods/concepts
• Assume responsibility
• Get along well with people
• Work under pressure and with multiple distractions
• Have basic computer and math skills
• Learn through a variety of delivery methods

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Business Math
• Computer skills
• Keyboarding
• Communications
• 2-3 years of relevant work experience is recommended

Program Outcomes
Employers will expect graduates to be able to:
• Utilize quality strategies and tactics
• Apply effective leadership skills
• Apply human resources policies and procedures
• Perform supervisory management functions to achieve organizational objectives
Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Supervisory Management students are usually employed in a variety of businesses and industries when they enroll. This program provides students with the opportunity to upgrade their leadership and management skills in preparation for a supervisory position or for support in their present position. Typical career options after graduation include:
• Supervisor
• Manager
• Team Leader
• Group Leader
• Department Head
• Coach
• Mentor

Curriculum

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<td>Legal Issues for Supervisors</td>
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</tr>
<tr>
<td>10196136</td>
<td>Safety in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>10196145</td>
<td>Contemporary Business for Supervisors</td>
<td>2</td>
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<tr>
<td>10196164</td>
<td>Personal Skills for Supervisors</td>
<td>3</td>
</tr>
<tr>
<td>10196168</td>
<td>Organizational Development</td>
<td>3</td>
</tr>
<tr>
<td>10196169</td>
<td>Diversity and Change Management</td>
<td>3</td>
</tr>
<tr>
<td>10196170</td>
<td>Applied Supervision</td>
<td>2</td>
</tr>
<tr>
<td>10196188</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>10196189</td>
<td>Team Building and Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>10196190</td>
<td>Leadership Development</td>
<td>3</td>
</tr>
<tr>
<td>10196191</td>
<td>Supervision</td>
<td>3</td>
</tr>
<tr>
<td>10196192</td>
<td>Managing for Quality</td>
<td>3</td>
</tr>
</tbody>
</table>

General Studies Courses

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1009195</td>
<td>Written Communication ▲</td>
<td>3</td>
</tr>
<tr>
<td>1009198</td>
<td>Speech or</td>
<td>3</td>
</tr>
<tr>
<td>1004123</td>
<td>Math with Business Applications ▲</td>
<td>3</td>
</tr>
<tr>
<td>1009122</td>
<td>Introduction to American Government or</td>
<td>3</td>
</tr>
<tr>
<td>1009172</td>
<td>Introduction to Diversity Studies</td>
<td></td>
</tr>
<tr>
<td>1009195</td>
<td>Economics</td>
<td>3</td>
</tr>
<tr>
<td>1009196</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>1009198</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

ELECTIVES 2

PROGRAM REQUIREMENTS 66

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
▲ See pages 41-43 for course descriptions.
10196190 Leadership Development - Credits: 3
In Leadership Development, the learner applies the skills and tools necessary to fulfill his/her role as a modern leader. Each learner will demonstrate the application of evaluating leadership effectiveness and organization requirements, individual and group motivation strategies, implementing mission and goals, ethical behavior, personal leadership style and adaptation, impacts of power, facilitating employee development, coaching, managing change, and effective conflict resolution.

10196191 Supervision - Credits: 3
In Supervision, the learner applies the skills and tools necessary to perform the functions of a frontline leader. Each learner will demonstrate the application of strategies and tools to a contemporary supervisory role including day-to-day operations, analysis, delegation, controlling, staffing, leadership, problem solving, team skills, motivation, and training.

10801195 Written Communication - Credits: 3
Develops writing skills which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize resources, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through the analysis of a variety of written documents. PREREQUISITE: Successful scores on placement test or 10831103 Intro to College Writing.

10801198 Speech - Credits: 3
Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of the course.

10801196 Oral/Interpersonal Communication - Credits: 3
Focuses upon developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects.

10891198 Introduction to Psychology - Credits: 3
This introductory course in psychology is a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, biological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings.

10196134 Legal Issues for Supervisors - Credits: 3
Provides an overview of the general legal responsibilities of an organization. Analyzes the current employment laws in the U.S. and their impact on employer/employees. Examines the supervisor's role in dealing with harassment in the workplace. Compares how appeals can be addressed in both union and nonunion environment.

10196100 Human Resource Management - Credits: 3
In Human Resource Management, the learner applies the skills and tools necessary to effectively value and apply employees' abilities and needs to organization goals. Each learner will demonstrate the application of the supervisor's role in contemporary human resources management, impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies and procedures, training and development, employee counseling and development, and effective use of compensation and benefit strategies. It is recommended that the learner have experience using a PC/MAC, using the MS Windows operating systems and software suite, browsing Web pages, downloading files, using e-mail, and exchanging files prior to enrolling in this course.

10196168 Organizational Development - Credits: 3
In Organizational Development, the learner applies the skills and tools necessary to effectively deal with organization behavior and change. Each learner will demonstrate the application of the impacts of globalization on an organization, dealing with organization culture, dealing with change and future challenges affecting the total organization, organization decision making, vision, goals, performance management and planning, and the role of organization structure.

10196169 Diversity and Change Management - Credits: 3
Addresses changes taking place in the workforce and their effect on the supervisor and the organization. Explores a broadened view of diversity, including values, age, gender, disabilities, education, and culture. Provides an action framework for the supervisor to gain advantage by blending and capitalizing on the different skills and perspectives of people and creating an organization where everyone gives his or her best.

10101176 Financial Accounting 1A - Credits: 2
This is a basic accounting course for non-accounting program students. The scope of study focuses on introduction to business and accounting, analyzing and recording accounting transactions, performing the adjusting process, and completing the accounting cycle. Understanding is based both on theory and application.

10196108 Customer Service - Credits: 1
This course examines customer service as it relates to organizational quality. It addresses service models for internal and external customers, and systems and strategies applied to customer service, and tools and techniques for gathering customer feedback and handling complaints.

10196136 Safety in the Workplace - Credits: 3
An introduction to safety and loss prevention in the workplace with an emphasis on the supervisor's role for maintaining a safe, productive environment. Students will study safety concepts, hazard controls, developing safety and health programs, and federal- and state-mandated regulations.

10196145 Contemporary Business for Supervisors - Credits: 2
In this course, you will review how the basic management styles affect the people, processes, and profitability of a business. You will also learn how to balance the organization's needs for profits with employees' basic needs within a global context. You will review and study the basic concepts and the supervisor's role regarding return on investment, return on equity, profit centers, financial statements, and overall departmental operations.

10196170 Applied Supervision - Credits: 2
This course emphasizes application of advanced principles of supervision and project management. These principles include planning and organizing; implementing and control; and assessment. Learners are provided the opportunity to design and complete supervisory projects. Beginning with the fundamentals and extending to application, this course allows learners to undertake improvement projects within their workplace. PREREQUISITE: Students must be enrolled in the Supervisory Management program and have completed 40 credits.

10196188 Project Management - Credits: 3
In Project Management, the learner applies the skills and tools necessary to design, implement, and evaluate formal projects. Each learner will demonstrate the application of the role of project management, developing a project proposal, use of relevant software, working with project teams, sequencing tasks, charting progress, dealing with variations, budgets and resources, implementation, and assessment.

10103106 MS PowerPoint - Credits: 1
A complete presentation graphics course that allows you to produce professional-looking presentations. It gives you the flexibility to make informal presentations using overhead transparencies, electronic presentations, formal presentations using 35mm slides, or virtual presentations. Additionally, you can create paper printouts, outlines, speaker notes, and audience handouts.

10103146 MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103151 MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10196164 Personal Skills for Supervisors - Credits: 3
In Personal Skills for Supervisors, the learner applies the skills and tools necessary to deal with the time management, stress, and related challenges to a supervisor. Each learner will demonstrate the application of time management techniques, personal planning, continuous learning, valuing rights and responsibilities of others, effective communication, assertiveness, and dealing effectively with stress.

10196189 Team Building and Problem Solving - Credits: 3
In Team Building and Problem Solving, the learner applies the skills and tools necessary to facilitate problem solving in a team environment. Each learner will demonstrate the application of the benefits and challenges of group work, necessary roles in a team, stages of team development, different approaches to problem solving, consensus, systematic process of problem definition, data acquisition, analysis, developing alternative solutions, solution implementation, evaluation, and documentation.

10196192 Managing for Quality - Credits: 3
In Managing for Quality, the learner applies the skills and tools necessary to implement and maintain a continuous improvement environment. Each learner will demonstrate the application of a personal philosophy of quality, identifying all stakeholder relationships, meeting/exceeding customer expectations, a system-focused approach, using appropriate models and tools, managing a quality improvement project, and measuring effectiveness of continuous improvement activities.

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Graduate Employment Information
(2012-2013; for most recent data, go to wtc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of responses</td>
<td>18</td>
</tr>
<tr>
<td>Number available for employment</td>
<td>15</td>
</tr>
</tbody>
</table>

**Number employed** 14
**Percent employed** 93%
**Range of yearly salary** $23,710-$39,621
**Average yearly salary** $28,515

800.243.9482 wtc.edu 2015-2016
Program Overview
The Welding program will provide students with the skills and knowledge identified by the American Welding Society Skill Standards. They will be taught welding skills and theory, fabrication, layout, print reading, welding symbols, math, and welding codes.

Career Pathway Options
A career pathway is a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. The Welding one-year technical diploma includes a series of five embedded short-term technical diplomas as documented below:
- 30-442-2 Welding/Maintenance and Fabrication
- 30-442-4 Shielded Metal Arc Welding (SMAW)
- 30-442-5 Gas Metal Arc Welding (GMAW)
- 30-442-6 Flux Cored Arc Welding (FCAW)
- 30-442-7 Gas Tungsten Arc Welding (GTAW)

Admission Requirements
Students in this program must:
- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete admissions interview with WITC counselor (above requirements should be completed prior to interview)

Student Profile
Welding students should:
- Enjoy working with their hands
- Be able to use independent judgment
- Be able to visualize objects from drawings
- Be able to organize work rapidly and perform repetitive tasks
- Be able to follow procedures carefully
- Be able to stand for long periods
- Be able to work in an industrial setting
- Be able to work well under pressure
- Be able to work with or without direct supervision

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Communications
- Drafting and Design
- Basic Math
- General Metals
- Machine Shop
- Welding
- Principles of Technology

Program Outcomes
Employers will expect the Welding graduate to be able to:
- Demonstrate industry-recognized safety practices
- Interpret welding drawings
- Produce shielded metal arc welds (SMAW)
- Produce gas metal arc welds (GMAW)
- Perform thermal cutting
- Produce gas tungsten arc welds (GTAW)
- Perform thermal cutting

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook
Almost 60 percent of the gross national product involves welding. The demand for welders continues to be very strong. Positions available after graduation include:
- Production Welder
- Construction Welder
- Maintenance Welder
- Welder/Fitter
- Welder Helper
- Welding Machine Operator
- Flame Cutter/Machine Operator

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>31442321</td>
<td>Print Reading - Welding Trades</td>
<td>2</td>
</tr>
<tr>
<td>31442325</td>
<td>Welding Fabrication/Production (WBL)</td>
<td>3</td>
</tr>
<tr>
<td>31442370</td>
<td>Gas Metal Arc Welding 1</td>
<td>3</td>
</tr>
<tr>
<td>31442371</td>
<td>Gas Metal Arc Welding 2</td>
<td>2</td>
</tr>
<tr>
<td>31442372</td>
<td>Gas Metal Arc Welding 3</td>
<td>1</td>
</tr>
<tr>
<td>31442373</td>
<td>Shielded Metal Arc Welding 1</td>
<td>3</td>
</tr>
<tr>
<td>31442374</td>
<td>Shielded Metal Arc Welding 2</td>
<td>2</td>
</tr>
<tr>
<td>31442375</td>
<td>Shielded Metal Arc Welding 3</td>
<td>2</td>
</tr>
<tr>
<td>31442376</td>
<td>Oxyfuel and Arc Cutting Processes</td>
<td>2</td>
</tr>
<tr>
<td>31442377</td>
<td>Flux Cored Arc Welding</td>
<td>2</td>
</tr>
<tr>
<td>31442378</td>
<td>Flux Cored Arc Welding 2</td>
<td>2</td>
</tr>
<tr>
<td>31442379</td>
<td>Gas Tungsten Arc Welding 1</td>
<td>2</td>
</tr>
<tr>
<td>31442380</td>
<td>Gas Tungsten Arc Welding 2</td>
<td>2</td>
</tr>
</tbody>
</table>

PROGRAM REQUIREMENTS 34

* Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
* See pages 41-43 for course descriptions.
Course Descriptions
(See pages 41-43 for General Studies course descriptions)

31442321
Print Reading - Welding Trades - Credits: 2
Orthographic projection, sketching, dimensioning, section and auxiliary views, structural shape identification, weld symbols, welding symbol nomenclature, welded joint geometry, metric conversion, and interpretation of fabrications from prints.

31442325
Welding Fabrication/Production (WBL) - Credits: 3
This course introduces the student to the basics of metal fabrication including the use of layout tools and principles, and blueprint interpretation. Also, weldment fit-up, tacking, distortion, and flame straightening are covered. The use of shears, drilling, taping, painting, and CNC cutting equipment for fabrication purposes is also covered. PREREQUISITES: 31442321 Print Reading - Welding Trades, 31442370 Gas Metal Arc Welding 1, 31442373 Shielded Metal Arc Welding 1, 31442374 Shielded Metal Arc Welding 2, 31442376 Oxyfuel and Arc Cutting Processes, and COREQUISITE: 31442375 Shielded Metal Arc Welding 3.

31442370
Gas Metal Arc Welding 1 - Credits: 3
This course introduces the student to the basics of GMAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques.

31442371
Gas Metal Arc Welding 2 - Credits: 2
This course introduces the student to the next level of GMAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques.

31442372
Gas Metal Arc Welding 3 - Credits: 1
This course introduces the student to an advanced level of GMAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques. COREQUISITE: 31442371 Gas Metal Arc Welding 2.

31442373
Shielded Metal Arc Welding 1 - Credits: 3
This course introduces the student to the basics of SMAW welding. It includes the study of the type of metals and equipment utilized when welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard welding techniques.

31442374
Shielded Metal Arc Welding 2 - Credits: 2
This course introduces the student to the next level of SMAW welding. It includes the study of the type of metals and equipment utilized when welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard welding techniques. COREQUISITE: 31442373 Shielded Metal Arc Welding 1.

31442375
Shielded Metal Arc Welding 3 - Credits: 2
This course introduces the student to an advanced level of SMAW welding. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard welding techniques. COREQUISITE: 31442374 Shielded Metal Arc Welding 2.

31442376
Oxyfuel and Arc Cutting Processes - Credits: 2
This course introduces the student to the basics of cutting and gouging operations. It includes the study of the common processes, techniques, and equipment utilized when cutting and gouging. The instruction emphasizes accepted applications in the use of carbon steel, stainless steel, and aluminum.

31442377
Flux Cored Arc Welding 1 - Credits: 2
This course introduces the student to the basics of FCAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques.

31442378
Flux Cored Arc Welding 2 - Credits: 2
This course introduces the student to the next level of FCAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques. COREQUISITE: 31442377 Flux Cored Arc Welding 1.

31442379
Gas Tungsten Arc Welding 1 - Credits: 2
This course introduces the student to the basics of GTAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques.

31442380
Gas Tungsten Arc Welding 2 - Credits: 2
This course introduces the student to the next level of GTAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing the standard industry techniques. COREQUISITE: 31442379 Gas Tungsten Arc Welding 1.

Gainful employment information is available at this link: http://www.witc.edu/pgmpages/welding/career.htm. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>53</th>
<th>Number employed</th>
<th>40</th>
<th>% employed in WITC district</th>
<th>62%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of responses</td>
<td>46</td>
<td>Percent employed</td>
<td>91%</td>
<td>Range of yearly salary</td>
<td>$27,038-$68,635</td>
</tr>
<tr>
<td>Number available for employment</td>
<td>44</td>
<td>Employed in related field</td>
<td>33</td>
<td>Average yearly salary</td>
<td>$40,329</td>
</tr>
</tbody>
</table>
Individualized Technical Studies
10-825-1 Associate Degree

Financial Aid Eligible

Program Overview
The associate degree in Individualized Technical Studies is designed for students who are looking for a specialized course of instruction that is not available in existing programs. The program allows the student to combine courses from two or more major areas of study into a unique associate degree. Students will be required to complete a program plan with WITC career counseling staff and identify their career objectives and the courses that will help them meet those objectives.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
The Individualized Technical Studies option is designed for students who:
• Are currently employed
• Are able to explain a specific career objective
• Would benefit from combining courses from two or more major areas
• Are seeking academic credit for work and/or other experience related to a career goal

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• High school diploma or GED
• Work experience

Program Outcomes
This unique degree will:
• Provide direction to the student in pursuit of specific occupational outcomes
• Allow students to meet individual career goals which cannot be achieved through enrollment in any single instructional program currently available at the college
• Meet the needs of students who want to pursue an Associate of Applied Science Degree on either a full- or part-time basis
• Help identify new and emerging occupations for new or modified programs

Career Outlook
This degree gives students the flexibility to meet the educational goals of new and emerging occupational fields. Employers also benefit from the flexible program that helps them meet their own specific employee training needs as new technologies and methods emerge in the business world.

Curriculum
Course Title Credits
General Studies Core 21-30
Communications 6
Social Science 3
Behavioral Science 3
Math and/or Science 3
Additional General Studies 6
(See list of General Studies courses on page 40.)

Individualized Technical Studies Courses 40

All students will be required to complete 40 credit hours of individualized technical studies and may utilize courses from all departments of the college. A minimum of 20 of these credits must be focused in one discipline. The selection of these courses must be relevant to the student's identified career goals and provide sufficient hours of concentration in one or two specific technical areas to ensure technical competence in achieving their occupational goals.

TOTAL PROGRAM CREDITS 61-70

Graduate Employment Information
(WITC Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

<table>
<thead>
<tr>
<th>Number of graduates</th>
<th>Number employed</th>
<th>% employed in WITC district</th>
<th>Range of yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>-%</td>
<td>$15,000*-70,000*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of responses</th>
<th>Percent employed</th>
<th>Average yearly salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>100%</td>
<td>$43,089*</td>
</tr>
</tbody>
</table>

Employed in related field 1

*Average yearly salary based on composite of graduates from Wisconsin's 16 technical college districts (including WITC graduates).
Program Overview
The apprenticeship associate degree in Technical Studies - Journeyworker is designed for students who are looking for a specialized course of instruction which is not available in existing programs. The program allows the student to receive advanced standing credit for previous apprenticeship work and then create a unique associate degree. Students will be required to complete a program plan with the apprenticeship dean and identify their career objectives and the courses that will help them meet those objectives.

Admission Requirements
Students in this program must:
• Complete application form and submit with fee (fee waiver may apply if previously submitted)
• Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
• Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile
The technical studies option is designed for students who have:
• Journey-Level certification from an apprenticeship program
• 400 hours of related instruction in the Wisconsin Technical College System

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• High school diploma or GED
• Work experience

Program Outcomes
This unique degree will:
• Provide direction to the student in pursuit of specific occupational outcomes
• Allow the student to meet individual career goals which cannot be achieved through enrollment in any single instructional program currently available at the college
• Meet the needs of students who want to pursue an Associate of Applied Science Degree on either a full- or part-time basis
• Help identify new and emerging occupations for new or modified programs

Career Outlook
The degree gives students the flexibility to meet the educational goals of new and emerging occupational fields. Employers also benefit from the flexible program that helps them meet their own specific employee training needs as new technologies and methods emerge in the business world.

Curriculum

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Studies Core</td>
<td>21</td>
</tr>
<tr>
<td>Communications</td>
<td>6</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>Math and/or Science</td>
<td>3</td>
</tr>
<tr>
<td>Additional General Studies</td>
<td>6</td>
</tr>
</tbody>
</table>

(See list of General Studies courses on page 40.)

