Contact Information

Student Services Office
(Information about Admissions and Programs)
(813) 769-5180, ext. 231

Financial Aid Office
(813) 769-5180, ext. 235

Campus
2010 East Hillsborough Avenue
Tampa, FL  33610
(813) 769-5180
Fax: (813) 769-5181

Website:  www.erwin.edu

Updated:  February 2016

Disclaimer: The announcements, information, policies, rules, regulations and procedures set forth in this Course Catalog are for information only and are subject to review and change without notice. Every effort was made to ensure accuracy at the time of printing. Any policies not addressed in this Course Catalog would follow standard procedures set forth by the Hillsborough County School District.
Institutional Accreditation by:

Council on Occupational Education
Council on Accreditation & School Improvement, Southern Association of Colleges & Schools

The following agencies accredit Erwin Technical College programs:

Accrediting Bureau of Health Education Schools (MA, MLT and ST programs)
Commission on Accreditation of Allied Health Education Programs, upon recommendation of the Accreditation for Education in Neurodiagnostic Technology (CoA-NDT) (END program)
Commission on Dental Accreditation, American Dental Association (Dental program)
Joint Review Committee on Education in Electroneurodiagnostic Technology (END program)

The following organizations have approved Erwin Technical College programs:

CISCO Networking Academy (Wireless Telecommunications program)
Florida Barbers’ Board (Barbering program)
Florida Department of Veterans Affairs, State Approving Agency (All PSAV programs)
Florida State Board of Cosmetology (Cosmetology program)
Florida State Board of Dentistry (Dental Assisting program)
Florida State Board of Massage (Massage program)
Florida State Board of Nursing (Practical Nursing and Nursing Assistant programs)
National Center for Construction Education and Research (Building Construction, Carpentry, Electricity, Plumbing and Welding programs)
National Automotive Technicians Education Foundation (Automotive program)
North American Board of Certified Energy Practitioners (Solar PV program)

Requests for additional information on the policies, standards, or procedures for institutional accreditation through the Council on Occupational Education should be addressed to:

Dr. Gary Puckett, Executive Director/President
Council on Occupational Education
7840 Roswell Road, Building 300, Suite 325
Atlanta, GA 30350
Phone: (770) 396-3898    Fax: (770) 396-3790
www.council.org

Requests for additional information on Hillsborough County Public Schools District CASI-SACS Accreditation, contact:

Mr. Dennis Holt, SACS Internal Facilitator
Hillsborough County Public Schools
901 E. Kennedy Blvd., Tampa, FL 33602
(813) 272-4932
HILLSBOROUGH COUNTY PUBLIC SCHOOLS MISSION & VISION STATEMENTS

Mission: To provide an education and the supports that enable each student to excel as a successful and responsible citizen.

Vision: Preparing students for life.

HILLSBOROUGH COUNTY PUBLIC SCHOOLS ADMINISTRATION

Jeff Eakins
Superintendent of Schools

Larry Sykes
Chief of Schools

Henry Washington
Area Superintendent, Area 4

Michael Ramsey
Director of Workforce & Continuing Education

James Rich
Principal

HILLSBOROUGH COUNTY PUBLIC SCHOOLS
District Offices:
901 E. Kennedy Boulevard
Tampa, FL 33602
(813) 272-4000

www.sdhc.k12.fl.us
HCPS CONTINUOUS NOTIFICATION OF NONDISCRIMINATION

The School District of Hillsborough County does not discriminate nor tolerate harassment on the basis of race, color, ethnicity, national origin, religion, gender, gender identity, sexual orientation, age, disability, marital status, genetic information or pregnancy in its educational programs, services or activities, or in its hiring or employment practices; and it will take immediate action to eliminate such harassment, prevent its recurrence, and address its effects. The district also provides equal access to its facilities to the Boy Scouts and other patriotic youth groups, as required by the Boy Scouts of America Equal Access Act.

Any student(s) or employee(s) found to have engaged in acts of harassment (as mentioned above), will be promptly disciplined. Such discipline may include, if circumstances warrant, suspension or expulsion for students, or suspension or termination for employees.

All school personnel, students, and parents are expected to work together to prevent harassment. Should you believe you or another individual has been subjected to harassment on the basis of race, color, ethnicity, national origin, religion, gender, gender identify, sexual orientation, age, disability, marital status, genetic information or pregnancy, you should report the harassment to your school or to:

Dr. Pansy Houghton, Executive Officer, HR Compliance
Division of Human Resources
901 East Kennedy Boulevard
Tampa, FL 33602
(813) 272-4097
Pansy.houghton@sdhc.k12.fl.us
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**HISTORY**

**Name Change:** D.G. Erwin Technical Center’s name has changed to Erwin Technical College. The School Board of Hillsborough County Public Schools authorized the name change in December 2014, and the Council on Occupational Education approved the change in January 2015. The name change on the transcripts became effective on January 21, 2015.

Erwin Technical College is a public postsecondary technical school that is part of the School District of Hillsborough County.