Wisconsin Journey-Level Certificate Courses 39

Degree completion requirement: possess a Wisconsin Apprenticeship Completion Certificate issued by the Department of Workforce Development - Bureau of Apprenticeship Standards registered apprenticeship program that requires a minimum of 400 hours of related instruction in the Wisconsin Technical College System. The certificate will meet the 39-credit minimum Technical Studies requirement for the Associate of Applied Science degree.

TOTAL PROGRAM CREDITS 60

Graduate Employment Information
(WTCS Technical Studies - Journeyworker Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)
The information below is based on graduates’ responses from the following technical colleges within the Wisconsin Technical College System (WTCS) and does not include WITC graduates: Blackhawk Technical College, Chippewa Valley Technical College, Fox Valley Technical College, Madison Area Technical College, Milwaukee Area Technical College, Moraine Park Technical College, Northcentral Technical College, Waukesha County Technical College, and Western Technical College.

- Number of graduates 19
- Number of responses 13
- Number available for employment 11
- Number employed 11
- Percent employed 100%
- Employed in related field 9
- % employed in WITC district NA
- Range of yearly salary $32,246-$70,000
- Mean yearly salary $56,520

Graduate Employment Information (WTCS Technical Studies - Journeyworker Graduate Survey Responses 2012-2013; for most recent data, go to witc.edu)

800.243.9482  witc.edu  2015-2016

Programs and Course Descriptions
Certificate FAQs

Note: certificates are best when used in conjunction with a program or degree.

Q 1. How do students declare taking courses towards a certificate?

Students must complete an Application for Admission indicating the certificate they wish to work towards and turn it in to the Student Services office.

Q 2. Is there an application fee?

No, a fee is not required for declaring a certificate.

Q 3. Do students need to take an assessment before they are eligible to enroll in courses?

No, however, some individual courses may require an assessment for course placement.

Q 4. Will students be eligible for Financial Aid if enrolled in a certificate?

Certificates alone are not financial aid-eligible. However, students enrolled in a financial aid-eligible program with the same courses required for a certificate may be eligible to receive financial aid. Contact a campus financial aid advisor for more information.

Q 5. How do students know which courses to take?

The current course requirements for a certificate are found in this catalog as well as online at www.witc.edu/certificate. Click on the certificate title and then click “Curriculum.”

Q 6. How are students awarded a certificate when the required courses have been completed?

Students will need to complete an Intent to Graduate form and turn it in to the Student Services Office. This is the same form completed by degree-seeking students when they complete their degree coursework. There is no charge for Intent to Graduate forms for students seeking a certificate.

Q 7. Will students have an advisor?

Students enrolled for six or more credits will be assigned an advisor. Students should contact Student Services for advisor assignments.

Q 8. Can students enrolled in a certificate purchase software at student rates?

Yes, students currently enrolled at WITC are eligible to purchase software at student rates.

Q 9. Is there a grade point average (GPA) required for successful completion of a certificate?

Yes, a grade point average must be at least a 2.0 or a grade of “C” for the awarding of a certificate. Some certificates have higher requirements. For example, the Medical Transcription certificate requires a cumulative GPA of 3.0 or better. Check this catalog listing for specific requirements.

Q 10. Are certificates offered at WITC-Hayward and WITC-Ladysmith outreach centers?

Select certificate courses are offered at the WITC-Hayward and WITC-Ladysmith outreach centers. Please contact the outreach center manager for details.
Certificates

Whether learning new skills or upgrading existing ones, WITC offers a variety of short-term certificates and specialty courses that will prepare students for the competitive business world. Many certificates are available in a flexible format with delivery methods designed to fit a busy lifestyle.

Divisions add or discontinue certificates periodically. Curriculum may change at any time to assure that instruction is keeping pace with changing technology and workplace requirements. Please contact the Admissions office for information on current availability.

Certificate offerings vary by location; see certificate page for details. Select certificate courses are offered at the WITC-Hayward and WITC-Ladysmith outreach centers. Please contact the outreach center manager for details.

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Automated Packaging
Advanced Marine Repair Technician
17-461-1 Technical Certificate

Overview
The Advanced Marine Repair Technician certificate is designed to provide graduates of the Marine Repair Technician program with the opportunity to develop advanced-level skills in the areas of marine engine rebuilding and marine engine/power systems. Diagnostics and the repair of outboard motors, inboard engines, marine transmissions, along with sterndrive units will be examples of coursework designed within this advanced certificate. Students are encouraged to adhere to projects which will increase their level of expertise as a qualified Marine Repair Technician. This certificate is designed to adapt to specific student interests in combination with the advanced technological changes taking place within the Marine Industry.

Special Features
This certificate is unique in the state. Students completing this certificate must meet prerequisite requirements. This certificate has the ability to be adapted to each student's unique interests in the marine repair field.

Student Profile
Students in this certificate should be able to:
• Apply all competencies as required by the Marine Repair Technician program

Preparation for Admission
Students enrolling in this certificate must be a graduate from the Marine Repair Technician program or equivalent or related occupational experience and approval of instructor.

Outcomes
Employers will expect the graduate of this certificate to:
• Adhere to project completion deadlines
• Follow proper repair instructions
• Complete projects that meet professional standards
• Complete project work as intended
• Be able to have an in-depth knowledge related to select product-specific training

Career Outlook
Upon completing this certificate, graduates will be ready to begin or complete their career as a marine repair technician and be able to complete advanced repairs such as (depending on selected learning activities):
• Diagnose and repair outboard motors
• Diagnose and repair sterndrive and inboard engines
• Repair marine transmissions and sterndrive units

Related Program
• Marine Repair Technician

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>31461344</td>
<td>Advanced Marine Engine Rebuilding ▲</td>
<td>3</td>
</tr>
<tr>
<td>31461345</td>
<td>Advanced Marine Engine Systems ▲</td>
<td>3</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS 6

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

Course Descriptions

31461344
Advanced Marine Engine Rebuilding - Credits: 3
This course is designed to study in detail the process of rebuilding a marine engine or its related major components. The student will choose and provide a major project(s) and rebuild it to the manufacturer's specifications. The student will have to provide the instructor with a list of project(s) and the time estimated for their completion. The instructor will need to approve the project(s) and will guide the student as to the feasibility of completion. The estimated hours of completion will equal 3 credit hours (96 hours of time). The instructor will offer guidance to assure the students success in completion of the project. Lab work will need to be completed during the open time of the marine lab. PREREQUISITE: Successful completion of the Marine Repair Technician program.

31461345
Advanced Marine Engine Systems - Credits: 3
This course is designed to increase the student's knowledge of specific manufacturers' operation systems. The student will be able to complete additional manufacturer training programs. There may be an additional cost to the student for some of these programs. Also the student will select areas of interest to study in detail, and provide training to program students and the public. Student to submit an outline of work to be completed that equals the number of credit hours of the course. Lab work will need to be completed during the open time of the marine lab. PREREQUISITE: Successful completion of the Marine Repair Technician program.
### Business Administration Specialist

**17-104-5 Technical Certificate**

#### Overview

The Business Administration Specialist certificate will prepare students for success in today's business world. Areas of emphasis include supervision, human resource management, and business law.

#### Special Feature

This certificate is completely focused on the key areas of business administration.

#### Student Profile

Business Administration Specialist certificate students should be able to:

- Work with people and ideas in a team setting
- Work with numbers and charts
- Cope in a competitive environment
- Be friendly and tactful with clients
- Use various computer applications

#### Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

- Mathematics
- Accounting
- Keyboarding
- Basic computer skills
- Prior work experience

#### Outcomes

Employers will expect graduates to be able to:

- Handle basic functions of a business office
- Make informed decisions regarding business transactions
- Document business transaction and planning documents
- Communicate and relate with clients, peers, and supervisors

#### Career Outlook

Graduates of this certificate will be qualified to become an integral support employee in a business firm.

#### Related Program

- Business Management

#### Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10104198</td>
<td>Managing Human Resources or</td>
<td>3</td>
</tr>
<tr>
<td>10116100</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>10105100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>10105125</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>10145101</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>10196191</td>
<td>Supervision</td>
<td>3</td>
</tr>
<tr>
<td>10801197</td>
<td>Technical Reporting ▲</td>
<td>3</td>
</tr>
</tbody>
</table>

**CERTIFICATE REQUIREMENTS**

- ▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

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#### Course Descriptions

**10104198 Managing Human Resources - Credits: 3**

Introduces the functions of Human Resource Management in the legal and social context of today's dynamic business environment. Topics include human resource development, employee selection, performance, appraisal, compensation, training, labor relations, affirmative action, and career management.

**10116100 Human Resource Management - Credits: 3**

In Human Resource Management, the learner applies the skills and tools necessary to effectively value and apply employees' abilities and needs to organization goals. Each learner will demonstrate the application of the supervisor's role in contemporary human resources management, impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies and procedures, training, performance management, employee counseling and development, and effective use of compensation and benefit strategies. It is recommended that the learner have experience using a PC/MAC, using the MS Windows operating systems and software suite, browsing Web pages, downloading files, using e-mail, and exchanging files prior to enrolling in this course.

**10105100 Introduction to Business - Credits: 3**

This is an introductory course designed to develop an understanding of the activities, functions, and principles of business enterprises. The course helps to gain insight into the responsibilities and challenges of operating a business. Emphasis is on the interaction of the various functions required to operate businesses of all sizes. Specifically, the areas of business trends, ownership models, leadership, human resources, marketing, information management, and finance will be explored.

**10105125 Business Law - Credits: 3**

Business Law provides the student with a working knowledge of the legal system, business ethics, and essentials of contracts. Students gain knowledge in logical and analytical thinking, and are encouraged to challenge legal issues and defend their point of view.

**10145101 Entrepreneurship - Credits: 3**

This course is designed to develop the planning, organizing, financing, and management functions needed to start a small business. Includes research methods and identification of the resources to create, develop, and implement solutions to problems. Students will also develop appropriate strategies to initiate or maintain a small business.

**10196191 Supervision - Credits: 3**

In Supervision, the learner applies the skills and tools necessary to perform the functions of a frontline leader. Each learner will demonstrate the application of strategies and transition to a contemporary supervisory role including day-to-day operations, analysis, delegation, controlling, staffing, leadership, problem solving, team skills, motivation, and training.

**10801197 Technical Reporting - Credits: 3**

The student will prepare and present oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course. PREREQUISITE: 10801195 Written Communication.
Business Graphics
17-106-6 Technical Certificate

Overview
This certificate will provide students with the fundamental skills necessary to provide support to or be part of a team which is responsible for publishing, document design and preparation, Web design, and/or media development. Students will complete projects and compile a portfolio that incorporates the use of graphics technology and software.

Student Profile
Students in this certificate should:
• Have a good understanding of the computer and fundamental software (i.e. MS Word, MS Excel, MS Access, and MS PowerPoint)
• Be able to work with people and ideas in both a team environment as well as independently
• Possess good human relations skills

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Intro to Computers
• Intro to MS Office
• MS Word
• MS PowerPoint
• MS Excel
• MS Access

Outcomes
Employers will expect graduates of this certificate to be able to:
• Exhibit visual and creative thinking
• Exhibit conceptual skills
• Complete projects (such as brochures, mailers, business cards, and prepared print media) in a professional and timely manner

Career Outlook
Graduates of this certificate will be ready to assist in business graphics and be employed in such fields as:
• Marketing
• Publication
• Advertising
• Web Design
• Administration
• Office Support
• Management
• Accounting/Finance

Related Programs
• Administrative Professional
• Office Support Specialist

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10103156</td>
<td>Adobe Photoshop</td>
<td>2</td>
</tr>
<tr>
<td>10106127</td>
<td>Desktop Publishing</td>
<td>2</td>
</tr>
<tr>
<td>10106129</td>
<td>Web Technologies</td>
<td>3</td>
</tr>
<tr>
<td>10106147</td>
<td>Advanced Graphics Applications ▲</td>
<td>3</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS 10
▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

Course Descriptions

10103156
Adobe Photoshop - Credits: 2
Students will become skilled in using the Adobe Photoshop image-editing software package. They will learn to create original artwork, manipulate images, and create images for the Web and retouch photographs.

10106127
Desktop Publishing - Credits: 2
Preparation of professional-looking documents using desktop publishing software or word processing software with desktop publishing capabilities.

10106129
Web Technologies - Credits: 3
This course presents the foundational skills necessary to function in a Web 2.0 environment. Students will create a web site using effective web page design concepts including text, graphics, hyperlinked text, tables, forms, layers, templates, and Cascading Style Sheets (CSS) and behaviors. This course will also introduce students to a broad spectrum of concepts and issues associated with E-Business, cloud based documents and Social Media from marketing to network security to customer service. A general knowledge of working in a Windows environment and keyboarding skills are recommended.

10106147
Advanced Graphics Applications - Credits: 3
Advanced Graphics Applications further enhances the skills students obtained in Adobe Photoshop, Illustrator, and InDesign software at a more advanced level. Students will also be given independent projects in real-world situations where they can use their creativity, review layout and design principles, and develop their customer service skills. The final project will be to create a professional portfolio of their work in both printed and electronic form. COREQUISITES: 10103156 Adobe Photoshop, 10106127 Desktop Publishing, and 10106129 Web Technologies.
C# Programming
17-152-5 Technical Certificate

Overview
This certificate will provide students with the skills necessary to work with C# development teams and to integrate business processes into Windows applications. Students will learn the fundamentals of C# programming and gain experience using the Visual Studio.NET development environment.

Student Profile
Students in the C# Programming certificate should:
• Be very detail oriented
• Work independently and as part of a development team
• Communicate effectively, both orally and in writing
• Enjoy learning about the information technology field
• Be a competent user of the Microsoft Windows operating systems

Preparation for Admission
This certificate is intended for individuals who are seeking to enhance their existing information technology skills. Participants should be prepared to validate their knowledge of the following topics prior to entering the certificate:
• Programming logic fundamentals
• Database concepts and SQL
• Systems analysis and design

Outcomes
Employers will expect students, after completing this certificate, to:
• Analyze business needs and develop applications for the Microsoft Windows environment
• Design and develop solutions for business using the C# programming language

Career Outlook
C# programming knowledge is in demand. Typical positions available after graduation include:
• C# Developer

Related Program
• Information Technology - Web and Software Developer

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10152115</td>
<td>Beginning .NET Programming</td>
<td>▲ 3</td>
</tr>
<tr>
<td>10152117</td>
<td>Advanced .NET Programming</td>
<td>▲ 3</td>
</tr>
<tr>
<td>10152118</td>
<td>Enterprise Programming in .NET</td>
<td>▲ 3</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS 9
▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

Course Descriptions

10152115 Beginning .NET Programming – Credits: 3
Introduction to the concepts and techniques of programming in the .NET environment using the C# language. Topics covered include requirement analysis, program design, coding, and debugging. Emphasis is placed on the techniques needed to program graphical user interface applications using C# forms, events, and codes. COREQUISITE: 10152135 Program Logic.

10152117 Advanced .NET Programming – Credits: 3
This course provides the student with an object-oriented view of the .NET development environment using C# language. Some of the topics covered include classes, instance, encapsulation, polymorphism, and inheritance. Emphasis is placed on using C# to write class libraries of reusable code, ActiveX components, ActiveX controls, and error-handling routines. PREREQUISITE: 10152115 Beginning .NET Programming.

10152118 Enterprise Programming in .NET – Credits: 3
This course is designed to provide students with an enterprise view of the .NET development environment. Concepts and competencies will be emphasized that help the programmer create C# programs that conform to well-adopted Windows Standards. Students will learn how to incorporate advanced tools to enhance windows functionality. Current platform features are introduced such as XML, LINQ, and Windows Presentation Foundation (WPF). Successful completion of this course will provide the student with a rich set of tools to create programs that satisfy the demands of today's business environment. PREREQUISITE: 10152117 Advanced .NET Programming.

800.243.9482  witc.edu  2015-2016
Overview

The Computer Numerical Control (CNC) Machining certificate will help the student become a CNC operator/programmer. This certificate is for the student who wants to program and operate CNC machines, upgrade present skills, or prepare for new CNC processes coming into their workplace.

Course Descriptions

### Special Feature
Courses will be offered both day and evening hours.

### Student Profile
CNC Machining students should have:
- A basic knowledge of conventional machining processes
- An interest in accurate, detailed work
- A desire to upgrade their machining skills

### Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Computer Applications
- Machine Shop
- Print Reading
- Geometry
- Keyboarding

### Outcome
Employers will expect CNC Machining certificate graduates to be able to:
- Operate and program CNC equipment

### Career Outlook
Graduates of this certificate will be ready for their careers as:
- CNC Operators
- Machine Tool Programmers
- Machine Operators
- Machine Setup Persons
- Apprentice Machinists

### Related Programs
- Machine Tool Operation
- Machine Tool Technician
- Machine Tooling Technics
- Residential Construction and Cabinetworking

### Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>32420312</td>
<td>CNC Programming - Turning</td>
<td>2</td>
</tr>
<tr>
<td>32420313</td>
<td>CNC Turning Operations</td>
<td>2</td>
</tr>
<tr>
<td>32420315</td>
<td>CNC Programming - Milling</td>
<td>2</td>
</tr>
<tr>
<td>32420316</td>
<td>CNC Milling Operations</td>
<td>2</td>
</tr>
<tr>
<td>32420320</td>
<td>CAD/CAM Applications</td>
<td>2</td>
</tr>
<tr>
<td>32420361</td>
<td>Introduction to CAD/CAM</td>
<td>1</td>
</tr>
<tr>
<td>32420365</td>
<td>CNC Fundamentals</td>
<td>2</td>
</tr>
</tbody>
</table>

### CERTIFICATE REQUIREMENTS
- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

### Campus: Superior

WISCONSIN TECHNICAL COLLEGE

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** CERTIFICATE REQUIREMENTS**

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
Computerized Accounting
17-101-1 Technical Certificate

Overview
Accounting is an important tool of business. Computerized Accounting certificate students use accounting and office software to perform a variety of tasks including basic accounting data entry.

Special Features
The Computerized Accounting certificate is ideal for students who:
- Have experience in accounting or bookkeeping and desire training on current software
- May already have college-level training but wish to obtain or update accounting software skills
- May lack experience but seek basic skills with a minimal time investment

Student Profile
Students of the Computerized Accounting certificate should:
- Be organized, accurate, and detail oriented
- Possess good communication skills
- Be comfortable using computers and 10-key calculators
- Enjoy working alone and with others

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Accounting, bookkeeping
- Consumer Mathematics
- English/basic grammar
- Keyboarding
- Basic computer skills

Outcomes
Employers will expect Computerized Accounting certificate graduates to be able to:
- Work under supervision with current accounting software applications
- Use word processing and spreadsheet programs to perform basic office tasks
- Assist in processing payrolls

Career Outlook
Computerized Accounting certificate graduates can seek many opportunities in part-time and entry-level office and accounting positions.

Related Programs
- Accounting
- Accounting Assistant
- Business Management

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10101101</td>
<td>Financial Accounting 1</td>
<td>4</td>
</tr>
<tr>
<td>10101124</td>
<td>Payroll Systems and Accounting</td>
<td>3</td>
</tr>
<tr>
<td>10101174</td>
<td>QuickBooks Accounting - Beginning</td>
<td>2</td>
</tr>
<tr>
<td>10103129</td>
<td>Introduction to MS Office</td>
<td>1</td>
</tr>
<tr>
<td>10103151</td>
<td>MS Excel A</td>
<td>1</td>
</tr>
<tr>
<td>10103152</td>
<td>MS Excel B</td>
<td>1</td>
</tr>
<tr>
<td>10103162</td>
<td>MS Access A</td>
<td>1</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS 13

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better. Students must earn a grade point average of 2.0 or better in all required courses.

Course Descriptions

10101101 Financial Accounting 1 - Credits: 4
Complete accounting cycle, special journals, payroll tax principles, special procedures, and financial statements. Accounting applications through practice set approach.

10101124 Payroll Systems and Accounting - Credits: 3

10101174 QuickBooks Accounting - Beginning - Credits: 2
Students will learn the QuickBooks accounting software by performing tasks that involve the general ledger, accounts payable, accounts receivable, inventory, payroll, and financial statements. Students will be responsible for finding and correcting errors in the QuickBooks program. COREQUISITE: 10101101 Financial Accounting 1 or 10101176 Financial Accounting 1A.

10103129 Introduction to MS Office - Credits: 1
Learners will create, edit, view, and print basic documents using word processing, spreadsheets, database, and presentation software.

10103151 MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10103152 MS Excel B - Credits: 1
Students will learn to use MS Excel. Credit B activities will include using advanced features of formulas, object linking and embedding, multiple worksheets, 3-D references, macro basics and database basics. COREQUISITE: 10103151 MS Excel A.

10103162 MS Access A - Credits: 1
Learners create, edit, sort, and query a database. They also learn how to create and print basic forms and reports.
Overview
The Cosmetology Instructor certificate prepares the student to take the State of Wisconsin examination to become a licensed Cosmetology Instructor. To apply for this examination, students must successfully complete 150 hours of required Cosmetology Instructor certificate coursework, hold a current Wisconsin license in Cosmetology, and possess 2,000 hours of experience in the Cosmetology field. Through completion of this certificate, the student will acquire the practical and theoretical knowledge and skills required to teach new students entering the cosmetology profession.

Student Profile
Students in this certificate should:
• Have a desire to teach
• Communicate clearly
• Work well with others
• Display a strong work ethic
• Show creativity

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Family and Consumer Education
• Accounting and Mathematics
• Social Problems/Psychology
• Chemistry/Biology
• Health
• English
• Speech
• Economics
• Art

Outcomes
Employers will expect the graduate of this certificate to be able to:
• Successfully complete the State of Wisconsin examination to become a licensed cosmetology instructor

Career Outlook
Wisconsin licensed cosmetology instructors are qualified to work in state, public, and private colleges/schools that offer cosmetology programs.

Employment opportunities for cosmetology instructors are expected to increase through 2014, at a rate equal to that of the national average. Successful completion of the Cosmetology Instructor certificate is a necessary step towards beginning a career in this industry, within the state of Wisconsin.

Related Program
• Cosmetology

<table>
<thead>
<tr>
<th>Course Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>10522140 Teaching Methods - Credits: 2</td>
</tr>
<tr>
<td>Prepares educators to create a learning environment that supports learners and results in the achievement of designated learning outcomes. Emphasizes teaching and learning techniques that promote active learning, support learners with a variety of learning preferences and needs, and generate continuous improvement in teaching and learning.</td>
</tr>
<tr>
<td>31502308 Cosmetology Instructor Orientation - Credits: 2</td>
</tr>
<tr>
<td>Students explore the Wisconsin Indianhead Technical College Cosmetology program including goals and curriculum. Students will discuss the State of Wisconsin Department of Licensing for Instructors policies and procedures. Students will also develop lessons and assessment plans, discuss safety and first aid, student advising, record keeping, and interpersonal skills needed for success in the Cosmetology industry.</td>
</tr>
<tr>
<td>31502309 Supervised Teaching Practicum - Credits: 1</td>
</tr>
<tr>
<td>Students will observe experienced Cosmetology instructors in classroom, lab and clinic settings. Students will prepare learning plans for theory and practical lessons, teach under the supervision of licensed instructors, and learn the practical skills of supervising students in a clinical setting.</td>
</tr>
</tbody>
</table>

Curriculum
<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>10522140</td>
<td>Teaching Methods</td>
<td>2</td>
</tr>
<tr>
<td>31502308</td>
<td>Cosmetology Instructor Orientation</td>
<td>2</td>
</tr>
<tr>
<td>31502309</td>
<td>Supervised Teaching Practicum</td>
<td>1</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS 5
**Cosmetology Manager**

17-196-6 Technical Certificate

### Overview

As a licensed Cosmetology practitioner, the Cosmetology Manager certificate will qualify students to complete the State of Wisconsin Cosmetology Manager examination. In order to apply for the manager's exam, students will need to have 2,000 hours of practice as a licensed practitioner plus 150 hours of instruction as provided by this certificate. (Otherwise, students are required to have 4,000 hours of practice as a licensed practitioner, prior to taking the exam.)

### Special Features

Courses are offered in a variety of instructional modes that allow flexibility with the student's working schedule.

### Student Profile

Cosmetology Manager certificate students should be able to:
- Practice as a licensed cosmetology practitioner
- Work well with people
- Be friendly and professional with clients and co-workers
- Be organized and able to handle multiple responsibilities

### Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:
- Cosmetology Practitioner License
- Psychology
- Speech/Grammar
- Health
- Economics

### Outcomes

Employers will expect graduates to be able to:
- Successfully complete the State of Wisconsin examination to become a Cosmetology Manager

### Career Outlook

Graduates of this certificate will be ready for their career as a Cosmetology Manager. In addition, graduates will be able to provide cosmetology services in a senior center or long-term care home or rent their own chair in a larger cosmetology service provider or business.

### Related Program

- **Cosmetology**

### Curriculum

Students interested in obtaining a license as a Cosmetology Manager will be required to take 50 hours of coursework from each of the following categories:

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10101176</td>
<td>Financial Accounting 1A ▲</td>
<td>36</td>
</tr>
<tr>
<td>10101123</td>
<td>Income Tax Accounting ▲</td>
<td>72</td>
</tr>
<tr>
<td>10101170</td>
<td>Financial Analysis ▲</td>
<td>54</td>
</tr>
<tr>
<td>10101174</td>
<td>QuickBooks Accounting - Beginning ▲</td>
<td>54</td>
</tr>
<tr>
<td>10103151</td>
<td>MS Excel ▲</td>
<td>36</td>
</tr>
<tr>
<td>10104102</td>
<td>Marketing Principles ▲</td>
<td>72</td>
</tr>
<tr>
<td>10105100</td>
<td>Introduction to Business ▲</td>
<td>54</td>
</tr>
<tr>
<td>10105125</td>
<td>Business Law ▲</td>
<td>54</td>
</tr>
<tr>
<td>10106167</td>
<td>Computer and Business Technologies ▲</td>
<td>36</td>
</tr>
<tr>
<td>10114125</td>
<td>Personal Finance ▲</td>
<td>54</td>
</tr>
<tr>
<td>10145101</td>
<td>Entrepreneurship ▲</td>
<td>72</td>
</tr>
</tbody>
</table>

| Communication                                    |       |
| 10801195 | Written Communication ▲                   | 54    |
| 10801196 | Oral/Interpersonal Communication ▲        | 54    |
| 10801198 | Speech ▲                                  | 54    |
| 10809198 | Introduction to Psychology ▲              | 54    |
| 32801361 | Applied Communications 1 ▲                | 54    |

| Supervision                                      |       |
| 10161610 | Human Resource Management ▲               | 54    |
| 10161634 | Legal Issues for Supervisors ▲            | 54    |
| 10161636 | Safety in the Workplace ▲                 | 54    |
| 10161638 | Conflict Resolution and Confrontation Skills ▲ | 18    |
| 1016164 | Personal Skills for Supervisors ▲         | 54    |
| 1016169 | Diversity and Change Management ▲         | 54    |
| 1016189 | Team Building and Problem Solving ▲       | 54    |
| 1016190 | Leadership Development ▲                  | 54    |
| 1016191 | Supervision ▲                             | 54    |

* Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

* See page 45 for Accounting course descriptions.

* See pages 41-43 for Communication course descriptions.

* See page 147 for Supervisory Management course descriptions.

### Course Descriptions

**10101170 Financial Analysis – Credits: 3**

In Financial Analysis, the learner applies the skills necessary to achieve an understanding of the financial aspects of business. Each learner will demonstrate application of financial statement interpretation, analysis, forecasting, budgeting and expense control relevant to the nonfinancial manager.

**10104102 Marketing Principles - Credits - 3**

This course focuses on the marketing process as it relates to the operation of a business enterprise. The intent is to provide students with an understanding of how the marketing function fits within the overall structure of the organization. Special attention is given to the role and significance of evaluating customer needs, pricing, operations, and the operating system. An emphasis will be placed on file/document management in a network environment and on a standalone personal computer. Learners will become familiar with the World Wide Web by accessing the Internet through browser software. Learners will use e-mail and learn how to communicate properly through e-mail and optional online vehicles. Learners will use search engines/databases for research purposes and proper validation techniques.

**10105100 Introduction to Business – Credits: 3**

This is an introductory course designed to develop an understanding of the activities, functions, and principles of business enterprises. The course helps to gain insight into the responsibilities and challenges of operating a business. Emphasis is on the interaction of the various functions required to operate businesses of all sizes. Specifically, the areas of business trends, ownership models, leadership, human resources, marketing, information management, and finance will be explored.

**10106167 Computer and Business Technologies – Credits: 1**

Learners will gain knowledge on computer hardware, basic computer operations, and the operating system. An emphasis will be placed on file/document management in a network environment and on a standalone personal computer. Learners will become familiar with the World Wide Web by accessing the Internet through browser software. Learners will use e-mail and learn how to communicate properly through e-mail and optional online vehicles. Learners will use search engines/databases for research purposes and proper validation techniques.

**10114125 Personal Finance – Credits: 3**

Personal Finance introduces students to money management, taxes, financial services, credit, real estate, insurance, stocks, bonds, mutual funds, retirement planning, and estate planning.

**10145101 Entrepreneurship - Credits: 3**

This course is designed to develop the planning, organizing, financing, and management functions needed to start a small business. Included are research methods and identification of the resources to create, develop, and implement solutions to problems. Students will also develop appropriate strategies to initiate or maintain a small business.

**10196133 Conflict Resolution and Confrontation Skills – Credits: 1**

In Conflict Resolution and Confrontation Skills the learner applies the skills and tools necessary to deal with conflict and confrontation in the workplace. The learner will identify the major causes of conflict, develop a working plan of action to confront difficult situations, and establish guidelines for gaining resolution to difficult situations. The learner will build greater personal skill and confidence in their ability to deal with conflict in their personal and professional life.

### Contact Information

**800.243.9482**

witec.edu

2015-2016
### Overview
The Customer Service certificate will prepare learners to serve a diverse customer base in business. Learners may choose one of two areas of emphasis - service or marketing/sales. Learners will be prepared to communicate with internal and external customers using phone, fax, e-mail, Internet, and e-business. Professional poise, conflict resolution, non-verbal communication, listening skills, and respectful engagement in a multi-cultural, global business setting are additional areas of study.

### Student Profile
Students in this certificate should be:

- Proficient in keyboarding
- Skilled with the computer and its functions
- Able to communicate effectively in writing using correct grammar and spelling
- Able to communicate effectively orally with correct diction and grammar
- Able to work in a team environment
- Able to work independently

### Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:

- Keyboarding
- MS Word
- MS Excel
- MS PowerPoint
- MS Access
- Introduction to Internet

### Outcomes
Employers will expect Customer Service certificate graduates to be able to:

- Professionally communicate non-verbally and in writing
- Provide ethical service to a diverse customer base
- Exhibiting superior listening skills
- Operate appropriate technology
- Select appropriate technology (software and equipment) for tasks

### Career Outlook
After completing the Customer Service certificate, students' career opportunities will be strengthened with the ability to effectively and professionally communicate and provide both internal and external customer service to a global and diverse business community.

### Related Programs
- Administrative Professional
- Business Management
- Office Support Specialist
- Supervisory Management

### Course Descriptions

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10104102</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>10809172</td>
<td>Introduction to Diversity Studies</td>
<td>3</td>
</tr>
<tr>
<td>10196138</td>
<td>Conflict Resolution and Confrontation Skills</td>
<td>1</td>
</tr>
<tr>
<td>10801195</td>
<td>Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>10801196</td>
<td>Oral/Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

### Curriculum Requirements

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

### New Richmond
- Ashland
- Rice Lake

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

### 10104102 Marketing Principles - Credits: 3
This course focuses on the marketing process as it relates to the operation of a business enterprise. The intent is to provide students with an understanding of how the marketing function fits within the overall structure of the organization. Special attention is given to the role and significance of evaluating customer needs, pricing, distribution, and promotion of products and services.

### 10809172 Introduction to Diversity Studies - Credits: 3
Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, religion are explored.

### 10106164 Office Communication - Credits: 3
This course provides the student with the opportunity to develop professional office communication skills using voice recognition, transcribers, and hard copy material. Students will learn to speak, write, and listen in a clear, courteous, concise, and correct manner. Students will apply these skills to create and share documents electronically while applying the proper document formats.

### 10196108 Customer Service - Credits: 1
This course examines customer service as it relates to organizational quality. It addresses service models for internal and external customers, systems and strategies applied to customer service, and tools and techniques for gathering customer feedback and handling complaints.

### 10196138 Conflict Resolution and Confrontation Skills - Credits: 1
In Conflict Resolution and Confrontation Skills the learner applies the skills and tools necessary to deal with conflict and confrontation in the workplace. The learner will identify the major causes of conflict, develop a working plan of action to confront difficult situations, and establish guidelines for gaining resolution to difficult situations. The learner will build greater personal skill and confidence in their ability to deal with conflict in their personal and professional life.

### 10801195 Written Communication - Credits: 3
Develops writing skills which include prewriting, drafting, revising, and editing. A variety of writing assignments are designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through the analysis of a variety of written documents. 

- PREREQUISITE: Successful scores on placement test or 10831103 Intro to College Writing.

### 10801196 Oral/Interpersonal Communication - Credits: 3
Focuses upon developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects.
Ethical Leadership
17-196-2 Technical Certificate

Overview
The Ethical Leadership certificate is a series of three courses designed to acquire and improve the student’s skills in creating and maintaining a legal, ethical, and diverse work environment. Areas covered include diversity and change management, legal issues for supervisors, and ethics.

Special Feature
This certificate is designed to give students guidelines so they will have, and be willing to act on, a definite sense of ethical standards. This certificate will also encourage students to examine ethical dilemmas from different perspectives and to develop a habit of conscious reflection.

Student Profile
Students should consider the Ethical Leadership certificate if they are:
• Working toward obtaining a Supervisory Management associate degree
• Interested in learning more about diversity and change
• Looking for a basic understanding of ethics and legal issues
• Able to relate on-the-job experiences to the course material
• Able to make judgments and decisions
• Able to get along well with people
• Able to work under pressure and handle multiple tasks
• Able to study on their own for at least six to eight hours per week

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Communication skills
• General business concepts
• Prior work experience
• Keyboarding and basic computer skills

Outcomes
Employers will expect graduates of this certificate to be able to:
• Justify corporate social responsibility
• Recommend a framework for dealing with different cultures and morals/ethics
• Critique the identification, analysis, and recommend action/solution to a business-related ethical dilemma
• Assess the “value” of advertising to society
• Recommend methods of balancing “reasonable” consumer safety with a producer’s profit motive
• Recommend methods of balancing employees’ right to privacy with employers’ rights in today’s information/knowledge-based business

Career Outlook
After completing the Ethical Leadership certificate, graduates will be ready to work with and understand today’s diverse workplace and legal and ethical decision making.

Related Program
• Supervisory Management

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10196134</td>
<td>Legal Issues for Supervisors</td>
<td>3</td>
</tr>
<tr>
<td>10196169</td>
<td>Diversity and Change Management</td>
<td>3</td>
</tr>
<tr>
<td>10196199</td>
<td>Ethics in Business</td>
<td>3</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS 9

Course Descriptions

10196134
Legal Issues for Supervisors - Credits: 3
Provides an overview of the general legal responsibilities of an organization. Analyzes the current employment laws in the U.S. and their impact on employer/employees. Examines the supervisor’s role in dealing with harassment in the workplace. Compares how appeals can be addressed in both union and nonunion environment.

10196169
Diversity and Change Management - Credits: 3
Addresses changes taking place in the workforce and their effect on the supervisor and the organization. Explores a broadened view of diversity, including values, age, gender, disabilities, education, and culture. Provides an action framework for the supervisor to gain advantage by blending and capitalizing on the different skills and perspectives of people and creating an organization where everyone gives his or her best.

10196199
Ethics in Business - Credits: 3
This course will focus on business practices from an ethical point of view. The student will examine such topics as morality/ethical theory, utilitarianism, Kantian ethics, justice and the market system, whistle blowing, trade secrets/conflict of interest, privacy, advertising, product safety, corporate social responsibility, international business.
General Studies
17-801-2 Technical Certificate

Overview
The General Studies certificate is designed for students who would like to take introductory courses before deciding on a technical diploma or associate degree program. It provides time to develop learning skills and clarify career/educational goals while earning credits that may be applied to a full-time WITC program.

Special Features
Some credits may also be transferable to other technical colleges, the UW System, or private four-year colleges. Check with the other college for more information.

Student Profile
Students should consider a General Studies certificate if they are:
• A high school senior who is unsure of what major to pursue at a technical college or four-year university
• Returning to school without a clear career path in mind

Outcomes
The General Studies certificate will help students:
• Develop learning skills
• Clarify career/educational goals
• Recognize and be more aware of their abilities
• Complete general education requirements prior to choosing their program
• Match their interests and abilities to today's technical careers
• Improve their study habits, writing skills, academic performance, and employability skills

Curriculum
Number Course Title Credits
Communications

Required Courses
10801195 Written Communication ▲ 3
10801197 Technical Reporting ▲ 3

(one course from the following list):
10801196 Oral/Interpersonal Communication 3
10801198 Speech 3

Math or Science

(one course from the following list):
10804107 College Mathematics ▲ 3
10804113 College Technical Mathematics 1A ▲ 3
10804115 College Technical Mathematics 1 ▲ 5
10804123 Math with Business Applications ▲ 3
10804133 Mathematics and Logic ▲ 3
10804138 Math for Health Professionals ▲ 2
10804134 General Chemistry ▲ 4
10804189 Introductory Statistics ▲ 3
10806112 Principles of Sustainability 3
10806198 Human Biology 4
10806122 Natural Sciences in Society 3
10806177 General Anatomy and Physiology ▲ 4

Social Science

(one course from the following list):
10809122 Introduction to American Government 3
10809166 Introduction to Ethics: Theory and Application 3
10809172 Introduction to Diversity Studies 3
10809174 Social Problems ▲ 3
10809195 Economics 3
10809196 Introduction to Sociology 3

Behavioral Science

(one course from the following list):
10809159 Abnormal Psychology ▲ 3
10809188 Developmental Psychology 3
10809198 Introduction to Psychology 3

Select one additional course from the categories above

CERTIFICATE REQUIREMENTS 21

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

See pages 41-43 for General Studies courses and descriptions.
Industrial Controls and Automation
17-631-1, 17-631-2 Technical Certificates

Overview
The Industrial Controls and Automation certificates are designed to develop or upgrade skills for individuals with an industrial background in operations, maintenance, or engineering. The training includes lecture and hands-on activities utilizing equipment found in industry today. The certificates focus on AC/DC circuits, process control instrumentation, programmable logic controllers, electromechanical controls, motor control, and distributed control systems.