Erwin Technical College can be traced back to 1925, when Dr. and Mrs. Henry W. Brewster played a major role in opening a school, which received their name. Brewster School operated as a vocational school under various names until July 1, 1979, when the Erwin Center officially came into being. All programs at Brewster were transferred to the Erwin Center. Many adult programs were transferred from Tampa Bay Vocational-Technical Center, and several new programs were originated to form Hillsborough County's first Adult Area Vocational-Technical Center. The center was named after David G. Erwin, who for many years contributed to the development of vocational education in Hillsborough County and Florida as a teacher, principal-director and assistant superintendent.

The Erwin Technical College is comprised of 2 buildings with a total area of approximately 50,000 square feet. An elevator services the second floor of the main building, and public areas are handicapped accessible. Instructional areas include classrooms and laboratories/shops with equipment and supplies necessary for training students in their vocational fields. Computers and wireless Internet access are available throughout the building. A Media Center, equipped with computers and print materials, is available on campus.

An approved Instructional Services Center (ISC) is located at Tampa Bay Technical High School, five miles from Erwin’s campus, for the purpose of expanding the HVAC program.

**PHILOSOPHY STATEMENTS**

**Mission Statement:** Erwin Technical College will produce quality, productive team members for the workforce and for the community.

**Vision Statement:** Erwin Technical College will:
- empower students to take ownership of their education;
- educate students to be highly-trained, productive members of society; and
- provide an environment for the achievement of higher education, focusing on technology, job preparation and personal growth.

**School Motto:** Learning for Everyone … Whatever it Takes!
Student Services Department: The Student Services Department is the first stop to learn about Erwin Technical College and the technical training programs offered at the school. Program Advisors/Counselors are assigned to specific programs providing students continuity from initial inquiry, through training, to graduation. The office of Student Services works with individuals on career choices, registration, academic advising, counseling concerns, and personal issues. Additional counseling is available with a School Psychologist or School Social Worker. The office is open school days throughout the day and at least one evening per week. For more information and specific hours, call: (813) 769-5180, ext. 231.

Career Planning: The Career Planning area is located in the Student Services suite. Information is provided about Erwin’s training programs through informational materials, school tours and classroom visits, and discussions with advisors and instructors. Information is available about local job markets, pay scales and any limitations imposed by working conditions. Recommendations are then made regarding technical training or upgrading of academic skills.

Financial Aid Department: Financial Aid personnel are available to assist prospective and current students. Erwin Technical College offers a wide range of financial aid to full-time students who qualify. See the Financial Aid section for details on the types of financial aid available to those who qualify. The office is open school days throughout the day and at least one evening per week. For additional information, call: (813) 769-5180, ext. 235.

The Learning Center: The Learning Center is a student-oriented lab that offers tutorial resources to help prospective and current students improve basic reading, language, and mathematics skills levels to become workplace ready. Students must meet a set minimum reading requirement to be eligible for assistance in this particular center, to ensure that materials in the lab meet student needs. Information about TABE testing and The Learning Center is available through Student Services.

Media Center: The Media Center, known as the “HUB”, has a variety of materials available for student use and check-out. Computers, with Internet accessibility, are available for student use.

Job Placement: As job leads become available through employers, the information about the position is both posted electronically and given in hardcopy format to applicable program instructors. Current students and graduates can access this information through Erwin Online. In addition, instructors often contact recent graduates with potential employment information.

Administrative Office: The Administrative Office provides general information, and parking tags, and it is the location where tuition and fees are paid. The school’s main switchboard number is: (813) 769-5180.
EDUCATIONAL PROGRAMS

Erwin offers job preparation/occupational training programs for students to obtain entry-level employment related to their chosen field, as well as continuing education classes to update or enhance the students’ current skills. Erwin’s educational programs are authorized through Hillsborough County Public Schools and the State of Florida Department of Education. Job preparation programs are divided into Occupational Completion Points (OCPs). OCPs are career ladders within programs. All programs at Erwin Technical College are presented in a traditional manner (also called “residential”). Distance learning is not offered. All programs are taught in English.