Special Features
These certificates:
- Are unique in the state
- Use modern industrial controls
- Have hands-on experiences

Student Profile
Industrial Controls and Automation students should have:
- Basic computer skills
- Interest or background in electricity or electronics
- Basic mechanical skills
- The ability to communicate and work as part of a team

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Computer applications
- Mathematics
- Physics/Science

Outcomes
Employers will expect certificate graduates to be able to:
- Perform calibration, installation, and troubleshooting for process instrumentation
- Wire and troubleshoot electromechanical and motor controls
- Perform basic installation and setup of DC and AC drives
- Program and troubleshoot PLCs
- Create basic HMI displays
- Develop and maintain system documentation including electrical diagrams and P & ID drawings
- Configure single-loop controllers
- Perform loop tuning using PID
- Utilize communication skills

Career Outlook
Typical positions available after graduation include:
- Field Engineering/Service Technician
- Instrumentation and Controls Technician (I&C)
- Electrical and Instrumentation Technician (E&I)
- Controls Systems Technician
- Automation Technician
- Electromechanical Technician

Related Programs
- Automated Packaging Systems Technician
- Industrial Automation, Controls, and Networking

Course Descriptions

INSTRUMENTATION AND CONTROL SYSTEMS SPECIALIST CERTIFICATE 10605167
Electricity 1 - Credits: 2
Electricity 1 is a lecture/hands-on course designed to introduce students to basic electrical terminology, laws, concepts, instrumentation, and application. Hands-on activities will be utilized to reinforce electrical concepts related to practical applications dealing with computer networks. Topics covered will include electrical safety, terminology and symbols, electrical laws, basic circuits, multimeter use, DC power supplies, and troubleshooting. Critical-thinking skills are emphasized to develop competencies in problem solving and troubleshooting.

10631100 Introduction to Process Control - Credits: 2
The Introduction to Process Control course explains the function of basic devices for measuring and controlling different kinds of variables in process control. It introduces closed-loop control, PID functions, analog and digital devices, and control system applications. It also covers instrumentation symbols and the interpretation and use of process diagrams.

10631102 Industrial Power Electronics - Credits: 2
The Industrial Power Electronics course is a hands-on course dealing with the electronics that are used to control power and operate machines and processes in the modern manufacturing plant. The course includes the study and use of the oscilloscope and digital multimeter, thyristors, AC, DC, step-up and step-down motor drive systems, photoelectric switches, and miscellaneous field devices.

10631104 Process Control and Instrumentation - Credits: 3
The Process Control and Instrumentation course offers hands-on skill exercises on controlling and manipulating temperature, pressure, flow, and level in the manufacturing process. Students will be able to identify, connect, operate, troubleshoot, and perform preventive maintenance on the components that form a process control system. COREQUISITE: 10605167 Electricity 1 or equivalent.

10631106 Supervisory and Distributed Control Systems - Credits: 3
Distributed Control Systems. Students will connect, configure, and operate a simulated process that includes the elements of distributed control and data acquisition systems. PREREQUISITES: 10631100 Introduction to Process Control and 10631105 PLC Programming and Interfacing.

10631107 Industrial Automation Case Project - Credits: 1
This course will introduce the student to networked distributed control systems and data acquisition systems. Included are PLCs, data acquisition systems, Single Loop Controllers, Smart Devices, and Distributed Control Systems. Students will connect, configure, and operate a simulated process that includes the elements of distributed control and data acquisition systems. PREREQUISITES: 10631100 Introduction to Process Control and 10631108 PLC Programming and Interfacing.

10661106 Supervisory and Distributed Control Systems - Credits: 3
This course includes an overview of the automation system. Students will be able to discuss the components of an industrial process control system and the components of a manufacturing system. Students will complete a project or research dealing with an existing process in an area industry or complete an advanced project in the lab dealing with applications of industrial networks, sensors, control, and data acquisition. PREREQUISITES: 10631100 Introduction to Process Control and 10631102 Industrial Power Electronics.

10661110 Advanced PLC Programming and Interfacing - Credits: 3
Advanced PLC Programming and Interfacing. Students will be able to discuss the components of an industrial control system and the components of a manufacturing system. Students will complete a project or research dealing with an existing process in an area industry or complete an advanced project in the lab dealing with applications of industrial networks, sensors, control, and data acquisition. PREREQUISITES: 10631100 Introduction to Process Control and 10631105 PLC Programming and Interfacing.

10661111 Advanced PLC Programming and Interfacing - Credits: 3
Advanced PLC Programming and Interfacing. Students will be able to discuss the components of an industrial control system and the components of a manufacturing system. Students will complete a project or research dealing with an existing process in an area industry or complete an advanced project in the lab dealing with applications of industrial networks, sensors, control, and data acquisition. PREREQUISITES: 10631100 Introduction to Process Control and 10631105 PLC Programming and Interfacing.

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10605167</td>
<td>Electricity 1</td>
<td>2</td>
</tr>
<tr>
<td>10631100</td>
<td>Introduction to Process Control</td>
<td>2</td>
</tr>
<tr>
<td>10631102</td>
<td>Industrial Power Electronics</td>
<td>2</td>
</tr>
<tr>
<td>10631103</td>
<td>Process Control and Instrumentation</td>
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</tr>
<tr>
<td>10631104</td>
<td>Process Control and Instrumentation</td>
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</tr>
<tr>
<td>10631105</td>
<td>PLC Programming and Interfacing</td>
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<td>10631106</td>
<td>Supervisory and Distributed Control Systems</td>
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</tr>
<tr>
<td>10631107</td>
<td>Industrial Automation Case Project</td>
<td>1</td>
</tr>
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<td>10631110</td>
<td>Advanced PLC Programming and Interfacing</td>
<td>3</td>
</tr>
<tr>
<td>10661106</td>
<td>Supervisory and Distributed Control Systems</td>
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</tr>
<tr>
<td>10661110</td>
<td>Advanced PLC Programming and Interfacing</td>
<td>3</td>
</tr>
<tr>
<td>10661111</td>
<td>Advanced PLC Programming and Interfacing</td>
<td>3</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

Notes on Course Descriptions:
- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

800.243.9482
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2015-2016
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Overview
This certificate will provide students with the skills necessary to become valuable members of application development teams that utilize Java technologies. Students will learn the fundamentals of object-oriented programming and the Java language in order to integrate business processes into applets, server-side Web applications, and enterprise applications.

Student Profile
Java Developer students should:
• Be very detail oriented
• Be able to work independently and as part of a development team
• Communicate effectively, both orally and in writing
• Enjoy learning about the information technology field and about Java language and associated technologies

Preparation for Admission
This certificate is intended for individuals who are seeking to enhance their existing information technology skills. Participants should be prepared to validate their knowledge of the following topics prior to entering the certificate:
• Programming logic fundamentals
• Web development fundamentals
• Database concepts and SQL
• Systems analysis and design
• Operating system fundamentals
• Server-side Web development

Outcomes
Employers will expect graduates of this certificate to be able to:
• Program client and server-side Java applications
• Analyze business needs
• Design object-oriented solutions
• Develop enterprise applications

Career Outlook
There is a great demand for IT professionals with Java experience. Graduates of this certificate will be ready for their careers as:
• Software Developers
• Java/J2EE Developers

Related Program
• Information Technology - Web and Software Developer

Curriculum
<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>10152106</td>
<td>Java Programming - Beginning ▲</td>
<td>3</td>
</tr>
<tr>
<td>10152107</td>
<td>Java Programming - Advanced ▲</td>
<td>3</td>
</tr>
<tr>
<td>10152108</td>
<td>Enterprise Java Programming ▲</td>
<td>3</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS 9
▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

Course Descriptions
10152106
Java Programming - Beginning - Credits: 3
This Java course will familiarize the student with the fundamentals of the Java language including data types, operators, expressions, event-driven programming, and conditional statements. Students will learn how to set up an environment for developing Java programs, define classes and utilize class objects. Object-oriented topics including encapsulation, inheritance, and polymorphism will be explored. Other topics include string manipulation, Collections, Array Lists, Exception Handling, Packages and creating a graphical user interface (GUI). PREREQUISITE: 10152133 Program Logic.

10152107
Java Programming - Advanced - Credits: 3
This course will provide an in-depth look at how to apply some of the more advanced features of the Java language. It is intended for students with a solid grasp of Java language basics and object-oriented concepts. Students will create GUI applications that connect to a database. The Model View Controller framework will be explored. Topics covered include Swing, utility classes, threads, and database access. Students will develop a business application that interacts with a database. PREREQUISITE: 10152106 Java Programming - Beginning.

10152108
Enterprise Java Programming - Credits: 3
The third class of the Java sequence explores advanced Java topics within the Java EE application framework. Topics include JSP, Servlets, session management, Expression Language, JSTL, JavaBeans, asynchronous processing, custom tags and tag files. Students will create applications utilizing a Model View Controller framework. PREREQUISITE: 10152107 Java Programming - Advanced.
Marketing Specialist
17-104-2 Technical Certificate

Overview
The Marketing Specialist certificate is designed to prepare students for a career in support of marketing management, selling, promotion, and marketing information management activities.

Student Profile
Marketing Specialist certificate students should be able to:

- Work with people and ideas in a team setting
- Maintain a positive, outgoing attitude
- Possess good human relations skills
- Use sound judgment

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:

- Accounting
- Mathematics
- Basic computer skills
- Prior work experience

Outcomes
Employers will expect graduates of this certificate to be able to:

- Generate marketing information for effective decision making
- Apply continuous improvement strategies to solve marketing problems
- Apply technology to marketing and marketing information systems
- Develop long-term strategic marketing plans
- Create a personal professional development plan
- Formulate selling strategies
- Design a promotional plan

Career Outlook
Graduates of this certificate will be ready for their careers as:

- Marketing Research Assistants
- Promotion Assistants
- Marketing Management Assistants
- Sales Trainees

Select six credits from the following courses:

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10104102</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>10104104</td>
<td>Selling Principles</td>
<td>3</td>
</tr>
<tr>
<td>10104125</td>
<td>Multi-Media Marketing</td>
<td>3</td>
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<tr>
<td>10104175</td>
<td>Marketing Research</td>
<td>3</td>
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<tr>
<td>10104110</td>
<td>Technological Applications in Marketing</td>
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<td>10104126</td>
<td>Sales Promotion/Imaging</td>
<td>3</td>
</tr>
<tr>
<td>10104160</td>
<td>Marketing Management</td>
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<tr>
<td>10104190</td>
<td>Retail Principles</td>
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</tr>
<tr>
<td>10145101</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

Related Programs
- Marketing

CertIFICATE REQUIREMENTS 18

Campus: Online

800.243.9482 witic.edu 2015-2016

Course Descriptions

10104102 Marketing Principles - Credits: 3
This course focuses on the marketing process as it relates to the operation of a business enterprise. The intent is to provide students with an understanding of how the marketing function fits within the overall structure of the organization. Special attention is given to the role and significance of evaluating customer needs, pricing, distribution, and promotion of products and services.

10104104 Selling Principles - Credits: 3
This introductory course is designed to acquaint the student with the principles of selling and applications to the marketing of goods and services. Special emphasis is given to developing the selling process. Included are customer relations, sales psychology, steps to successful presentation, closing techniques, and sales motivation.

10104125 Multi-Media Marketing - Credits: 3
Multi-Media Marketing provides an overview of advertising and public relations efforts in today's business environment. The course will explore what is done in advertising and the reasons why. Public relations activities and their effectiveness will be discussed using real-world examples. Additional topics of study include the social and economic aspects of promotion. PREREQUISITE: 10104102 Marketing Principles.

10104175 Marketing Research - Credits: 3
This course presents marketing information management as a means of solving marketing problems and making better marketing decisions. It focuses on the systematic gathering, analysis, and distribution of information to achieve that goal. Topics include problem definitions, planning studies, use of secondary data, questionnaire design and development, instrument administration, and data collection and interpretation. The use of current technology to gather and manage marketing information is emphasized throughout the course. Students will conduct an actual research study. PREREQUISITE: 10104102 Marketing Principles.

10104110 Technological Applications in Marketing - Credits: 3
This course is designed to expose the student to current and upcoming technologies impacting the field of marketing. PREREQUISITE: 10103129 Introduction to MS Office.

10104126 Sales Promotion/Imaging - Credits: 3
An overview of the field of sales/visual promotion designed to provide knowledge of the role sales promotion and visual merchandising play in marketing. Emphasis is placed on planning, execution, and evaluation of these promotional components. PREREQUISITE: 10104125 Multi-Media Marketing.

10104160 Marketing Management - Credits: 3
This course studies the established principles of management as they apply to the practice of marketing. Specifically, it considers the planning, organizing, directing, and controlling of the marketing function of a contemporary business. Applications of leadership principles, functions, and styles as they relate to marketing are also included. PREREQUISITE: Minimum of 12 credits of 104-level courses or equivalent business experience.

10104190 Retail Principles - Credits: 3
This introductory course explores successful retail formats employed today. Major topics will include the language of retail, store formats, segmentation and target markets. The concepts of trading area analysis, daily operations, pricing, image, social media and latest trends will be investigated. As retailers are a critical component of the economy, this course is a peek behind the scenes as to how retailers operate.

10145101 Entrepreneurship - Credits: 3
This course is designed to develop the planning, organizing, financing, and management functions needed to start a small business. Included are research methods and identification of the resources to create, develop, and implement solutions to problems. Students will also develop appropriate strategies to initiate or maintain a small business.
Marketing/Desktop Publishing Specialist
17-104-6 Technical Certificate

Overview
The Marketing/Desktop Publishing Specialist certificate is designed to prepare students for a career in support of marketing management and promotion management activities.

Student Profile
Marketing/Desktop Publishing Specialist certificate students should:

• Be able to work with people and ideas in a team setting
• Maintain a positive, outgoing attitude
• Possess good human relations skills
• Use sound judgment

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:

• Accounting
• Mathematics
• Basic computer skills
• Prior work experience

Outcomes
Employers will expect graduates of this certificate to be able to:

• Generate marketing information for effective decision making
• Apply technology to marketing and marketing information systems
• Develop long-term strategic marketing plans
• Create a personal professional development plan
• Formulate selling strategies
• Develop a product and service mix
• Design a promotional plan

Career Outlook
Graduates of this certificate will be ready for their careers as:

• Promotion Assistants
• Desktop Publishing Assistants

Related Programs
• Marketing

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
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<td>10104102</td>
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<td>10104104</td>
<td>Selling Principles</td>
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<td>10104125</td>
<td>Multi-Media Marketing</td>
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<tr>
<td>10106127</td>
<td>Desktop Publishing</td>
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<td>10106167</td>
<td>Computer and Business Technologies</td>
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Select six credits from the following courses:

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<td>10104126</td>
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</tr>
<tr>
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<td>Retail Principles</td>
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</tbody>
</table>

Certificate Requirements 18

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

Course Descriptions

10104102 Marketing Principles - Credits: 3
This course focuses on the operation of a business enterprise. The intent is to provide students with an understanding of how the marketing function fits within the overall structure of the organization. Special attention is given to the role and significance of evaluating customer needs, pricing, distribution, and promotion of products and services.

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Multi-Media Marketing provides an overview of advertising and public relations efforts in today's business environment. The course will explore what is done in advertising and the reasons why. Public relations activities and their effectiveness will be discussed using real-world examples. Additional topics of study include the social and economic aspects of promotion. PREREQUISITE: 10104102 Marketing Principles.

10106127 Desktop Publishing - Credits: 2
Preparation of professional-looking documents using desktop publishing software or word processing software with desktop publishing capabilities.

10106167 Computer and Business Technologies - Credits: 1
Learners will gain knowledge on computer hardware, basic computer operations, and the operating system. An emphasis will be placed on file/document management in a network environment and on a standalone personal computer. Learners will become familiar with the World Wide Web by accessing the Internet through browser software. Learners will use e-mail and learn how to communicate properly through e-mail and optional online vehicles. Learners will use search engines/databases for research purposes and proper validation techniques.

10104110 Technological Applications in Marketing - Credits: 3
This course is designed to expose the student to current and upcoming technologies impacting the field of marketing. PREREQUISITE: 10103129 Introduction to MS Office.

10104126 Sales Promotion/Imaging - Credits: 3
An overview of the field of sales/visual promotion designed to provide knowledge of the role sales promotion and visual merchandising play in marketing. Emphasis is placed on planning, execution, and evaluation of these promotional components. PREREQUISITE: 10104125 Multi-Media Marketing.

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This course is designed to develop the planning, organizing, financing, and management functions needed to start a small business. Included are research methods and identification of the resources to create, develop, and implement solutions to problems. Students will also develop appropriate strategies to initiate or maintain a small business.
Medical Transcription
17-106-9 Technical Certificate

Overview
The Medical Transcription certificate is designed to prepare students for a career in the growing field of medical transcription. Students will not only learn how to produce accurate documents using machine transcription, but they will also learn medical terminology and the basics of anatomy and physiology to make them more marketable and efficient.

Special Feature
Prior work experience and/or education may be used as credit for prior learning.

Admission Requirement
Students must meet a keyboarding requirement of 40 net wpm prior to being admitted to the certificate.

Student Profile
Medical Transcription students should:
• Possess excellent spelling, grammar, and English skills
• Have an interest in accurate, detailed work
• Enjoy keyboarding

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Keyboarding
• Computer Applications
• English/Grammar

Outcomes
Employers will expect graduates of this certificate to be able to:
• Use medical transcription equipment
• Understand and apply medical terminology
• Be accurate
• Produce quality, error-free documents
• Maintain confidentiality

Career Outlook
Graduates of this certificate will be ready for their careers as:
• Medical Transcriptionists
• Medical Receptionists
• Hospital Admitting Clerks

Related Program
• Medical Administrative Specialist

Curriculum
Number Course Title Credits
10103146 MS Word A 1
10103147 MS Word B ▲ 1
10106130 Medical Terminology 1 ▲ 3
10106135 Healthcare Documentation ▲ 3
10106148 Medical Transcription 1: Techniques & Procedures ▲ 3
10106149 Medical Transcription 2: Editing & Voice Recognition ▲ 3
10510135 Anatomy, Physiology, and Disease Concepts 2

CERTIFICATE REQUIREMENTS 16
▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

Students must earn a cumulative GPA of 3.0 or better in the certificate with a grade point of at least 2.0 in each required course. Students must also complete an English skills test with at least a grade of "B" (3.0) and must key 60 net wpm of straight copy for five minutes.

Course Descriptions
10103146 MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103147 MS Word B - Credits: 1
Students will learn word processing using MS Word. Credit B activities include tables, mail merge, sort, graphics, and special features of MS Word. COREQUISITE: 10103146 MS Word A.

10106130 Medical Terminology 1 - Credits: 3
This course presents the principles of medical word construction through identification of root words, prefixes, suffixes, combining forms, and methods of building medical terms. Emphasis is placed on correct medical word spelling, pronunciation, and definition, while introducing terminology specific to various body systems. The course is arranged by body system so that the student will recognize organs and anatomical terms as they relate to each system.

10106135 Healthcare Documentation - Credits: 3
This course is designed to expand the student's medical vocabulary and develop skill in keyboarding, formatting, editing, storing, and printing medical documents. Emphasis is placed on speed building and accuracy improvement. PREREQUISITE: 10106130 Medical Terminology 1 and 10106110 Document Formatting or 10103146 MS Word A and 10103147 MS Word B.

10106148 Medical Transcription 1: Techniques & Procedures - Credits: 3
Students are introduced to clinic and hospital transcription covering most medical specialties. Correct spelling, grammar, punctuation, and formatting of medical reports are emphasized through review and practice, using computers and transcribing equipment. COREQUISITE: 10106135 Healthcare Documentation.

10106149 Medical Transcription 2: Editing & Voice Recognition - Credits: 3
This course introduces the student to more difficult hospital-based transcription covering many medical specialties including radiology, oncology, cardiology, hematology, infectious diseases, general surgery, plastic surgery, dentistry, oral surgery, neurology/neurosurgery, psychiatry, urology/nephrology, obstetrics/gynecology, pediatrics, neonatology, otolaryngology, ophthalmology, respiratory/pulmonary medicine, gastroenterology, and pathology. This course includes a module on the use of speech recognition software. PREREQUISITE: 10106148 Medical Transcription 1: Techniques and Procedures.