CURRENT PROGRAM OFFERINGS

<table>
<thead>
<tr>
<th>PROGRAM TITLE</th>
<th>CLOCK HRS</th>
<th>APPROXIMATE LENGTH (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Operations</td>
<td>900</td>
<td>10</td>
</tr>
<tr>
<td>Air Conditioning, Refrigeration &amp; Heating Technology (HVAC)</td>
<td>1350</td>
<td>15 / 22</td>
</tr>
<tr>
<td>Automotive Services Technology</td>
<td>1800</td>
<td>21</td>
</tr>
<tr>
<td>Barbering</td>
<td>1200</td>
<td>19</td>
</tr>
<tr>
<td>Barbering II (Note: Must have valid Florida Cosmetology license)</td>
<td>300</td>
<td>6</td>
</tr>
<tr>
<td>Building Construction Technologies</td>
<td>1050</td>
<td>12</td>
</tr>
<tr>
<td>Carpentry</td>
<td>1200</td>
<td>14</td>
</tr>
<tr>
<td>Commercial Foods &amp; Culinary Arts</td>
<td>1200</td>
<td>14</td>
</tr>
<tr>
<td>Computer Systems &amp; Information Technology</td>
<td>900</td>
<td>10</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>1200</td>
<td>14</td>
</tr>
<tr>
<td>Dental Assisting Technology &amp; Management – ATD</td>
<td>1230</td>
<td>12</td>
</tr>
<tr>
<td>Drafting (Emphasis: Computer Aided Drafting)</td>
<td>1500</td>
<td>17</td>
</tr>
<tr>
<td>Electricity</td>
<td>1200</td>
<td>14</td>
</tr>
<tr>
<td>Electroneurodiagnostic Technology</td>
<td>1250</td>
<td>12</td>
</tr>
<tr>
<td>Massage Therapy</td>
<td>750</td>
<td>9</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>1300</td>
<td>15</td>
</tr>
<tr>
<td>Medical Clinical Laboratory Technician – ATD</td>
<td>1515</td>
<td>16</td>
</tr>
<tr>
<td>Medical Coder/Biller – ATD</td>
<td>1110</td>
<td>12</td>
</tr>
<tr>
<td>Nursing Assistant – Articulated</td>
<td>165</td>
<td>2</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>165</td>
<td>5</td>
</tr>
<tr>
<td>Plumbing Technology</td>
<td>960</td>
<td>11</td>
</tr>
<tr>
<td>Practical Nursing</td>
<td>1350</td>
<td>15 / 18</td>
</tr>
<tr>
<td>Solar Photovoltaic</td>
<td>600</td>
<td>7</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>1330</td>
<td>15</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>1050</td>
<td>12</td>
</tr>
</tbody>
</table>
ADMISSIONS

ADMISSIONS AND TESTING

Admission Requirements: Erwin Technical College is a postsecondary extension of Hillsborough County Public Schools. Erwin’s career-focused training offers adults the opportunity to develop skills for a new career or professional growth. Individual programs have specific admissions requirements, which may include a standard high school diploma (or GED) or other documents. Once prospective students have completed all admissions requirements for their program of interest, they will be placed on a list for the next available starting date of the program, on a first-come, first-served basis.

Completion of a standard, approved, high school program* or the equivalent may be required for individual programs. Note: Any transcripts, diplomas, or degrees from foreign institutions must be translated into English and certified as equivalent to a standard U.S. credential by a licensed foreign credential company. Passing TABE test scores are also required when submitting an international diploma or degree.

*Lists of approved accrediting institutions are available at Erwin’s Student Services office and online at www.erwin.edu.

TABE Testing and Remediation: The Florida Department of Education (FLDOE) has mandated that each student enrolled in a certificate/diploma program meet minimum basic academic skill levels in reading, mathematics, and language in order to receive a Certificate of Completion or Applied Technology Diploma. A chart that shows the levels for each PSAV program offered at Erwin is available in the Appendix of the School Catalog, on the school’s website, and in hardcopy in the Student Services office. Most students take the Test of Adult Basic Education (TABE) prior to beginning vocational/technical training. (Some exclusions apply – contact Student Services for information.) TABE results are reported in grade-level equivalents. TABE test scores are valid for 24 months.

Erwin offers the TABE test in English, generally twice a week. (Consult web site or call Student Services for current days and times.) No appointment is necessary, but seating is limited to the first 20 who arrive. Doors are locked once the testing session begins. Applicants should arrive at the main office at least 30 minutes prior to testing. There is a $5 testing fee (cash or money order only). Picture IDs are required and Social Security numbers are requested at the time of testing. Cell phones are not permitted in the testing room. Children may not accompany applicants, since the test takes approximately 3 hours.

If a prospective student does not meet the basic requirements for a specific program, he/she is encouraged to begin remediation as soon as possible, while awaiting their program’s start date. Applicants are referred to The Learning Center (TLC) at Erwin for assistance. Test results are used to create an individual education plan for remediation. Students register for The Learning Center on a first-come, first-served basis, as space permits. Information about registering for The Learning Center is available following TABE testing and through Student Services. Students testing at or below the fifth (5th) grade level in Reading are referred to other institutions for appropriate classes.
Foreign Applicants: At this time, Erwin does not accept International students. We are permitted to accept non-citizens who hold valid Alien Registration cards or who have received a current INS form I-797C, Notice of Action, noting that they have been fingerprinted and have passed a background screening. Contact Student Services for more details.

REGISTRATION

Applicants who meet admissions requirements for a vocational training program are invited to attend a registration session approximately four to six weeks before classes begin. The registration process takes approximately two to three hours, so children should not accompany registrants. Applicants will receive correspondence from the program’s advisor/counselor regarding time and place of the registration session and items to bring. If an applicant does not attend the registration session and does not contact the program’s advisor, his/her seat in the class will be offered to the next applicant on the waiting list.

TRANSFER OF CREDIT FROM OTHER INSTITUTIONS

Transfer of credit will be considered if a student previously attended a postsecondary institution that:

- Is fully accredited by a regional or national accrediting agency recognized by the U.S. Department of Education (USDE), and
- Participates in the statewide course numbering system*, and
- Credit was earned within two years of Erwin program entry.

*For additional information on statewide course numbering participating schools, please visit http://scns.fldoe.org, and see the information below.

A student requesting transfer of credit must submit a copy of his/her official transcript before class begins, preferably at or before program registration. This will ensure that the teacher has sufficient time to review the transcripts, determine the number of credits eligible to be transferred, and determine the student’s correct entry date.