10510135 Anatomy, Physiology, and Disease Concepts - Credits: 2
This course is a study of human anatomical structure, physiology, and the basic mechanisms of disease. It is designed to meet the unique educational needs of the medical secretary/office personnel. The course focuses on assessment, diagnosis, and treatment of commonly occurring medical conditions. The course will be structured to application of the content through case studies and group discussions. It is meant to provide a solid knowledge base for students entering work in health care settings. It is recommended that the student have a basic knowledge of medical terminology.
Microsoft Office
17-103-1  Technical Certificate

Overview
This certificate allows students to update their computer skills in one of today's most popular software packages.

Special Features
This certificate allows students to take associate degree courses without the time commitment of a full-time program. The credits can later be applied toward a degree or diploma if desired.

Student Profile
Microsoft Office students should be:
• Interested in expanding their computer skills

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Keyboarding
• Basic computer skills

Outcomes
Employers will expect graduates of this certificate to be proficient in the following types of software:
• Word Processing
• Database
• Spreadsheet
• Presentation Graphics

Career Outlook
Graduates of this certificate will be prepared to:
• Work in an environment using Microsoft Office software
• Study and complete MOUS (Microsoft Office User Specialist) certification test

Related Programs
• Administrative Professional
• Business Management
• Office Support Specialist
• Supervisory Management

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>10103106</td>
<td>MS PowerPoint</td>
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<tr>
<td>10103125</td>
<td>MS Outlook</td>
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<tr>
<td>10103146</td>
<td>MS Word A</td>
<td>1</td>
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<tr>
<td>10103147</td>
<td>MS Word B</td>
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<tr>
<td>10103148</td>
<td>MS Word C</td>
<td>1</td>
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<tr>
<td>10103151</td>
<td>MS Excel A</td>
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<tr>
<td>10103152</td>
<td>MS Excel B</td>
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<td>10103162</td>
<td>MS Access A</td>
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<tr>
<td>10106128</td>
<td>Software Integration</td>
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</table>

CERTIFICATE REQUIREMENTS 9

▲ Requires a prerequisite and/or corequisite.

Students must earn a grade point of 3.0 or better in all required courses.

Course Descriptions

10103106
MS PowerPoint - Credits: 1
A complete presentation graphics course that allows you to produce professional-looking presentations. It gives you the flexibility to make informal presentations using overhead transparencies, electronic presentations, formal presentations using 35mm slides, or virtual presentations. Additionally, you can create paper printouts, outlines, speaker notes, and audience handouts.

10103125
MS Outlook - Credits: 1
This course introduces the basics of Microsoft Outlook. Participants will use e-mail, calendar, files, and other features to effectively manage business and personal information.

10103146
MS Word A - Credits: 1
Students will learn word processing using MS Word. Credit A activities will include creating, editing, saving, formatting, printing, and other basic MS Word features.

10103147
MS Word B - Credits: 1
Students will learn word processing using MS Word. Credit B activities include tables, mail merge, sort, graphics, and special features of MS Word. COREQUISITE: 10103146 MS Word A.

10103148
MS Word C - Credits: 1
Students will learn word processing using MS Word. Credit C activities will include wordgroup collaboration, macros, styles, and advanced formatting features of MS Word. COREQUISITE: 10103147 MS Word B.

10103151
MS Excel A - Credits: 1
Students will learn to use MS Excel. Credit A activities will include creating, editing, saving, formatting, printing, performing calculations, and enhancing worksheets through charts.

10103152
MS Excel B - Credits: 1
Students will learn to use MS Excel. Credit B activities will include using advanced features of formulas, object linking and embedding, multiple worksheets, 3-D references, macro basics and database basics. COREQUISITE: 10103151 MS Excel A.

10103162
MS Access A - Credits: 1
Learners create, edit, sort, and query a database. They also learn how to create and print basic forms and reports.

10106128
Software Integration - Credits: 1
This course is designed to integrate computer applications. Participants will prepare and enhance documents using word processing, spreadsheets, database, and presentation graphics software. PREREQUISITES: 10103106 MS PowerPoint, 10103146 MS Word A, 10103147 MS Word B, 10103148 MS Word C, 10103151 MS Excel A, 10103152 MS Excel B, 10103162 MS Access A.

Campus:
Ashland
New Richmond
Rice Lake
Superior
Networking Professional
17-150-5 Technical Certificate

Overview
The Networking Professional certificate is designed to give information technology professionals a path to complete industry certification while advancing their skills. Students should have experience in information technology or broadband technologies.

Special Feature
Friendly, skilled instructors with an emphasis in a hands-on teaching environment will teach the courses. Topics within the certificate will help prepare the student for industry certification in the Cisco Certified Networking Associate (CCNA).

Student Profile
Networking Professional certificate students should be near completion of a degree in information technology or broadband technologies or be employed in the industry.

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:

- Network hardware configuration
- Router setup and configuration
- Switch configuration
- Network management
- Operating System Management

Outcomes
Employers will expect graduates of this certificate to:

- Configure hardware and software
- Plan and implement routers into TCP/IP network infrastructure
- Plan, implement, and support wired and wireless networks

Career Outlook
Graduates of this certificate will enhance their careers as:

- Network/Technical Coordinators
- Network Administrator-Managers
- Network Technician or Support Specialists
- Computer Support Specialists

Related Program
- Information Technology - Network Specialist

Curriculum

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<th>Number</th>
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<td>Wireless LANs - Credits: 3</td>
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<td>10150111</td>
<td>Cisco CCNA 1 Introduction to Networks - Credits: 3</td>
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<td>10150112</td>
<td>Cisco CCNA 3 Scaling Networks - Credits: 3</td>
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<td>10150113</td>
<td>Cisco CCNA 2 Routing and Switching Essentials - Credits: 3</td>
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<tr>
<td>10150114</td>
<td>Cisco CCNA 4 Connecting Networks - Credits: 3</td>
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CERTIFICATE REQUIREMENTS 15

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better. Students must earn a grade point of 3.0 or better in all required courses.

Course Descriptions

10150109
Wireless LANs - Credits: 3
Wireless LANs is an introductory course that will focus on the design, planning, implementation, operation and troubleshooting of wireless networks. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands-on skills. PREREQUISITE: 10150113 Cisco CCNA 2 Routing and Switching Essentials.

10150111
Cisco CCNA 1 Introduction to Networks - Credits: 3
This course introduces the architecture, structure, function, components and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

10150112
Cisco CCNA 3 Scaling Networks - Credits: 3
This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. PREREQUISITE: 10150111 Cisco CCNA 1 Introduction to Networks.

10150113
Cisco CCNA 2 Routing and Switching Essentials - Credits: 3
This course describes the architecture, components and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPng, Single area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. After this course, students should be prepared to sit for the Cisco CCENT certification exam. PREREQUISITE: 10150111 Cisco CCNA 1 Introduction to Networks.

10150114
Cisco CCNA 4 Connecting Networks - Credits: 3
This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network. After this course, students should be prepared to sit for the CCNA routing and switching certification exam. PREREQUISITES: 10150112 Cisco CCNA 3 Scaling Networks and 10150113 Cisco CCNA 2 Routing and Switching Essentials and COREQUISITES: 10150109 Wireless LANs and 10150118 Microsoft LAN Administration - Active Directory.

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Overview
The Personal Care Worker (PCW) course is a combination of an independent study coupled with a final 8-hour lab session with the course instructor. The independent study portion of the course is directed through a series of eight learning plans (approximately seven hours/learning plan) that carefully detail learning activities to help students learn the course content. Upon completion of the learning activities, students will contact the campus contact to schedule an 8-hour lab session that concludes with skills competency testing and the final written exam. The lab sessions are held on Saturdays and scheduled at the various WITC campuses (Ashland, New Richmond, Rice Lake, and Superior) and outreach centers (Hayward and Ladysmith) throughout the district.

Special Features
This course allows students to work at their own pace to learn the content. Students will work directly with an instructor to complete the written exam and skill demonstration. The course emphasizes core abilities for the workplace.

Student Profile
Personal Care Worker students should:
• Display a caring attitude toward ill clients and their families
• Be flexible, empathetic, and nonjudgmental
• Be emotionally stable
• Be able to adjust to diverse personalities, background, and home environments

Preparation for Admission
The following will help students prepare for this certificate:
• Communication skills
• Problem-solving skills

Outcomes
Employers will expect students, after completing the certificate, to:
• Provide personal care for clients
• Communicate effectively with clients, families, and healthcare teams
• Promote client rights

Career Outlook
Typical careers that will be available after graduation as a Personal Care Worker include:
• Home care services
• County and private healthcare agencies
• Independent practices

Curriculum
<table>
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<tr>
<th>Number</th>
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<tbody>
<tr>
<td>30510308</td>
<td>Personal Care Worker</td>
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</table>

CERTIFICATE REQUIREMENTS 1

Course Descriptions
30510308  
**Personal Care Worker - Credits: 1**
This course emphasizes aspects of providing personal and supportive/rehabilitative healthcare to clients needing assistance in their home or other care facilities. Basic knowledge and skills acquired through this course include clients' rights, communication, rehabilitation, positioning and transfer skills, infection control, and safety. Personal Care Worker is a 64-hour course that combines guided independent study with a laboratory practice time and a final written exam and skills competency testing assessed under the guidance of a registered nurse.
Overview
Students will undergo focused study of federal and Wisconsin income tax law and practices including: participation in WITC’s VITA (Volunteer Income Tax Assistance) Tax Workshop for one tax season, preparing income tax returns for low-income tax payers. This experience will be supervised by a qualified tax professional/instructor.

Special Features
This certificate enables the student to practice professionally in a guided experience with real clients.

Student Profile
Personal Income Tax Specialist students should be able to:
• Read and comprehend complete tax guidelines
• Effectively communicate on a one-on-one basis with a client
• Work independently
• Seek guidance on ambiguous issues
• Work comfortably with computer software
• Maintain a professional demeanor when dealing with clients
• Handle client information in a confidential manner

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Introductory Accounting
• Oral/Interpersonal Communication
• Written Communication
• Working experience with Internet-based computer software

Key to the student's success in this certificate is attention to detail and a willingness to learn.

Outcomes
Employers will expect graduates of this certificate to be able to:
• Interact effectively with taxpayers
• Prepare basic and advanced tax returns (as defined by the IRS-VITA program)
• Effectively use tax-preparation software
• Consult relevant reference materials to determine correct filing status, tax forms, deductions, etc.
• Present taxpayers with a professionally prepared tax return, including a copy of the return and answers to taxpayers’ questions

Career Outlook
Graduates of this certificate will be ready for their career as a Tax Preparer with experience in the VITA program.

Related Programs
• Accounting
• Accounting Assistant

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
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<td>10101123</td>
<td>Income Tax Accounting - Credits: 4</td>
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<tr>
<td>10101125</td>
<td>VITA Income Tax Prep - Service Learning - Credits: 2</td>
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<tr>
<td>10801196</td>
<td>Oral/Interpersonal Communication</td>
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</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS

Students must earn a cumulative GPA of 3.0 or better in the certificate with a grade point of at least 2.0 in each required course.

Course Descriptions

10101123
Income Tax Accounting - Credits: 4
This course will prepare you to complete and file individual federal and Wisconsin income tax returns including the 1040EZ/W2, 1040A/1A, and 1040/1 with most common supporting schedules. This course is lecture- and project-based with most returns done manually and some comprehensive problems being computerized.

10101125
VITA Income Tax Prep - Service Learning - Credits: 2
VITA Income Tax Prep – Service Learning is a tax review and subsequent tax preparation experience. The student will review recent tax changes at the federal and Wisconsin levels, and will also be taught the basics of tax accounting software. After the successful completion of the review and training, the student will participate in a Volunteer Income Tax Assistance workshop and a two-month series of tax assistance to the general public. The student will prepare, review, and assemble tax returns for qualifying clients with basic personal tax returns. As a volunteer tax preparer, the student is under no personal or professional liability for the tax returns. The workshop will be supervised by a qualified instructor who will oversee and review work. 10101123 Income Tax Accounting or similar experience is recommended prior to taking this course.

10801196
Oral/Interpersonal Communication - Credits: 3
Focuses upon developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects.
Professional Credential for Child Care Administrators (Wisconsin)
17-307-1 Technical Certificate

Overview
The Professional Credential for Child Care Administrators (Wisconsin) coursework provides in-depth training for effective leadership in early childhood settings. The wide variety of roles of an early childhood administrator or director are explored and addressed, including current information on organizational management, administration, policy, marketing, finances, child development, and advocacy in the early childhood field. The credential coursework will benefit current administrators and staff in early care and education and early intervention programs, and family child care providers who wish to gain practical information and develop a deeper understanding about the administrative role.

Special Features
Upon completion of certificate classes, students may apply to The Registry for the Wisconsin Professional Credential for Child Care Administrators, 2517 Seiferth Road, Madison, WI 53716, 608.222.1123, or the-registry.org.

Student Profile
Professional Credential for Child Care Administrators (Wisconsin) students should:

• Enjoy and respect children and families
• Communicate effectively
• Get along well with people
• Be able to work under pressure and handle multiple tasks
• Be able to make decisions

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:

• Psychology
• Sociology
• Parenting/Family Living
• Communication skills
• Basic problem-solving skills

Outcomes
Employers will expect graduates of this certificate to:

• Apply organizational leadership principles
• Communicate effectively with parents and staff
• Oversee the development and maintenance of appropriate and safe early childhood environments

Career Outlook
The graduate of this certificate will be ready for a career as a:

• Director or Administrator of Early Childhood Programs
• Assistant Director of Early Childhood Programs
• Family Child Care Provider

Related Program
• Early Childhood Education

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10307204</td>
<td>Supervision/Administration of ECE Programs</td>
<td>3</td>
</tr>
<tr>
<td>10307161</td>
<td>ECE: Operations Management in Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>10307162</td>
<td>ECE: Financial Management and Planning in Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>10307163</td>
<td>ECE: Early Childhood Programs and the External Environment</td>
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<tr>
<td>10307164</td>
<td>ECE: Best Practices for Children and Families in Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>10307165</td>
<td>ECE: Administrative Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Certificate Requirements

▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

WITC offers a wide array of credit-based early childhood education courses, credentials, and degree options that align with the Youngstar requirements.

For more information, go to www.witc.edu/ece.
Overview

The Professional Credential for Infants/Toddlers (Wisconsin) is designed for and will benefit infant/toddler educators, teacher’s assistants, program directors and administrators from full day and half day early care and education programs including: child care centers, family child care homes, Head Start, pre-kindergarten, early intervention programs, and preschool or nursery schools. Students will gain knowledge of the unique skills and experience needed to provide nurturing, stimulating, high quality infant and toddler care.

Upon completion of certificate classes, students may apply to the Registry for the Wisconsin Professional Credential for Infants/Toddlers, 2517 Seiferth Road, Madison, WI 53716, 608.222.1123, the-registry.org.

Special Features

To meet the needs of all students, the Professional Credential for Infants/Toddlers (Wisconsin) will be offered in a fully online environment. The flexibility and accessibility of distance learning allows students to decide where and when to attend class, eliminating the barriers that traditional classes often place on working students. Online students in this certificate can study from home, the office, or an Internet café — anywhere they can find a connection.

Students who successfully complete the Professional Credential for Infants/Toddlers (Wisconsin) may also have the opportunity to obtain the Infant Mental Health Endorsement offered via the Wisconsin Alliance for Infant Mental Health.

Student Profile

Students in this certificate should:

- Enjoy and respect children and families
- Communicate effectively
- Get along well with people
- Work well under pressure and handle multiple tasks
- Be able to make decisions

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

- Psychology
- Sociology
- Written Composition
- Parenting/Family Living
- Communication skills
- Basic problem-solving skills

Course Descriptions

10307151 ECE: Infant & Toddler Development - Credits: 3
In this 3-credit course you will study infant and toddler development as it applies to an early childhood education setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; analyze development of infants and toddlers (conception to three years); correlate prenatal conditions with development; summarize child development theories; analyze the role of heredity and the environment; examine culturally and developmentally appropriate environments for infants and toddlers; examine the role of brain development in early learning (conception through age three); examine caregiving routines as curriculum.

10307141 ECE: Group Care for Infants/Toddlers - Credits: 3
This 3-credit course focuses on caring for infants and toddlers in a variety of settings, inclusive of center-based and family child care environments. Key course components will be based on elements of quality early care including philosophical foundation, structure and environments, health and safety responsive relationships, developmentally appropriate practice, culturally sensitive care, inclusion, brain development, assessment, and purposeful planning.

10307195 ECE: Family & Community Relationships - Credits: 3
In this 3-credit course you will examine the role of relationships with family and community in early childhood education. Course competencies include: implement strategies that support diversity and anti-bias perspectives when working with families and community; analyze contemporary family patterns, trends, and relationships; utilize effective communication strategies; establish ongoing relationships with families; advocate for children and families; work collaboratively with community resources.

10307143 ECE: Infant/Toddler Capstone Credential - Credits: 3
In this 3-credit capstone course, students will integrate and demonstrate their knowledge of best practices as learned in courses 1-3, while working in a supervised infant/toddler (birth to 35 months) setting. As part of this course, students will complete the required Credential Portfolio and culminate in the Wisconsin Registry Commission process. PREREQUISITES: 10307141 ECE: Group Care for Infants/Toddlers, 10307151 ECE: Infant & Toddler Development, and 10307195 ECE: Family & Community Relationships.

Outcomes

Employers will expect students completing the Professional Credential for Infants/Toddlers (Wisconsin) to:

- Apply developmental knowledge and observation to design, implement, and evaluate individual and group curriculum experiences for infants and toddlers
- Create respectful, healthy, and safe physical and interpersonal environments for infants and toddlers
- Utilize culturally responsive verbal and nonverbal caregiver strategies
- Select appropriate materials and promote health, safety, and nutrition guidelines specific to early care environments
- Design experiences and utilize caregiver strategies that support family involvement and reciprocal relationships
- Perform professionally and ethically, use self-reflection and knowledge, and access relevant resources

Career Outlook

- Job growth in child care is expected to increase faster than the national average for all occupations through 2016 (bls.gov)
- Professional advancement in the field of early care comes with increased specialized training in the unique needs of infants and toddlers

Related Program

- Early Childhood Education

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
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<td>10307195</td>
<td>ECE: Family &amp; Community Relationships</td>
<td>3</td>
</tr>
<tr>
<td>10307143</td>
<td>ECE: Infant/Toddler Capstone Credential</td>
<td>3</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
- Note: it is recommended that courses are taken in the sequence shown, but not required.

http://wisconsinearlychildhood.org/programs/teach/

WITC offers a wide array of credit-based early childhood education courses, credentials, and degree options that align with the Youngstar requirements.

For more information, go to www.witc.edu/ece.
The Professional Credential for Preschool Teachers (Wisconsin) certificate is designed for individuals working with children ages three to five. This includes family child care providers, day care teachers, nursery school teachers, certified providers, or anyone wishing to provide a quality environment and learning activities for children in this age group. Coursework consists of 18 credits, representing five courses selected from the Wisconsin Technical College System statewide curriculum for an associate degree, plus a culminating capstone course.

Special Features
Coursework will be offered in an in-person and/or online instructional format.

The early childhood program credentials were created to give learners an alternative to enrolling in the full associate degree program. The certificates are made up of associate degree-level courses. Many of the certificates “ladder” into the associate degree program. The preschool credential is designed to stand alone or to enhance the coursework of the Early Childhood Education associate degree program. Early Childhood Education courses taken prior to 2006 may meet the credential requirement.

Upon completion of certificate classes, students may apply to The Registry for the Wisconsin Professional Credential for Preschool Teachers, 2517 Seifert Road, Madison, WI 53716, 608.222.1123, or the-registry.org.

Career Outlook
Graduates of this certificate will be ready for their careers in:
• Child Care Centers
• Family Child Care Homes
• Preschool or Nursery Schools
• Head Start Programs
• Pre-Kindergarten
• Early Intervention Programs

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Psychology

Course Descriptions
10307148 ECE: Foundations of Early Childhood Education - Credits: 3
This 3-credit course introduces you to the early childhood profession. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; investigate the history of early childhood education; summarize types of early childhood education settings; identify the components of a quality early childhood education program; summarize responsibilities of early childhood education professionals; explore early childhood curriculum models, and analyze the principles of the WI Model Early Learning Standards.