Students must complete a minimum of 50% of a program at Erwin Technical College. Consequently, no more than 50% of the required clock hours/credits for program completion will be accepted as transfer credit toward graduation from Erwin.

Any student requesting transfer credit who will be receiving financial assistance (V.A., Pell, etc.) should also confer with the Financial Aid Office and/or the VA Certifying Official to discuss any limitations on financial assistance which may result from transferring credits.

Credit for Experiential Learning or Advanced Placement: No credit is offered for experiential learning, and entering students are not placed in advanced classes. “Testing out” of courses is not available, except for Tech Math I and II in certain industrial programs. All students are expected to be enrolled for all clock hours within their program and successfully complete all courses and classes.
STATEWIDE COURSE NUMBERING SYSTEM (SCNS)

Official course numbers at the Erwin Technical College are identified by prefixes and numbers that were assigned by Florida's SCNS. This common numbering system is used by all public postsecondary institutions in Florida. The major purpose of this system is to facilitate the transfer of courses between participating institutions.

The course prefix and each digit in the course number have meaning in the SCNS. The list of course prefixes and numbers, along with their generic titles, is referred to as the "SCNS taxonomy". Descriptions of the courses are referred to as "course equivalency profiles". Each participating institution controls the title, level, credit and content of its own courses. Course prefixes and the last three digits of the course numbers are assigned by the Florida Department of Education in Tallahassee. For more information, please visit http://scns.fldoe.org.

TRANSFERRING BETWEEN ERWIN PROGRAMS

A currently-enrolled student who wishes to move to a different program should first speak with the program advisor for his/her current program. Career goals will be discussed and the student will be encouraged to utilize the resources at www.flchoices.org. If the student then desires more information about a different program, he/she will set an appointment with the program advisor for the new program to discuss entrance requirements, TABE levels, start dates, and possible transfer of credit.

Students may enter a maximum of three different programs within a two-year period.

TRANSFER OF CREDIT BETWEEN ERWIN PROGRAMS

Credits previously earned at Erwin may be accepted for transfer into another Erwin program if:

- the State course number is identical (example: Basic Health Care Worker, HSC0003, 90 hours), and
- the State course was completed within the past 24 months, and
- the content of the course has not significantly changed, and
- the student received a passing grade in the course.

Students should contact the counselor/advisor for the program they desire to enter. The counselor/advisor will forward the request to the program instructor, who will determine whether the transfer credit is appropriate and meets current course requirements.
CLASS SCHEDULES

Erwin Technical College follows the School District’s calendar, including vacation days and early-release days. Most Erwin classes meet from 8:00 a.m. to 2:00 p.m., Monday through Friday, during the normal school year. Generally, classes during the summer session (June – July) are held Monday through Thursday, 8:00 a.m. to 2:30 p.m. Practical Nursing day programs meet for on-campus instruction from 7:30 a.m. to 1:30 p.m., during the normal school year, with 30-minute longer days during the summer session.

Programs with clinical training components or an externship/practicum as part of the curriculum have varied schedules that require students to attend different days and hours during that portion of their training.

Practical Nursing and Air Conditioning, Refrigeration & Heating Technology programs are offered both during the day and in the evening. The Barbering program is available in the evening only.

LENGTH OF PROGRAMS AND TUITION CHARGES

The length of individual programs is based on clock hours. Tuition and fees are set by the district School Board. A Program Summary Information chart, listing full-time job preparatory programs offered at Erwin Technical College, clock hours, and approximate months to complete each program, can be found in the Appendix, online at www.erwin.edu and in hardcopy in Student Services.

Tuition Rates: The 2015-2016 tuition rate for full-time postsecondary adult vocational programs (PSAV) is $2.78 per clock/clinical hour for Florida residents (proof of residency required). Non-Florida residents pay $11.17 per clock/clinical hour for job preparation programs. All students must pay for the total number of clock hours in their program prior to graduation.

Full-time students will receive a Fee Sheet that indicates when each State Course begins and the tuition that will be due on that date. Self-paying students will receive Statements of Account each month. Self-paying students will pay their tuition in the main office, at the Bookkeeper’s window. If necessary, students may make arrangements with the Bookkeeper to make installments.

Students who expect their tuition will be paid through an agency, scholarship, or financial assistance must work closely with the Financial Aid department throughout their program. If the expected scholarship/grant payments do not come through, the student is responsible for paying his/her tuition prior to graduation.

Florida Residents: Florida residents are assessed tuition by the clock hour at the current rate approved by the Florida Legislature and set by the School Board of Hillsborough County Public Schools. A Florida resident is defined as a person whose official residence has been in the state of Florida for one full year prior to enrollment. At registration, all students must complete a Florida residency affidavit and provide documents that prove residency. Tuition rates vary for part-time Continuing Education (CE) classes. See details for individual part-time classes at: www.erwin.edu.
FEES

Students enrolled in a PSAV program are charged certain fees at the time of program registration. Students pay a non-refundable $10 application/registration fee and a $5 activity fee. The activity fee includes two student I.D. cards and a parking decal.

Additional costs are specific to each program and may include an accident insurance fee; a liability insurance fee, fingerprinting; drug screening; lab fees; textbooks and supplies; uniforms and shoes; physical examinations; licensing or industry certification fees; and certain personal materials, professional tools, and equipment as determined by the area of training.

During registration, students will receive a Fee Sheet that lists all fees involved in the program, as well as required textbooks and supplies. A copy of a Fee Sheet for each program is also available online at: www.erwin.edu Textbook ISBN numbers are included so that students have the option of purchasing their books in our bookstore or elsewhere. Prices are subject to change. Fee sheets distributed at registration are an estimate only.

REFUND POLICY

PSAV Programs: Tuition refunds will be processed according to the following district School Board policy in PSAV programs: A student who withdraws from a postsecondary adult vocational (PSAV) program will receive a refund of tuition if the student withdraws on or before 10 percent of the scheduled course hours in the State Course or sequence number have commenced. After 10 percent of the scheduled course hours in the State Course or sequence number have commenced, no refund will be provided. Tuition charges will be reviewed within 30 days of the student's withdrawal. If a student is entitled to a refund, a check (if the student paid by cash, check, or money order) or credit to the student's credit card (if a credit card was used for payment) will be processed within 45 days.

The following fees will be refunded at 100 percent, if the fees have not already been disbursed to outside agencies: fingerprinting, licensing or industry certification exam, accident insurance, liability insurance, and CPR/first aid certification. All other fees are non-refundable.

No refunds will be made on books, supplies, and materials, unless the school deems them to be unused, current, and needed for resale.

Community Education Classes: A student who cancels registration from a Community Education (CE) course will receive a 100 percent refund of tuition, provided the student notifies the school at least one school day prior to the class start date. Tuition charges will be reviewed within 30 days of the student’s withdrawal. If the student is entitled to a refund, a check (if the student paid by cash, check, or money order) or credit to the student's credit card (if a credit card was used for payment) will be processed within 45 days.

No refunds will be made on books, supplies, and materials, unless the school deems them to be unused, current, and needed for resale.
GROUNDS AND PROCEDURES FOR CANCELLATION OR TERMINATION OF A PROGRAM

When the school finds it necessary to cancel or terminate a program, currently enrolled students, as well as those who have applied to that program, will be notified as soon as possible. Efforts will be made to continue the program for a sufficient period of time (known as “teach out”) so that currently enrolled students may have an opportunity to complete the program. When this option is not viable, students will be counseled and assisted with enrollment into other programs available at Erwin Technical College.

VETERANS’ INFORMATION

Erwin Technical College is approved for training of qualified veterans and their dependents. Veterans’ and other students will be responsible for initiating all documentation for Veterans Administration (VA) education benefits. The student will need to submit required VA documentation at the time of program registration. Evaluation of prior postsecondary training, experience, or education is required. Transcripts must be provided at the time of registration. The school application process and registration must be completed before a student can be certified and start receiving benefits.

Industrial Cooperative Education (ICE) training may be available to veterans enrolled in certain industrial programs. However, the veteran should be aware that participation in cooperative training could result in a reduction of education benefits. Veterans should see the VA School Official in the Financial Aid office for additional information.

The VA Work Study program is not available at Erwin due to the lack of VA-related work necessary to establish such a program.

Veterans are expected to adhere to the same attendance, academic progress, and conduct policies and procedures as stated in the Erwin Course Catalog and individual program guide for each program. Each grading period, attendance and grades are reviewed by VA School Official. If a student does not maintain satisfactory attendance and/or grade point average, their VA education benefits will be terminated. The student must establish satisfactory attendance and grades for a minimum of one nine week grading period before the school can submit a recertification of enrollment. The Veterans Administration will be notified promptly as to the last date of attendance for a veteran. Records are retained in the veteran’s file for audit purposes.

Chapter 32, 35, Sections 901 and 903 are sent a certification of attendance form at the end of each month for which payment is due. This form must be signed and returned to VA before payments are released. Chapter 30, 1606 & 1607 starting the last day of each month, may verify enrollment for that month via Web Automated Verification of Enrollment (WAVE) at www.GIBILL.va.gov, Interactive Voice Response (IVR) at 1-877-823-2379, or by calling a GI Bill representative at 1-888-442-4551. Verification of pursuit to receive monthly benefits is not required for Chapter 33.

All of the policies stated above also apply to dependents eligible for benefits related to their parent(s) or spouse.
SPECIAL SERVICES

ADMINISTRATIVE ASSISTANCE

School administrators (principal and assistant principals) are available to help you. However, please observe the following steps to seek resolution before bringing your issue or concern to an administrator: First, speak to your instructor. If you feel your issue or concern remains unresolved, please see the department head for your program. If you feel your issue or concern remains unresolved, please see your program advisor/counselor or an administrator.

CAREER PLANNING

Career Planning and academic advising is provided, through the Student Services department, to help individuals choose or confirm realistic career goals.

Information is provided about Erwin’s training programs through discussions with program advisors/counselors and visits to the classrooms. The Career Planning Center also provides information concerning local job markets and pay scales. Advisors/counselors discuss hiring stipulations in certain industries (such as clean driving and/or arrest records, required drug screenings, and ability to lift heavy objects, etc.) that could keep graduates from obtaining employment in certain vocational areas. Recommendations are then made to prospective students regarding which postsecondary adult vocational training programs may suit them best.