10307176 ECE: Health, Safety, & Nutrition - Credits: 3
This 3-credit course examines the topics of health, safety, and nutrition within the context of the early childhood educational setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; follow governmental regulations and professional standards, as they apply to health, safety, and nutrition; provide a safe early childhood environment; provide a healthy early childhood environment; plan nutritionally sound menus; adhere to child abuse and neglect mandates, apply Sudden Infant Death Syndrome (SIDS) risk reduction strategies, apply strategies to prevent the occurrence of Shaken Baby Syndrome (SBS), incorporate health, safety, and nutrition concepts into the children’s curriculum.

10307178 ECE: Art, Music, & Language Arts - Credits: 3
This 3-credit course will focus on beginning level curriculum development in the specific content areas of art, music, and language arts. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the role of heredity and the environment; examine the role of brain development in early learning (ages 3-8); develop and implement a beginning level music and movement activity; create developmentally appropriate art activities; create developmentally appropriate language, literature, and literacy activities; create developmentally appropriate music and movement activities.

10307179 ECE: Child Development - Credits: 3
This 3-credit course examines child development within the context of the early childhood education setting. Course competencies include: analyze social, cultural, and economic influences on child development; summarize child development theories; analyze development of children age three through age eight; summarize the methods and designs of child development research; analyze the role of heredity and the environment; examine the role of brain development in early learning (ages 3-8).

10307180 ECE: Preschool Credential Capstone - Credits: 3
The capstone is the last course all students take prior to completing the Preschool Credential. The intent of this capstone course is to cover and revisit some important themes from the prior five courses. The student will synthesize the information and demonstrate mastery of the competencies through the completion of a portfolio.

10307188 ECE: Guiding Children’s Behavior - Credits: 3
This 3-credit course examines positive strategies to guide children’s behavior in the early childhood education setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; summarize early childhood guidance principles; analyze factors that affect the behavior of children; practice positive guidance strategies; develop guidance strategies to meet individual needs; create a guidance philosophy.

10307189 ECE: Youngstar Requirements - Credits: 1
This 1-credit course examines positive strategies to guide children’s behavior in the early childhood education setting. Course competencies include: analyze social, cultural, and economic influences on child development; analyze development of children age three through age eight; summarize the methods and designs of child development research; analyze the role of heredity and the environment; examine the role of brain development in early learning (ages 3-8).
Overview
The Safety Management certificate will prepare students to manage, promote, and oversee all aspects of safety in the workplace. They will study state and federal safety regulations and learn how to manage industrial safety reports. Graduates of this certificate will be ready to manage safety systems and reporting processes that are becoming more prevalent in business and industry today.

Special Feature
The certificate is designed to be project oriented so that participants will be able to design, implement, and manage a working safety management program after completing the certificate requirements.

Student Profile
Students in this certificate:
• Should have prior work experience and be able to relate on-the-job experiences to the concepts and regulations of safety management
• Need a basic understanding of general business practices
• Must be able to make judgments and decisions
• Need to get along well with people
• Should be able to work under pressure and handle multiple tasks and distractions
• Must be able to study on their own for at least six to eight hours per week
• Should have a desire to become a safety team leader

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
• Communication skills
• General business concepts
• Basic problem-solving skills
• Prior work experience
• Keyboarding and basic computer skills

Outcomes
Employers will expect graduates of the Safety Management certificate to:
• Handle state and federal OSHA paperwork and reporting processes
• Establish an effective safety management program for an organization
• Design preventative programs to reduce and/or eliminate injuries in the workplace
• Work with employees to maintain and enhance safe working conditions in the workplace

Career Outlook
After completing the Safety Management certificate, students will be ready to take responsibility for developing, overseeing, and managing the safety issues in an organization.

Related Program
• Supervisory Management

Curriculum
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<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>10196136</td>
<td>Safety in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>10196137</td>
<td>Management of Safety</td>
<td>3</td>
</tr>
<tr>
<td>10196139</td>
<td>OSHA General Standards</td>
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</tr>
<tr>
<td>10196164</td>
<td>Personal Skills for Supervisors</td>
<td>3</td>
</tr>
<tr>
<td>10196189</td>
<td>Team Building and Problem Solving</td>
<td>3</td>
</tr>
</tbody>
</table>

CERTIFICATE REQUIREMENTS 14

Course Descriptions

10196136 Safety in the Workplace - Credits: 3
An introduction to safety and loss prevention in the workplace with an emphasis on the supervisor's responsibility for maintaining a safe, productive environment. Students will study safety concepts, hazard controls, developing safety and health programs, and federal- and state-mandated regulations.

10196137 Management of Safety - Credits: 3
This course is dedicated to the management of safety issues in organizations. Safety has become an important part of every business operation. We will define, study, and practice the concepts of risk management and loss control management. General topics will include all liabilities of business, disaster and recovery issues, security concerns, outside contractor matters, DOT and vehicle regulations, workers' compensation, business site evaluation of needs, and more. The Management of Safety course ties all aspects of the Safety Certificate program together. Students enrolling in this course should have at least two years of prior work experience and basic working knowledge of a safety program or the approval of the instructor.

10196139 OSHA General Standards - Credits: 2
In the OSHA General Standards course, students examine and gain working knowledge of the major OSHA Industrial Safety Standards and paperwork processes. Participants will review, discuss, and develop plans of action to implement OSHA requirements in their workplace. This course is taught by an OSHA-certified instructor. Students receive an OSHA certification of completion upon successful outcome. Students enrolling in this course should have at least two years of prior work experience, basic working knowledge of Microsoft Office Suite, basic ability to search the Internet, and basic working knowledge of a safety program or the approval of the instructor.

10196164 Personal Skills for Supervisors - Credits: 3
In Personal Skills for Supervisors, the learner applies the skills and tools necessary to deal with the time management, stress, and related challenges to a supervisor. Each learner will demonstrate the application of the time management techniques, personal planning, continuous learning, valuing rights and responsibilities of others, effective communication, assertiveness, and dealing effectively with stress.

10196189 Team Building and Problem Solving - Credits: 3
In Team Building and Problem Solving, the learner applies the skills and tools necessary to facilitate problem solving in a team environment. Each learner will demonstrate the application of the benefits and challenges of group work, necessary roles in a team, stages of team development, different approaches to problem solving, consensus, systematic process of problem definition, data acquisition, analysis, developing alternative solutions, solution implementation, evaluation, and documentation.
Supervisory Leadership
17-196-5 Technical Certificate

Overview
The Supervisory Leadership certificate will allow students to customize their training with a series of short, achievable goals. Rather than completing an entire Supervisory Management associate degree, students will be able to select the course clusters and take them in a sequence that works best for them. Many students who are pursuing the Supervisory Management program decide to earn this certificate before they complete the associate degree. Earning the certificate may give students the recognition they need to move into their management role in their present job while they are finishing the associate degree, or it could be all they need to start a new career. The certificate, like the associate degree, is designed for working adults, with courses scheduled on evenings and weekends.

In addition to this certificate, some campuses offer:
- Safety Management certificate
- Ethical Leadership certificate

Student Profile
Supervisory Leadership certificate students should be able to:
- Make judgments and decisions
- Communicate ideas verbally and in writing
- Learn new methods/concepts
- Assume responsibility
- Get along well with people
- Work under pressure and with multiple distractions
- Have basic computer and math skills
- Learn using a variety of delivery methods

Preparation for Admission
Students should strive to reach a comfort level in the following courses or skills:
- Business Mathematics
- Computer skills
- Keyboarding
- Communications

Outcomes
After completion of this certificate, employers will expect students to be able to:
- Maximize use of time and resources
- Minimize wasted effort
- Address difficult situations in positive ways
- Possess supervisory, communication, and leadership skills
- Understand what motivates people in the workplace
- Create efficient, customer-friendly processes
- Develop productive work teams

Career Outlook
Supervisory Leadership certificate students may be employed in a variety of businesses and industries. This certificate provides students with the opportunity to upgrade their leadership and management skills in preparation for a supervisory position or for support in their present position.

Related Programs
- Business Management
- Supervisory Management

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>10196190</td>
<td>Leadership Development</td>
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<tr>
<td>10196191</td>
<td>Supervision</td>
<td>3</td>
</tr>
<tr>
<td>101961XX</td>
<td>Three (3) credits of 196 coursework</td>
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<tr>
<td>10081195</td>
<td>Written Communication</td>
<td>3</td>
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<tr>
<td>10081196</td>
<td>Oral/Interpersonal Communication</td>
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<tr>
<td>10081198</td>
<td>Speech</td>
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<tr>
<td>10089198</td>
<td>Introduction to Psychology</td>
<td>3</td>
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<tr>
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</tr>
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</table>

- Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
- See pages 41–43 for course descriptions.

Course Descriptions

10196190 Leadership Development - Credits: 3
In Leadership Development, the learner applies the skills and tools necessary to fulfill his/her role as a modern leader. Each learner will demonstrate the application of evaluating leadership effectiveness and organization requirements, individual and group management strategies, implementing mission and goals, ethical behavior, personal leadership style and adaptation, impacts of power facilitating employee development, coaching, managing change, and effective conflict resolution.

10196191 Supervision - Credits: 3
In Supervision, the learner applies the skills and tools necessary to perform the functions of a frontline leader. Each learner will demonstrate the application of strategies and transition to a contemporary supervisory role including day-to-day operations, analysis, delegation, controlling, staffing, leadership, problem solving, team skills, motivation, and training.

10196108 Customer Service - Credits: 1
This course examines customer service as it relates to organizational quality. It addresses service models for internal and external customers, systems and strategies applied to customer service, and tools and techniques for gathering customer feedback and handling complaints.

10196334 Legal Issues for Supervisors - Credits: 3
Provides an overview of the general legal responsibilities of an organization. Analyzes the current employment laws in the U.S. and their impact on employer/employee. Examines the supervisor’s role in dealing with harassment in the workplace. Compares how appeals can be addressed in both union and nonunion environment.

10196136 Safety in the Workplace - Credits: 3
An introduction to safety and loss prevention in the workplace with an emphasis on the supervisor’s responsibility for maintaining a safe, productive environment. Students will study safety concepts, hazard controls, developing safety and health programs, and federal and state-mandated regulations.

10196145 Contemporary Business for Supervisors - Credits: 2
In this course, you will review how the basic management styles affect the people, processes, and profitability of a business. You will also learn how to balance the organization’s needs for profits with employees’ basic needs within a global context. You will review and study the basic concepts and the supervisor’s role regarding return on investment, return on equity, profit centers, financial statements, and overall departmental operations.

10196164 Personal Skills for Supervisors - Credits: 3
In Personal Skills for Supervisors, the learner applies the skills and tools necessary to deal with the time management, stress, and related challenges to a supervisor. Each learner will demonstrate the application of time management techniques, personal planning, continuous learning, valuing rights, and responsibilities of others, effective communication, assertiveness, and dealing effectively with stress.

10196168 Organizational Development - Credits: 3
In Organizational Development, the learner applies the skills and tools necessary to effectively deal with organization behavior and change. Each learner will demonstrate the application of the impacts of globalization on an organization, dealing with organization culture, dealing with change and future challenges affecting the total organization, organization decision making, vision, goals, performance management and planning, and the role of organization structure.

10196169 Diversity and Change Management - Credits: 3
Addresses changes taking place in the workplace and their effect on the supervisor and the organization. Explores a broadened view of diversity, including values, age, gender, disabilities, education, and culture. Provides an action framework for the supervisor to gain advantage by blending and capitalizing on the different skills and perspectives of people and creating an organization where everyone gives his or her best.

10196188 Project Management - Credits: 3
In Project Management, the learner applies the skills and tools necessary to design, implement, and evaluate formal projects. Each learner will demonstrate the application of the role of project management, developing a project proposal, use of relevant software, working with project teams, sequencing tasks, charting progress, dealing with variations, budgets and resources, implementation, and assessment.

10196189 Team Building and Problem Solving - Credits: 3
In Team Building and Problem Solving, the learner applies the skills and tools necessary to facilitate problem solving in a team environment. Each learner will demonstrate the application of the benefits and challenges of team work, necessary roles in a team, stages of team development, different approaches to problem solving, consensus, systematic process of problem definition, data acquisition, analysis, developing alternative solutions, solution implementation, evaluation, and documentation.

10196192 Managing for Quality - Credits: 3
In Managing for Quality, the learner applies the skills and tools necessary to implement and maintain a continuous improvement environment. Each learner will demonstrate the application of a personal philosophy of quality, identifying all stakeholder relationships, meeting/exceeding customer expectations, a system-focused approach, using appropriate models and tools, managing a quality improvement project, and measuring effectiveness of continuous improvement activities.
## Overview

WITC’s Supervisory Management Lean Quality certificate is a combination of learning the “on the floor” lean quality process tools and studying and applying “leadership practices” to deliver your quality initiatives. Topics include lean enterprise principles and tools, value stream mapping, 5 S, Kaizen implementation, and management for improvement. Students can choose the study track that best meets their specific needs: manufacturing process approach or services process approach.

## Student Profile

Students in this certificate should:

- Relate to particular industry or business operations or processes
- Communicate ideas verbally and in writing
- Possess basic computer, math skills, and analysis skills
- Be a self-starter and team player
- Bring order to ambiguous situations
- Apply problem-solving principles

## Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

- Computer skills
- Business math skills
- Written and verbal communication skills
- Team building skills
- Basic business operational skills

## Outcomes

After completion of this certificate, employers will expect students to be able to:

- Lead and apply Kaizen initiatives
- Create and use value stream mapping processes
- Implement 5 S programs
- Incorporate the key components of Lean Enterprise and Six Sigma into a working environment

## Career Outlook

After completing the lean quality certificate, students will be ready to work with and understand day-to-day lean enterprise initiatives and challenges in most organizations. This certificate also prepares students to assist in working with and developing successful productive teams focused on customer service excellence.

## Related Program

- Supervisory Management

## Curriculum

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<th>Number</th>
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<tbody>
<tr>
<td>10196192</td>
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<td>3</td>
</tr>
<tr>
<td>10196163</td>
<td>Quality Tool Box</td>
<td>2</td>
</tr>
<tr>
<td>10196165</td>
<td>Lean Enterprise</td>
<td>3</td>
</tr>
<tr>
<td>10196195</td>
<td>Six Sigma Strategy</td>
<td>1</td>
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<tr>
<td>10196108</td>
<td>Customer Service</td>
<td>1</td>
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<td></td>
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<td><strong>10</strong></td>
</tr>
</tbody>
</table>

## SUPERVISORY MANAGEMENT LEAN QUALITY - MANUFACTURING CERTIFICATE 17-196-1

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<tr>
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<td>10196165</td>
<td>Lean Enterprise</td>
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<tr>
<td>10196198</td>
<td>Statistical Process Control</td>
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<tr>
<td></td>
<td><strong>CERTIFICATE REQUIREMENTS</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

## Course Descriptions

### SUPERVISORY MANAGEMENT LEAN QUALITY - SERVICE CERTIFICATE

#### 10196192 Managing for Quality - Credits: 3

In Managing for Quality, the learner applies the skills and tools necessary to implement and maintain a continuous improvement environment. Each learner will demonstrate the application of a personal philosophy of quality, identifying all stakeholder relationships, meeting/exceeding customer expectations, a system-focused approach, using appropriate models and tools, managing a quality improvement project, and measuring effectiveness of continuous improvement activities.

#### 10196163 Quality Tool Box - Credits: 2

Quality is all about implementing improvement. Quality Tool Box (QTBox) is all about studying and then applying the many different types of tools to actually make things happen out “on the floor.” Tools to be studied and applied: Value Stream Mapping Techniques, 5S Processes, DMAIC, Tools for Quality Planning, and Tools for Continuous Improvement.

#### 10196165 Lean Enterprise - Credits: 3

Lean Enterprise focuses on the abilities of supervisors to identify and increase workplace productivity. Learners will identify workplace productivity solutions through study and practice of: basic principles of lean manufacturing and Toyota Production System (TPS), Value-Stream Mapping, 5S Work Flow, Cellular Manufacturing, and Kanban Systems and Kaizen practices.

#### 10196195 Six Sigma Strategy - Credits: 1

This course takes a hands-on approach with the key concepts of Six Sigma being delivered in a form of a conversation between a recently unemployed manager and an old friend that has been successful in part because of Six Sigma. It culminates with the application of Six Sigma to various feedback surveys and to the development of an outline of a Six Sigma training program.

#### 10196108 Customer Service - Credits: 1

This course examines customer service as it relates to organizational quality. It addresses service models for internal and external customers, systems and strategies applied to customer service, and tools and techniques for gathering customer feedback and handling complaints.

### SUPERVISORY MANAGEMENT LEAN QUALITY - MANUFACTURING CERTIFICATE

First three courses of Supervisory Management Lean Quality - Service Certificate Plus:

#### 10196198 Statistical Process Control - Credits: 2

Statistical Process Control is an introductory course that covers the beginning/basic perspective of statistical processes and tools used in business and industry. Tools and processes include histograms, control charts, capability analysis and Pareto diagrams. Other topics of discussion and group activities will include the philosophy of quality, benefits of prevention over detection, and techniques and statistics for everyday life.
Overview

The Sustainable Design Certificate is offered online and provides applicants a wealth of education in sustainable building design. Whether the student is interested in building design, building construction, or just wanting to gain a working knowledge about the topic, the courses will apply. Students will learn about sustainable structures, renewable energy sources, types of energy systems, methods of construction, and alternative energy uses for both residential and commercial buildings. Students will learn how to reduce their personal carbon footprint; conserve natural resources; calculate energy loads for buildings; and design smart, high performance buildings from an ecological standpoint. Building systems will be looked at starting from site orientation and location, moving on to the building’s heating, ventilating, air conditioning, plumbing and electrical systems. The certificate holder will have a solid knowledge about the LEED (Leadership in Energy & Environmental Design) rating system and other common rating systems as they relate to sustainable “green” building design.

Outcomes

Employers will expect graduates of this certificate to be able to:

- Describe the need for renewable energy systems
- Evaluate changing needs and emerging careers in the architectural field
- Research energy generation systems: photovoltaic, wind, biogas, and hydro-electric
- Evaluate design and cost of solar, geothermal, and biomass heating/cooling
- Recognize Zero Energy designs
- Analyze implications of energy use - locally, regionally, and internationally
- Use formulas for calculating energy loads
- Compare successful/unsuccessful energy efficient building projects
- Describe the roles that architects, designers, and contractors play in sustainable design
- Evaluate site orientation and how this affects performance of building projects
- Recognize “green” building systems: HVAC (Heating, Ventilating, Air Conditioning), electrical, and plumbing
- Use landscape practices to enhance the sustainability of a project
- Evaluate the implications landscaping can both have locally and regionally
- Apply the LEED rating system to projects
- Recognize sustainable terminology, methods, materials, and applications

Career Outlook

This certificate will enhance construction opportunities or careers for graduates in both residential and commercial design applications. A student who is interested in the field of building construction, but an interested private citizen or a home or building owner will also acquire a wealth of knowledge that will allow them to design and live within a more healthy and sustainable environment – both now and into the future.

Related Programs

- Architectural Commercial Design
- Sustainable Landscape Practices
- Zero Energy Home
- High Performance Building Systems
- Sustainable Landscape Practices
- Green Globes, LEED, and Other Building Rating Systems
- Sustainable Architecture
- Alternative Energy Overview
- Sustainable Landscape Practices
- LEED and Other Building Rating Systems
- Sustainable Architecture
- Sustainable Landscape Practices
- Zero Energy Home
- High Performance Building Systems
- Sustainable Landscape Practices
- Green Globes, LEED, and Other Building Rating Systems

Special Feature

All of the courses will be offered online.