SERVICES FOR STUDENTS WITH SPECIAL NEEDS

Student Services program counselors/advisors are available to discuss the needs of students with disabilities. Students must self-identify their needs and provide current documentation and vocational recommendations from professionals as to their limitations and expected reasonable accommodations. We encourage students to meet with Erwin staff before entering programs so that we may plan accordingly. Certain special needs may preclude a student from participating in clinical/externships or from getting hired in certain industries. Student Services program counselors/advisors are available to discuss these considerations with potential students.

Students with special needs may request accommodations through The Learning Center before TABE re-testing. Students with special needs need to submit valid documentation (which must be recent) with vocational recommendations to assist with the creation of an adult individual education plan, if needed and requested.

Erwin is a two-story building with wide corridors and an elevator that accommodates wheelchairs. The Learning Center is equipped with special equipment for vision impaired and hearing impaired students. An interpreter for hearing impaired students is available evenings in The Learning Center, with advanced notice.
THE LEARNING CENTER

The Learning Center provides tutoring and support services for Erwin’s PSAV training programs. Adult students who have decided on a postsecondary vocational training goal, but lack the necessary basic skills, may enroll in the program. The Learning Center provides continuing support once students are enrolled in technical training.

The Learning Center is a student-oriented lab that offers the resources necessary to help students become workplace-ready. Students must meet the minimum reading requirements to be eligible for assistance and to ensure that materials in our Lab meet student needs.

These services are provided:

- Tutorial remediation to increase basic skills
- TABE re-testing in preparation for Erwin’s programs
- Continued academic support for students enrolled in occupational training
- Internet access

All instruction is individualized and self-paced. Enrollment is open entry, open exit. Day and evening classes are offered on a space available basis.

_Tuition Fees for The Learning Center:_ Tuition for The Learning Center is $45 per block (usually per semester) and must be paid at the time of registration.
ATTENDANCE POLICIES

Students are expected to attend every scheduled school day unless an emergency exists that prevents attendance. All absences and tardies will be classified as non-documented. Certain programs have stricter guidelines, as indicated in their Program Guide, which supersede the policies below. However, programs may not increase the number of allowable absences or tardies than are allowed by school policies, below.

Erwin Technical College follows the School District’s calendar, including holidays and early-release days. The regular day school schedule is Monday through Friday from 8:00 a.m. to 2:00 p.m. (These times may vary during the Summer Session.) Evening school hours vary by program. Practical Nursing program hours are from 7:30 a.m. to 1:30 p.m. when students are in the classroom. Clinical hours for Practical Nursing and Allied Health students vary.

1. Tardies and half-day absences are defined as follows: A tardy is 1 – 59 minutes missed and a half-day absence is 60 or more minutes missed in any morning, afternoon, or evening instructional block.

2. After the 10th absence in a program, the instructor will fill out and submit a student referral form. After the 10th tardy in a program, the instructor will fill out and submit a student referral form. The student will be counseled and placed on attendance probation.

3. Students may accumulate no more than 15 days of absence (in any combination of half and full days) in a 12-month period. The next time a student is absent (60 or more minutes in any session), the student will be withdrawn. He/she may petition the Academic Affairs Committee (AAC) to re-enter. (See AAC and Re-entry policies in this Catalog.)

4. Students may accumulate no more than 15 tardies in a 12-month period. The next time a student is tardy (1 – 59 minutes), the student will be withdrawn. He/she may petition the AAC to re-enter. (See AAC and Re-entry policies in this Catalog.)

5. Upon the completion of one year in a program, three additional absences and three additional tardies per grading period will be allowed for programs that exceed one year.

6. For programs of less than one year, the number of grading periods in the program will be multiplied by 3 absences or 3 tardies per grading period to determine the maximums.

7. The number of absences or tardies may be limited by the student’s ability to maintain satisfactory academic progress. If absences or tardies prevent satisfactory academic progress, a student will be subject to withdrawal.

8. Students who find it necessary to leave school during the school day must obtain permission from the classroom instructor and/or clinical supervisor.

9. Students absent three (3) consecutive days without contacting their instructor (No Call – No Show) will be withdrawn at the end of that third day.
Effective Date of Withdrawals:

1. Withdrawal for 3 consecutive days no contact = the next day
2. Student notifies staff of intent to withdraw = last day of attendance
3. Graduation = last day of the final course in the program

Religious Observances: Absences and tardies due to observance of an established religious holiday will not count against total allowable absences and tardies in a student’s program. Students observing religious holidays on scheduled school days should see their instructor prior to the absence to determine if documentation is needed. Any student who believes that he/she has been unreasonably denied an educational benefit due to his/her religious belief or practices may seek redress through the established grievance procedures.

Make-up Work: Students will have an opportunity to make up any tests, quizzes, or work missed due to absences or tardies as a result of administratively-approved, nonscheduled, religious holidays. Absences/tardies will be noted on the attendance record, but they will not be counted toward determining accumulated absences or tardiness for withdrawal.