Student Profile

Students in this certificate should:

- Perform basic math skills
- Enjoy problem solving
- Appreciate the environment
- Understand some of the construction process
- Be capable of working online

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

- Computer knowledge
- Ability to work effectively in an online learning environment
- Basic math and science
- Written Communication

Course Descriptions

10480100 Alternative Energy Overview - Credits: 2
In this course, students will investigate the need for renewable energy systems and emerging careers in renewable energy. Students will examine the basic design, cost, and other considerations associated with photovoltaic, wind, and biogas electrical generation systems. In addition, students will evaluate the basic design, costs, truths, and myths associated with solar thermal, geothermal, and biomass heating and cooling systems. Students will also explore the production and use of alternative transportation fuels.

10481155 Sustainable Architecture - Credits: 2
In the broad context, sustainable architecture seeks to minimize the negative environmental impact of buildings through ecological and efficient use of energy and materials resources. This course introduces the student to current theories and practices of sustainable building design through the study of energy efficiency techniques, renewable energy resources, and the reduction, recycling or reuse of building construction materials.

10481156 Zero Energy Home - Credits: 2
This course introduces the student to the various definitions of Zero Energy and what implications the term has within several contexts: bioregional, local and site constrained. Energy loads will be calculated and the student will have opportunity to learn how to reduce their current energy loads in their own home as well as in case studies and other theoretical projects.

10481157 High Performance Building Systems - Credits: 2
This course introduces the student to the concept of high performance buildings and explores appropriate objectives required in the energy use performance of such buildings. Through case study, students will review the systems design of existing buildings in order to develop an understanding of how buildings can achieve higher energy and operational efficiencies and how these efficiencies can become mainstream design practices going forward.

10481158 Sustainable Landscape Practices - Credits: 2
Designers have the responsibility to shape the environment using sustainable methods that can minimize resource depletion, biodiversity degradation, and unnecessary destruction of human and natural habitats. This course introduces the student to general landscape practices promoting a more sustainable built environment. In addition, the student will investigate the basic principles behind green roofs and their design.

10481159 Green Globes, LEED, and Other Building Rating Systems - Credits: 2
This course introduces the student to the LEED (Leadership in Energy and Environmental Design). There are several levels of LEED certification for buildings using a rating system with several categories that cover both design and construction. Students will learn how to use the LEED rating system in their project designs. Other state, regional and national rating systems (e.g., Green Globes, GreenPoint, Green Built Homes) will also be analyzed and evaluated for their contributions to sustainable design.

10481159 Green Globes, LEED, and Other Building Rating Systems - Credits: 2
This course introduces the student to the LEED (Leadership in Energy and Environmental Design). There are several levels of LEED certification for buildings using a rating system with several categories that cover both design and construction. Students will learn how to use the LEED rating system in their project designs. Other state, regional and national rating systems (e.g., Green Globes, GreenPoint, Green Built Homes) will also be analyzed and evaluated for their contributions to sustainable design.
Web Developer (eDeveloper)
17-152-0 Technical Certificate

Overview
This certificate will provide students with the skills necessary to work with Internet development teams and to integrate business processes into Internet/Intranet systems. Students will learn the underlying architecture and technology of the Internet, gain systems analysis and design experience, learn the fundamentals of Internet programming, and develop Web site applications.

Student Profile
Students in the certificate should:
- Be very detail oriented
- Be able to work independently and as part of a development team
- Communicate effectively, both orally and in writing
- Enjoy learning about the information technology field and about eBusiness

Preparation for Admission
This certificate is intended for individuals who are seeking to enhance their existing information technology skills. Participants should be prepared to validate their knowledge of the following topics prior to entering the program:
- Programming logic fundamentals
- Intermediate OOP (Object-Oriented Programming)
- Database concepts and SQL
- Systems analysis and design

Outcomes
Employers will expect students, after completing this certificate, to be able to:
- Analyze business needs and develop eCommerce and eBusiness solutions
- Design and develop Web-based solutions for businesses
- Program client and server-side Web applications

Career Outlook
eCommerce and Web development are rapidly growing fields. Typical positions available upon graduation include:
- Web Programmer
- eCommerce Developer
- ASP Programmer

Related Program
- Information Technology - Web and Software Developer

Course Descriptions

10103156
Adobe Photoshop - Credits: 2
Students will become skilled in using the Adobe Photoshop image-editing software package. Students will create and modify graphic images using various tools and techniques. They will learn to create original artwork, manipulate images, and create images for the Web and retouch photographs.

10152101
Web Design and Development - Credits: 3
Students will plan and develop well-designed Web sites that combine effective navigation and a balanced use of text, images, and color. Emphasis will be placed on understanding the basics of HTML5, Cascading Style Sheets (CSS), and responsive Web design. Students will create Web sites that can be easily viewed across a wide range of devices.

10152102
Advanced Web Site Development - Credits: 3
Students will gain hands-on experience with the design and implementation of dynamic business Internet Web sites. Topics include JavaScript, JQuery, Ajax, and XML, with which students will thoroughly explore event-driven techniques, data storage, accessing the DOM, and JSON. Students will create Web sites that can be easily viewed across a wide range of devices.
PREREQUISITE: 10152101 Web Design and Development and 10152113 Program Logic.

10152112
Server-Side Web Development - Credits: 3
This course will familiarize the student with techniques to create server-side scripts for building fully functional Web applications. Topics covered include the use of scripting objects, database interaction, and session management. Students will learn the fundamental programming concepts to build an e-commerce solution such as an online shopping cart application.
PREREQUISITES: 10152100 Database Concepts and SQL and 10152101 Web Design and Development.

Curriculum
Number Course Title Credits
10103156 Adobe Photoshop 2
10152101 Web Design and Development 3
10152102 Advanced Web Site Development ▲ 3
10152112 Server-Side Web Development ▲ 3

CERTIFICATE REQUIREMENTS 11
▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
CNC Machine Tool Operation

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Shell Lake Administrative Office, 185
Ashland Campus, 185
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Financial Aid
A variety of financial aid options exists for WITC students to finance their education. Loans, scholarships, grants, work-study, and other campus-based aid extend the opportunity for higher education to qualified applicants. Financial aid is designed to supplement the student and/or the student’s family resources while the student attends college. In order to determine a student’s eligibility for financial aid to assist with tuition, fees, supplies, estimated room and board, transportation, and personal expenses, students must complete a Free Application for Federal Student Aid (FAFSA). Even if a student has received financial aid before, the student must reapply each school year.

Free Application for Federal Student Aid (FAFSA) Application Procedures
New or continuing students should apply for financial aid by April 15 of the year preceding enrollment using the FAFSA.

FAFSA on the Web: www.fafsa.gov
FAFSA on the Web is the fastest, easiest, and most accurate way to apply for financial aid. Before applying, students will want to apply for a Personal Identification Number (PIN). This will ensure the application will be processed in the most efficient and timely manner.

PIN: www.pin.ed.gov
Students can use their U.S. Department of Education Personal Identification Number (PIN) to electronically sign their online FAFSA. Before the student begins FAFSA on the Web, he or she should visit www.pin.ed.gov and apply for a PIN. If a student is a dependent, one parent must also apply for a PIN so they can electronically sign the student’s FAFSA. Besides signing the student’s FAFSA on the Web electronically, the student’s PIN will allow the student to review and correct answers on the electronic Student Aid Report (SAR), print a copy of the student’s SAR, electronically sign loan promissory notes, reapply for student aid every year, and view information about federal loans and grants the student has received. Note: In April, 2015 the PIN for students, parents, and borrowers will be replaced with the FSA ID (username and password).

Financial Aid Eligibility Requirements
To be eligible to receive financial aid, the student must be a U.S. resident, high school graduate or equivalent, apply for admission at WITC (although the application process can be started sooner), enrolled in at least six credits (Pell grants may be available even if students are taking fewer credits), and maintain satisfactory academic progress. Such factors as defaulting on a previous student loan without arranging repayment, academic suspension, probation, retakes, incompletes, and withdrawals can affect a student’s financial aid eligibility. Refer to the Financial Aid Guide online at witc.edu for more information or call the Financial Aid office at the campus the student plans to attend.

Types of Financial Aid
Scholarships (no repayment necessary):
www.witc.edu/finance/scholarships.htm

WITC Foundation Scholarships
Student scholarships are awarded by the WITC Foundation and other organizations or individuals, and are available for all WITC campuses. Scholarship awards provide financial support for tuition, books, and other education expenses. Most scholarship awards are $250 to $500, but may be as high as $1,000 per student, per year. Scholarship information and applications are available online through the WITC Foundation (http://www.witc.edu/foundation/scholarship.htm). Scholarship deadlines are the first Monday in November for spring term scholarships and the first Monday in April for summer and fall term scholarships.

Other Scholarships
Many businesses, civic organizations, and other associations offer scholarships. The Internet is also a great source of information. Go to the address listed above for links to free scholarship search sites.

Grants (no repayment necessary)
Federal Pell Grant
Eligibility for a Federal Pell Grant is based on a student’s financial need, and whether they are a full- or part-time student. The student’s need is determined by the Free Application for Federal Student Aid (FAFSA).

Federal Supplemental Educational Opportunity Grant (FSEOG)
To be eligible for an FSEOG award, students must have exceptional financial need not met by other grants, be enrolled on at least a half-time basis, and be Federal Pell Grant eligible. FSEOG funds are limited and do run out. Apply for financial aid as early as possible each year.

Wisconsin Grant - Technical Colleges
To be eligible for a Wisconsin Grant, students must be a Wisconsin resident, have financial need not met by other grants, and be enrolled at least half-time in a Wisconsin public post-secondary school. Wisconsin Grant funds are limited and do run out. Apply for financial aid as early as possible each year.

Talent Incentive Program (TIP) Grant
The Wisconsin Educational Opportunity Program (WEOP) provides additional grant money for students enrolled in WEOP who demonstrate special financial need or unusual family circumstances. This grant program is designed to aid the nontraditional or less-advantaged student. For an application, contact the Wisconsin Educational Opportunity Program, 204 E. Grand Avenue, 5th Floor, Eau Claire, WI 54701, 715.836.3171; or the Wisconsin Educational Opportunity Program, 620 Beaser Avenue, Ashland, WI 54806, 715.682.7977; or the Financial Aid Office at the campus the student plans to attend.

Wisconsin Indian Student Assistance Program
Grants of up to $1,100 per academic year, based on financial need, are available to resident students...
whose heritage is at least 25 percent American Indian. Additional funds may be matched by the Federal Bureau of Indian Affairs. To apply, complete the Free Application for Federal Student Aid (FAFSA) and contact the Tribal Education Office for an Indian Scholarship Application.

Minority Grant
This is a state-sponsored grant program available only to students who are members of one of the following minority groups: African American, Hispanic, American Indian, and South East Asians from Vietnam, Cambodia, and Laos. Students must be U.S. citizens and Wisconsin residents entering their second year of school. Minority grants are awarded to students based on financial need. To apply, students must complete the FAFSA.

Visual and Hearing Impaired Scholarship
Provides grants up to $1,800 for Wisconsin residents who are deaf, hard of hearing, or visually handicapped and who can demonstrate financial need. Applications can be obtained from the local Division of Vocational Rehabilitation Office or the Wisconsin Higher Education Aids Board, P.O. Box 7885, Madison, WI 53707-7885.

Funds for Wisconsin Scholars (FFWS)
To be eligible for FFWS, the student must be a Wisconsin resident, a recent graduate of a Wisconsin public high school, enrolled full-time, receive a Pell grant, and have financial need. Recipients are chosen randomly and receive $1,800.

Loans (repayment necessary)

Subsidized Federal Stafford Loan
The federal government pays the interest while students are enrolled in school. The maximum annual amount that can be borrowed is $3,500 for the first academic year and $4,500 for the second academic year. Borrowers have a maximum subsidized loan eligibility period of 150% of the published length of the borrower’s academic program. The cumulative unpaid total of both Subsidized and Unsubsidized Federal Stafford Loans borrowed while at WITC and other colleges may prevent students from borrowing additional loans while at WITC. Contact the financial aid advisor at the campus the student will attend if the student has additional questions. Loan repayments begin six months after the student graduates, leaves school, or drops below a half-time credit load. The amount of the student’s payment depends on the student’s total loan indebtedness. A minimum of $50 per month is required. The maximum number of years to repay the Subsidized Federal Stafford Loan is 10 years, but may vary based on the size of loan debt and on eligibility for other payment plans. To apply, students must complete the FAFSA, a Master Promissory Note (MPN), and entrance counseling.

Unsubsidized Federal Stafford Loan
The terms of the Unsubsidized Loan are the same as the subsidized, except the federal government does not pay the interest while students are enrolled in school. The student is responsible for interest during the grace period, period of repayment, or during authorized deferment. To apply, students must complete the FAFSA and an MPN. The initial amount that can be borrowed is $3,500 for the student’s first year and $4,500 for the student’s second year (less any subsidized Stafford Loan eligibility). Dependent students may also receive up to an additional $2,000 and independent students may receive up to an additional $6,000. The cumulative unpaid total of both Subsidized/Unsubsidized Federal Stafford Loans borrowed from WITC and other colleges may prevent the student from borrowing additional loans to complete a degree at WITC. Contact the financial aid advisor at the campus the student will attend if the student has additional questions.

Parent Loans for Undergraduate Students (PLUS)
Federal Parent Loans for Dependent Undergraduate Students (PLUS) are available to parents for each child who is attending an approved post-secondary institution. The student must be enrolled at least half-time and be a dependent of the parent seeking the loan. Amounts vary up to the cost of education less other resources. To apply, the student(s) must complete the FAFSA and the parent must complete a PLUS MPN.

Work Study
To participate in this part-time employment program, students must show evidence of financial need. Positions include office support, custodial, learning resource center, or aides in various departments and offices on campus. Work-study positions are limited and are awarded to early financial aid applicants. If students were not awarded a work-study position on the student’s award letter, but are interested in working under this program, contact the Financial Aid office and request that the student’s name be placed on a waiting list. If students are eligible, the student will be contacted if/when a position becomes available. Contact WITC for the current work-study wage.

Other Available Aid

Workforce Resource
If students are unemployed, underemployed, or economically disadvantaged, the student may be eligible to receive financial assistance such as funds for tuition, books, and other support. This assistance is designed to help the student receive the training needed to secure, maintain, or retain employment. For more information, contact the WITC Financial Aid office.

Division of Vocational Rehabilitation (DVR)
Any Wisconsin resident, 16 years of age or older who has a disabling condition that constitutes a substantial handicap to employment, may be eligible for DVR aid. Contact the Wisconsin DVR office for more information.

Veterans’ Programs

Chapter 33, Post 9/11 Veterans Education Act
This benefit is for any veteran who served on active duty after 9-10-01. Benefits are prorated based on total months of active duty and enrollment. Payments include tuition and fees, housing allowance, and a stipend for books and supplies.

Chapter 30, New Montgomery G.I. Bill
The G.I. Bill establishes educational benefits for individuals initially entering military service after July 1, 1985.

Chapter 31, Disabled Veterans, Vocational Rehabilitation
If the student is a veteran with a 20 percent or more Veterans’ Administration (VA) service-connected disability, the student may be eligible for as many as 48 months of entitlement. For eligibility guidelines, contact
the VA, a Vocational Rehabilitation Counselor, or a county Office of Veterans' Affairs.

Chapter 35, Dependents/Spouses or Surviving Spouses
Dependents of veterans who are 100 percent disabled or who have died from a service-connected disability may be eligible to receive VA educational assistance. Generally, eligibility for a spouse extends 10 years from the date of the veteran's death or the date the veteran was found to have a total service-connected disability. Eligibility for a child ends on the child's 26th birthday, unless extended under certain conditions. If the veteran is not receiving monthly disability benefits, the student is usually not eligible for Chapter 35. The student should contact their county's Veterans' Service office for more information.

Chapter 1606, Montgomery G.I. Bill-Selected Reserves
This aid is available for members of the National Guard and Reserve who enlist, re-enlist, or extend an enlistment for a period of not less than six years.

Chapter 1607, Reserve Educational Assistance Program
This aid provides educational assistance to members of the reserve components who are called or ordered to active service in response to war or national emergency, as declared by the President or Congress.

Wisconsin G.I. Bill
The Wisconsin G.I. Bill provides a waiver ("remission") of tuition for eligible veterans and their dependents for up to eight full-time semesters or 128 credits. A 100 percent remission is provided to the veteran, qualifying unremarried surviving spouse and children of a veteran who died in the line of duty, and to the spouse and children of a veteran with substantial service-connected disabilities (combined VA service-connected disability rating of 30 percent or greater). For qualifying children, the benefit is available from ages 17 through 26. For the Wisconsin G.I. Bill, the veteran must have entered service as a Wisconsin resident or have lived in Wisconsin for five years prior to attending college. The benefit recipient must reside in Wisconsin. To remain eligible, students must maintain a 2.0 cumulative GPA.

For additional information, contact the financial aid advisor at the campus the student plans to attend or go to http://dva.state.wi.us.

Educational Tax Benefits
Several tax programs exist to help students. To claim the benefit(s), the taxpayer must file a tax return and meet federal eligibility guidelines. Claiming the tax credit is the student's responsibility. Tuition statements, (1098T forms) will be completed by the WITC business office for all eligible students and mailed on or before January 31. Eligible students may view their 1098T forms through MyWITC. For more information on the tax programs, see Publication 970 at irs.gov.

Enrollment Status
Students are considered full-time students if they are taking 12 or more credits each semester. Three-quarter-time enrollment is 9, 10, or 11 credits per semester. Half-time enrollment is 6, 7, or 8 credits per semester. (Summer full-time is 6 credits, three-quarter-time is 5 credits and half-time is 3-4 credits.)

Reciprocity
Wisconsin - Minnesota
Minnesota students pay resident material and program fees while attending WITC, and they are considered nondistrict state residents for tuition purposes.

Wisconsin - Michigan
A separate reciprocity agreement exists between Gogebic Community College in the upper peninsula of Michigan and WITC that allows residents of the Gogebic Community College district to pay the resident program fee plus $5 per credit for each credit taken at WITC.

Tuition and Fees
Fees are due 10 business days prior to the start of the term. An annual course fee will be assigned for each course. The course fee combines the uniform statewide program and material fees plus any board-established incidental or course fees. Course fees apply to credit courses regardless of the location at which the course is offered. If a student is in a Basic Skills program, the student may be exempt from paying fees.

Tuition Guarantee
WITC affirms that education and training are designed to enable eligible persons to acquire occupational skills necessary for full participation in the workforce.

The WITC Board, in compliance with Wisconsin Statute 38.24(4), provides a fee exemption for up to six credits to a graduate who is unable to obtain employment within six months of graduation or whose employer certifies that the graduate lacks entry-level job skills in the graduate's field of study.

Applications for fee exemption should be made to the campus dean of students, who will determine if the graduate qualifies for the exemption. To respond to this policy, the board stipulates that a graduate of an associate degree or technical diploma program who is a resident of the state of Wisconsin, is exempt from program and material fees for up to six credits within the same occupational program for which the degree or diploma was awarded if the graduate applies for exemption of fees within six months of graduation and either of the following two conditions apply:

1. Within 90 days after initial employment, the graduate's employer certifies to the WITC Board that the graduate lacks entry-level job skills and specifies in writing the areas in which the graduate's skills are deficient.

2. The graduate certifies in writing that all of the following conditions apply:
   a. The graduate has not secured employment in the occupational area in which (s)he received a degree or diploma.
   b. The graduate has demonstrated that (s)he has actively pursued employment in that occupational area.
   c. The graduate has not refused employment in that occupational or related field.
   d. The graduate has actively sought the assistance of the employment assistance services.
Tuition Fees 2014-2015*  
(2015-2016 fees not available at the time of catalog printing)

Program Fee - $125.85 per credit
All programs are subject to a uniform fee per credit established by the Wisconsin Technical College System Board and state legislature. The rate is subject to change. Certain unique courses and programs are exempt from program fees.