GRADING SYSTEM

Grading Periods: The school year is divided into five grading periods. Grades are submitted by the teachers approximately every 9 weeks. Students are issued report cards for Erwin classes completed within that grading period. The grading system is as follows, with the letter grade and the corresponding weight: A = 4.00, B = 3.00, C = 2.00, D = 1.00, F = 0.00.

A Certificate of Completion or Applied Technology Diploma (ATD) is awarded upon completion of all courses and all requirements within a program. Transcripts are prepared and may be requested in the Main Office or online at www.erwin.edu.

Clock / Credit Hours: PSAV programs are offered in clock hours. Credit hour equivalencies are available to assist students who wish to matriculate to other postsecondary institutions. In accordance with federal guidelines, thirty (30) clock hours equal one credit hour.

GRADE POINT AVERAGE

All Erwin Technical College students will be awarded letter grades in all Erwin classes scheduled to be completed during the grading period. Grades and their corresponding weighting for GPA purposes are shown on the chart on the next page.

Calculation of Grading Period GPA: A student’s grading period GPA will be calculated by adding all quality points earned for classes completed during that grading period and dividing by the total number of credit hours assigned to the classes completed during that grading period. There are four grading periods (approximately 9 weeks in length) and one summer term (about 7 weeks in length). However, this will vary according to the current SDHC calendar.
**Calculation of Cumulative GPA:** A student’s overall, cumulative GPA will be calculated by adding all quality points for classes completed in the program of study and dividing by the total number of credit hours assigned to all classes completed during that program of study.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Weight</th>
<th>Remarks</th>
<th>Percentage and/or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>Superior</td>
<td>90-100%</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Above Average</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Average</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
<td>Below Average</td>
<td>60-69% Considered the lowest passing grade</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failing</td>
<td>0-59%</td>
</tr>
<tr>
<td>WP</td>
<td>N/A</td>
<td>Withdrawn Passing</td>
<td>Will be used when a student who is passing withdraws before the end of the grading period. The class must be completed upon re-entry.</td>
</tr>
<tr>
<td>WF</td>
<td>N/A</td>
<td>Withdrawn Failing</td>
<td>Will be used when a student who is not passing withdraws before the end of the grading period. The class must be repeated upon re-entry.</td>
</tr>
<tr>
<td>X</td>
<td>N/A</td>
<td>Transfer / Test Out</td>
<td>Will be used when credit is given for courses/classes transferred from other schools or other Erwin Technical College programs or as a result of testing out, when permitted.</td>
</tr>
</tbody>
</table>

**Retakes:** Any class that is failed must be retaken and passed. If a student receives an “F” in a scheduled class, and the student is permitted to remain enrolled, the student must retake that class in the next available grading period following the term in which the “F” was earned. Both the original “F” and the retake grade are shown on transcripts, and both grades are calculated in the overall GPA. Students may retake a class only once. If the class is not passed on the second attempt, the student will be withdrawn. When a student successfully retakes the previously failed class, the new grade received will be recorded as follows:

<table>
<thead>
<tr>
<th>Earned Academic Grade on Retake</th>
<th>Retake Final Grade Reported on Transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>A or B</td>
<td>C</td>
</tr>
<tr>
<td>C or D</td>
<td>D</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
</tr>
</tbody>
</table>

**Minimum Satisfactory GPA:** To remain in good standing, a student must maintain an overall, cumulative GPA of 2.0. (See additional information under Satisfactory Academic Progress section.) Only students in good standing will be eligible for a certificate or diploma.
**Minimum Academic GPA – Erwin Academic Probation:** A student will be placed on academic probation if the student’s cumulative GPA falls below 2.0. To clear an academic probation, the student must raise his/her cumulative GPA to a 2.0 or better during the next grading period.

**Minimum Academic GPA – Erwin Academic Withdrawal:** A student failing to raise his/her cumulative GPA to 2.0 or better during the next grading period will be subject to withdrawal for academic reasons.

A student who is withdrawn may petition the Academic Affairs Committee (AAC) for re-entry. Students who are withdrawn for academic reasons shall follow the established policy for re-entry which states students may re-apply for admission after sixty (60) school days or when the conditions set forth by the AAC are complete. If re-entry is approved, it would take place when the Erwin class in which the student was studying at the time of withdrawal is offered again, on a space-available basis.

**PROGRESS REPORTS (REPORT CARDS)**

The school year is divided into five grading periods. Grades are submitted by the teachers approximately every 9 weeks. Students are issued report cards based on grades earned in all classes completed during that grading period. Progress reports (Report Cards) will be distributed to students, through their program instructor, approximately three weeks after the end of the previous grading period.

**GRADUATION REQUIREMENTS**

A diploma/certificate from a training program at Erwin will be issued only when a student has:

- Achieved a satisfactory score on the TABE (state approved Basic Skills Exam), and
- Satisfactorily completed all courses required in their training program, and
- Achieved an overall, cumulative GPA of 2.0 or better at the end of their training, and
- Cleared all financial obligations incurred at the school.

To receive a diploma or certificate, a student must complete an exit interview process and obtain all applicable signatures on an Application for Graduation. The students will be notified about procedures and deadlines. The name on the diploma of certificate must be the same as the name on student records.