Out-of-State Tuition – resident program fee plus $62.95 per credit
Out-of-state nonresident students pay $125.85 per credit program fee plus $62.95 per credit out-of-state program fee (total $188.80).

Material Fee – $4.50 minimum per course
All courses are subject to a material fee per credit established by the state. These fees vary by both the program the student is in and the different costs of materials used in each course. Certain unique courses and programs are exempt from material fees.

Incidental Fee - $8.30
A per-credit incidental fee is charged to help fund a wide range of services to students including parking, library and media services, student activities, records processing, health services, and other miscellaneous student support activities.

Supplementary Supplies and Materials – fees vary
Certain classes will require a fee to cover special laboratory costs, supplies, duplication, uniforms, etc.

Challenge Exam/Portfolio – work experience evaluation fee - $20 per credit
A standard fee of $20 per credit will be charged to students who attempt the Challenge Exam of a class or obtain credit for work or life experience.

Fee for Online Courses - $10 per credit
The instructional fee for all online courses is $10 per credit, with a minimum charge of $10 per course.

Application Fee - $30
The nonrefundable $30 application fee must accompany the application for admission for all state- and college-approved credit programs and certificates that require basic skills assessment and are financial aid eligible. This is a one-time fee as of March 8, 1999.

Criminal Background Check Fee - $10
(For Minnesota, there is an additional $20 fee required; for national, an additional $45 fee is required.) This fee is collected by WITC to process background checks from the Wisconsin Department of Justice required under the Caregiver Background Check Law.

Disclaimer: the College is participating in a background check pilot program with CertifiedBackground.com. For some programs, background check fees will vary. Contact the Student Services office for more information.

Graduation Fee - $35
A graduation fee is a one-time charge for each school year. (If a student graduates from a program and wishes to participate in the commencement ceremony in December and also in May, the graduation fee is only paid once.)

Effective 6/1/2015, the graduation assessment fee will be charged per credit. Contact the Student Services office for more information.

* New fees for the 2015-2016 school year will be determined by April 2015 and available at witc.edu.

Payment Options
Students may pay their tuition using the following options:

- Cash, check, or money order
- Visa, Master Card, Discover Card, China UnionPay, JCB, and Diners Club
- Participation in the WITC online payment plan
- Deferring against “agency” funding - an authorization form must be on file with the campus business office
- Deferring against financial aid - students may defer payment of their tuition and fees if they or have anticipated financial aid.

- In the event that a student’s financial aid, billing authorization, or personal payment does not fully cover the tuition and fee charges, the student must pay the balance or make satisfactory payment arrangements 10 business days prior to term start.
- Online payment options: credit card, auto debit to checking or savings, or Payment Plan ($300 or more tuition balance)
- Mail or pay in person: credit card, check, money order, cash (if paying in person), or Payment Plan ($300 or more tuition balance). Student must be 18 years of age or older.

Sec. 112 Textbook Information
(d) Provision of ISBN College Textbook Information in Course Schedules. To the maximum extent practicable, each institution of higher education receiving Federal financial assistance shall

(1) disclose, on the institution’s Internet course schedule and in a manner of the institution’s choosing, the International Standard Book Number and retail price information of required and recommended college textbooks and supplemental materials for each course listed in the institution’s course schedule used for preregistration and registration purposes, except that
(A) if the International Standard Book Number is not available for such college textbook or supplemental material, then the institution shall include in the Internet course schedule the author, title, publisher, and copyright date for such college textbook or supplemental material; and
(B) if the institution determines that the disclosure of the information described in this subsection is not practicable for a college textbook or supplemental material, then the institution shall so indicate by placing the designation ‘To Be Determined’ in lieu of the information required under this subsection; and

(2) if applicable, include on the institution’s written course schedule a notice that textbook information is available on the institution’s Internet course schedule, and the Internet address for such schedule.
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Glossary of Terms

**ACCREDITATION**
approval by an organization such as the Higher Learning Commission which accredits Wisconsin Indianhead Technical College.

**ACADEMIC ADVISOR**
person assisting students with course selection and sequencing to meet graduation requirements in expected timeframe.

**ACADEMIC CALENDAR**
a listing of important dates for students.

**ACADEMIC DEAN**
person responsible for an instructional division of programs, certificates, and courses.

**ADMISSION**
acceptance of a student into a college or program which entitles the student to take classes and participate in college activities.

**ADVANCED STANDING**
refers to credit awarded to high school students through an agreement with a high school, for coursework which is considered equivalent to a technical college course; after enrolling in the college, students may receive college credit.

**APPRENTICESHIP**
a planned program of occupational skill development that is provided by an employer and related instructional training provided through a college.

**ARTICULATION**
refers to a written agreement providing approval for college credit to be awarded for coursework previously completed at another educational institution.

**ASSESSMENT**
a method to measure skill levels in reading, writing, and mathematics to help place students in courses and programs where they will academically succeed.

**ASSOCIATE DEGREE**
a degree program with a minimum of 60 but up to 70 credits consisting of 36-49 technical studies credits and 21-30 general studies credits. WITC awards an Associate of Applied Science degree.

**AUDIT A COURSE**
a student pays regular tuition and fees for a class but does not need to complete assignments or take examinations, and does not get credit or a grade.

**BLENDED PROGRAM/CERTIFICATE**
Courses in the program/certificate will be taken in a combination of instructional formats including online, ITV, and in person.

**CAMPUS**
the physical location and elements of a college including all buildings and grounds.

**CAREER PATHWAY**
a series of connected education and training strategies and support services that enable individuals to secure stackable industry relevant credentials and obtain employment within an occupational area and advance to higher levels of future education and employment in that area.

**CATALOG**
official college publication listing programs, course descriptions, and general information.

**CERTIFICATE**
a group of courses at the program or adult continuing education level consisting of specific skills or competencies.

**CHALLENGE EXAM**
a test that allows a student to demonstrate proficiency in a specific course allowing a student to “test out” of that course and receive credit.

**COUNSELOR**
professionally-trained person who assists students with academic, career, and personal concerns.

**COREQUISITE**
a required course, which, if not taken ahead of time, must be taken concurrently with another course.

**CURRICULUM**
a collective term for various courses of study.

**ELECTIVE**
an optional course not identified, but meets a specified number of credits required for a program.

**EXPERIENTIAL LEARNING**
work experience, business and industry training, military education or experience, or other prior learning which may be used to award college credit.

**EXTRACURRICULAR**
campus activities or organizations which supplement student learning.

**FEE**
nonrefundable charges in addition to tuition.

**FINANCIAL AID**
loans, grants, scholarships, work study, and/or other types of campus-based aid designed to supplement the student while they attend college.

**FULL-TIME**
student enrollment status of 12 or more credits per semester and 6 or more credits in the summer semester.

**GED**
General Education Development - a group of five tests that, when successfully completed, certifies that the taker has high school-level academic skills.

**HSED**
High School Equivalency Diploma - more comprehensive than the GED and requires all the GED tests plus verification of health credit, social studies credits, and completion of a Career Exploration Activity.

**GENERAL COLLEGE**
pre-college courses to prepare students for associate degree coursework.
GENERAL STUDIES
category includes general education program courses, which relate to the effective functioning of the individual in both occupational and community settings.

GRADE POINT
is the numeric equivalency of a letter grade.

GRADE POINT AVERAGE
is the cumulative numeric value of grades earned, multiplied by each course credit value. The totaled point value divided by the number of credits per term equals the Grade Point Average.

INTRAMURAL
a term used to describe athletic teams that only compete against other teams within the same organization.

ITV
Interactive Television is an alternative to a traditional classroom; continuous audio and video technology offered in real time to one or more remote sites.

OCCUPATIONAL SPECIFIC
a category of program courses which contain content directly related to a specific technical area.

OCCUPATIONAL SUPPORTIVE
a category of courses that relate to effective functioning in an individual’s occupational and community settings. These courses shall be drawn from natural science, mathematics, social and behavioral science, communicative skills, and other disciplines.

ONLINE
an alternative to a traditional classroom using the Internet to access courses, assignments, and instructor.

ORIENTATION
scheduled event for incoming students to become familiar with places, processes, and expectations of college or program.

OUTREACH CENTER
facility separate from a campus that offers credit and non-credit courses as well as customized training to business and industry customers.

PART-TIME
student enrollment status less than 12 credits and 6 credits in the summer semester.

PREPARED LEARNER
college and state-wide initiative designed to more effectively prepare students for college-level coursework.

PREREQUISITE
a course or condition required to be successfully completed before taking another course.

RECIROCITY
agreement between Wisconsin and Minnesota allows Minnesota students Wisconsin resident privileges for tuition purposes; also, an agreement between Wisconsin Indianhead Technical College and Michigan Gogebic Community College district residents to pay resident program fees plus $5 per credit.

REGISTRAR
person responsible for student records, transcripts, and registration procedures.

REGISTRATION
process of enrolling in courses.

SCHOLARSHIP
a financial award to assist students with educational expenses; scholarships are awarded on various criteria usually reflecting the values and wishes of the founder.

SPECIAL FEATURES
a category on the program pages of this catalog highlighting unique program features.

STUDENT HANDBOOK PLANNER
official college publication explaining college policies and procedures, regulations, and student responsibilities.

TECHNICAL DIPLOMA
programs can be less than one-year, one-year, or two-year programs, and a technical diploma program consists of occupational specific and occupational supportive courses; occupational specific courses must be a minimum of 70% of the program credits and occupational supportive must be a maximum of 30% of the program credits.

TECHNICAL STUDIES
category includes courses that are specific to, or support the development of, technical skills and knowledge.

TRANSCRIPT
an official copy of a student’s academic record from an educational institution.

TRANSCRIPTED CREDIT
a technical college course taught to high school students in a high school setting by a high school instructor; upon successful completion of the course, credits are awarded and recorded on a technical college transcript.

TRANSFER
a process by which a student enters a college after having been enrolled at another college.

TUITION
per credit cost based on number of credits enrolled.

WITHDRAWAL
act of voluntarily dropping out of a specific course within a specified period of time; student must initiate the request at which time a “W” grade will be awarded and appear on the student’s transcript.
Equal Opportunity Statement

Wisconsin Indianhead Technical College (WITC) does not discriminate on the basis of race, color, religion, sex, national origin, age, disability or status in any group protected by state or local law in employment, admissions or its programs or activities. WITC offers degrees, diplomas, apprenticeships and certificates in the Emergency Management Services, General Education/ABE, Business, Family & Consumer Services, Allied Health and Trade and Technical divisions. Admissions criteria vary by program and are available by calling the Admissions Office at 800.243.9482.

The following person has been designated to oversee Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973 and to handle inquiries regarding the College's nondiscrimination bullying/harassment prevention policies: Cher Vink, Affirmative Action/ Equal Opportunity Officer/ Vice President, Human Resources & Risk Management, Administrative Office, 505 Pine Ridge Drive, Shell Lake WI 54871, 715.468.2815 ext. 2225, TTY 711, cher.vink@witc.edu.

Wisconsin Indianhead Technical College (WITC) no discrimina raza, color, religión, sexo, nacionalidad, edad, discapacidad o estado en cualquier grupo protegido por las leyes; estatal o local en el empleo, admisiones o de sus programas o actividades. WITC ofrece títulos, diplomas, aprendizaje y certificados en los Servicios de Gestión de Emergencias, Estudios Generales/ABE, Negocios, Servicios de la Familia y del Consumidor, Salud Aliada, Comercio y Divisiones Técnicas. Los criterios de admisión varían según el programa y están disponibles llamando a nuestra Oficina de Admisiones al 800.243.9482.

Cher Vink está encargada para supervisar el Título IX de las Enmiendas de Educación de 1972 y la Sección 504 de la Ley de Rehabilitación de 1973 y para atender preguntas sobre las políticas antidiscriminatorias de la Escuela: Cher Vink, Acción Afirmativa / Oficial de Igualdad de Oportunidades / Vicepresidente, Recursos Humanos y Gestión de Riesgos, Oficina Administrativa, 505 Pine Ridge Drive, Shell Lake WI 54871, 715.468.2815 ext. 2225, TTY 711, cher.vink@witc.edu.


Cher Vink yog tus neeg uas saib xyuas txog txoj kev cai txwv tsis pub cai pawb, los yog Title IX ntawm nqei lus sau ntxiv tseg rau xyoo 1972 thiab qib 504 ntawm txoj kev cai Rehabilitation xyoo 1973. Tsis tas li ntawd, Cher Vink yog tus tib neeg saib txog ntawm kev vaj huam sib luag rau lub tsev kawm ntawv qib siab Wisconsin Indianhead. Human Resources & Yuav raug tswj, Administrative Office, 505 Pine Ridge Drive, Shell Lake WI 54871, 715.468.2815, ext. 2225, TTY 711, cher.vink@witc.edu.

Cher Vink
Equal Opportunity Officer/
Title IX, Section 504,
and Title VII Coordinator
WITC Human Resources Department
Administrative Office
505 Pine Ridge Drive
Shell Lake, WI 54871
715.468.2815, Ext. 2225
## 2015-2016 Important Dates for Students

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 18</td>
<td>Summer fees due</td>
</tr>
<tr>
<td>May 18</td>
<td>Summer session course fees due at time of enrollment when registration occurs on or after this date</td>
</tr>
<tr>
<td>June 1</td>
<td>First day of summer term</td>
</tr>
<tr>
<td>June 8</td>
<td>Financial Aid Census Date for summer term; FINAL eligibility for Financial Aid determined at end of business day</td>
</tr>
<tr>
<td>June 9</td>
<td>First installment of summer term payment plan due</td>
</tr>
<tr>
<td>June 23</td>
<td>Second installment of summer term payment plan due</td>
</tr>
<tr>
<td>July 3</td>
<td>Holiday</td>
</tr>
<tr>
<td>July 7</td>
<td>Third installment of summer term payment plan due in full</td>
</tr>
<tr>
<td>July 9</td>
<td>Open enrollment for fall 2015 term begins; Web registration open for fall 2015 term</td>
</tr>
<tr>
<td>July 24</td>
<td>Last day of summer classes</td>
</tr>
<tr>
<td>August 3</td>
<td>Fall term fees due</td>
</tr>
<tr>
<td>August 3</td>
<td>Fall term course fees due at time of enrollment when registration occurs on or after this date</td>
</tr>
<tr>
<td>August 14</td>
<td>New student orientation at all campuses</td>
</tr>
<tr>
<td>August 17</td>
<td>First day of fall term</td>
</tr>
<tr>
<td>August 27</td>
<td>First installment of fall term payment plan due</td>
</tr>
<tr>
<td>August 31</td>
<td>Financial Aid Census Date for fall term; FINAL eligibility for Financial Aid determined at end of business day</td>
</tr>
<tr>
<td>September 7</td>
<td>Holiday</td>
</tr>
<tr>
<td>September 10</td>
<td>Second installment of fall term payment plan due</td>
</tr>
<tr>
<td>September 24</td>
<td>Third installment of fall term payment plan due in full</td>
</tr>
<tr>
<td>September 28</td>
<td>Last day for incompletes from spring 2015 &amp; summer 2015 term grading</td>
</tr>
<tr>
<td>October 12</td>
<td>Advising/mid-term checkup</td>
</tr>
<tr>
<td>October 13</td>
<td>No classes (College Inservice)</td>
</tr>
<tr>
<td>October 14</td>
<td>Faculty Teaching &amp; Learning Day (No daytime or evening credit/non-credit courses)</td>
</tr>
<tr>
<td>October 16</td>
<td>Petition-to-Graduate forms due for December 2015 graduate candidates</td>
</tr>
<tr>
<td>Early November</td>
<td>Self-Service enrollment begins for continuing program students on MyWITC (view only on Web)</td>
</tr>
<tr>
<td>November 23-27</td>
<td>Fall recess</td>
</tr>
<tr>
<td>Late November</td>
<td>Self-Service open enrollment begins - no enrollment appointments needed (enrollment available via Web)</td>
</tr>
<tr>
<td>December 14-18</td>
<td>No unofficial transcript or grades viewable in MyWITC</td>
</tr>
<tr>
<td>December 16</td>
<td>Last day of fall term classes</td>
</tr>
<tr>
<td>Dec. 17 - Jan. 8</td>
<td>Winter recess</td>
</tr>
<tr>
<td>December 22</td>
<td>Spring session course fees due at time of enrollment when registration occurs on or after this date</td>
</tr>
<tr>
<td>December 22</td>
<td>Spring term fees due</td>
</tr>
<tr>
<td>January 8</td>
<td>New student orientation</td>
</tr>
<tr>
<td>January 11</td>
<td>First day of spring term</td>
</tr>
<tr>
<td>January 21</td>
<td>First installment of spring term payment plan due</td>
</tr>
<tr>
<td>January 25</td>
<td>Financial Aid Census Date for spring term; FINAL eligibility for Financial Aid determined at end of business day</td>
</tr>
<tr>
<td>February 4</td>
<td>Second installment of spring term payment plan due</td>
</tr>
<tr>
<td>February 18</td>
<td>Third installment of spring term payment plan due in full</td>
</tr>
<tr>
<td>February 22</td>
<td>Last day for incompletes from fall term grading</td>
</tr>
<tr>
<td>February 24</td>
<td>No classes (College Inservice)</td>
</tr>
<tr>
<td>March 7-11</td>
<td>Spring recess</td>
</tr>
<tr>
<td>March 14</td>
<td>Advising begins for summer and fall terms and mid-year checkup</td>
</tr>
<tr>
<td>March 18</td>
<td>Petition-to-Graduate forms due for spring 2016 graduate candidates</td>
</tr>
<tr>
<td>March 25</td>
<td>Spring Holiday</td>
</tr>
<tr>
<td>March 28</td>
<td>Faculty Teaching &amp; Learning Day (No daytime or evening credit/non-credit courses)</td>
</tr>
<tr>
<td>Early April</td>
<td>Course schedule search (view only) on Web and on MyWITC</td>
</tr>
<tr>
<td>Mid April</td>
<td>Begin self-service registration for continuing students for summer and fall terms</td>
</tr>
<tr>
<td>Mid April</td>
<td>Open enrollment for summer term</td>
</tr>
<tr>
<td>May 11-17</td>
<td>No unofficial transcript or grades viewable in MyWITC</td>
</tr>
<tr>
<td>May 11</td>
<td>Last day of spring term classes</td>
</tr>
<tr>
<td>May 13, 2016</td>
<td>Commencement - all campuses</td>
</tr>
</tbody>
</table>

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**WITC Calendar**

WITC Indiana | 417 North 57th Street | River Falls, WI 54022 | 715-221-5222 | 800-450-2782

Wisconsin Indianhead Technical College | 2015-2016 Important Dates for Students | witc.edu
WITC has four campuses that are part of the Wisconsin Indianhead Technical College district. Together they serve the educational and career needs of more than 25,000 residents of northwestern Wisconsin each year. Each campus offers career-focused associate degree programs, technical diplomas, customized training for area businesses, and a wide array of courses for personal or career enrichment. WITC is also part of the statewide technical college system.

WITC-Ashland
2100 Beaser Avenue
Ashland, WI 54806
715.682.4591
fax 715.682.8040

WITC-New Richmond
1019 South Knowles Avenue
New Richmond, WI 54017
715.246.6561
fax 715.246.2777

WITC-Rice Lake
1900 College Drive
Rice Lake, WI 54868
715.234.7082
fax 715.234.5172

WITC-Superior
600 North 21st Street
Superior, WI 54880
715.394.6677
fax 715.394.3771

WITC-Hayward Outreach Center
15618 Windrose Lane
Suite 106
Hayward, WI 54843
715.634.5167
fax 715.634.8387

WITC-Ladysmith Outreach Center
1104 Lake Ave, W. Suite #1
P.O. Box 224
Ladysmith, WI 54848
715.532.3399
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