**Diploma Honors Designation:** Students completing a program with a 3.5 overall, cumulative GPA or better will have honors status noted on their diplomas.
ARTICULATION AGREEMENTS

The Erwin Technical College has agreements with several institutions which make it possible for an Erwin graduate to receive college credits toward an Associate’s Degree in certain college programs. Receiving schools ultimately make the final decision regarding credit acceptance, and students are responsible for initiating the request. An official transcript will be forwarded to the appropriate institution(s) upon our receipt of the formal transcript request in Erwin’s Registrar’s Office. Please see the current Articulation Agreements Chart in Appendix of Erwin’s Course Catalog, on the school’s website, or in hardcopy in Student Services.

Note that many state community colleges and private institutions will “bridge” or “transition” graduates of accredited institutions, such as Erwin, without individual school-to-school agreements. We strongly suggest that Erwin graduates inquire about transfer credits before pursuing further education.

Erwin currently participates in formal school-to-school agreements with Hillsborough Community College (HCC). All programs classified as having an Applied Technology Diploma (ATD) are designed by the Florida Department of Education for credit to transfer to community colleges in Florida offering the same program progression.

EMPLOYMENT GUARANTEE DISCLAIMER

Erwin Technical College makes no guarantee and provides no warranty in reference to securing employment upon completion of a job preparatory program. Successful completion of a job preparatory program at Erwin Technical College provides students with the education necessary for an entry-level position in his/her chosen field. An employability skills unit is a component included in the curriculum for our job preparatory programs.

The school will assist students with job placement as follows: As job leads become available through employers, information is made available to students (who are completing or who have graduated from the program) through his/her instructor and through postings available via the “Job Placement Assistance” link on the homepage of the Erwin Online website: www.erwinonline.org.

WITHDRAWALS

Students who are absent three consecutive days without contacting their instructor will be withdrawn at the end of that third day.

Students who voluntarily withdraw, or are procedurally withdrawn by virtue of Erwin’s attendance, academic or behavioral policies, from the same program two times will not be re-admitted into that program for a third attempt.

Students may enter a maximum of three different programs within a two-year period.

Refer to the Student Program Guide for information specific to each program.
RE-ENTRY OF FORMER STUDENTS

Students who wish to re-enter training into the same program at Erwin Technical College will submit a new registration form and an application for re-admission. Students must be withdrawn a minimum of sixty (60) calendar days before re-applying. The Academic Affairs Committee (AAC) will review the application and render a decision.

Generally, a student may re-enter only when the State course and Erwin class in which the student was enrolled at the time of withdrawal is offered again. Re-entries are on a space available basis. Students may be required to retake certain Erwin classes they already may have passed if the instructor so determines. Students re-entering nursing and allied health programs may need re-do fingerprinting, drug testing, CPR/First Aid training, etc.

Students may enter the same program only twice (the initial enrollment and one re-entry).

If the student was withdrawn due to excessive absences/tardies, he/she will re-enter on an attendance contract to be determined by the Academic Affairs Committee.

Students are to take care of any outstanding account balances and make good any NSF checks before re-entry will be allowed.

TABE scores must be current. (TABE scores are valid for 24 months.)

Previously approved financial aid, grants, and scholarships are not automatically reinstated. All re-entries should contact Erwin’s Financial Aid office. In order to receive veterans’ benefits, veterans and their dependents must also contact the VA School Official in Erwin’s Student Services office and the Veterans Administration to make necessary arrangements.
Erwin Technical College offers a wide range of financial aid to full-time students who qualify. Financial Aid counselors are available to assist in exploring these many options. The Financial Aid office is open school days and at least one evening each week. Please call (813) 769-5180, ext. 235 to verify current hours.

Full Consumer Information and Gainful Employment information is available on Erwin Technical College’s website:  www.erwin.edu

**To Apply for Financial Aid:** All students applying for any type of financial assistance at Erwin Technical College must apply online at: www.fafsa.ed.gov Erwin Technical College’s Federal code is: 005594. For details on eligibility and applications, visit Erwin’s Financial Aid department or call (813) 769-5180, ext. 235.

**Financial Aid Eligibility:** Financial Aid eligibility is established based on the number of clock hours specified in each training program. Tuition and other fees may be deducted from award payments, based on students’ signed approval. Students will be provided with a yearly award letter that outlines the financial assistance they are eligible to receive and the approximate disbursement date of their first check.

**Payment Periods of Enrollment:** Students will receive the balance of their award (after tuition, books, and fees have been deducted, if applicable), for one or two payment periods in each award year, based on the starting date of their current enrollment. A driver’s license or state-issued photo ID must be shown when picking up a disbursement check.

**On-going Grading Periods of Enrollment:** An overall, cumulative Grade Point Average of 2.0 or more is considered Satisfactory Academic Progress for future payments. An overall Grade Point Average (GPA) of below 2.0 at the end of their first complete grading period of enrollment will place a student on automatic Financial Aid Warning. (See more information in “Standards of Academic Progress for Disbursement of Financial Aid” section.)

**TYPES OF FINANCIAL ASSISTANCE**

**Federally Funded Title IV Grants:** (Students must have a high school diploma or GED)

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work Study (FWS)

**State Funded Grants:**

- District Financial Aid
- FSAG - Florida Student Assistance Grant
- FWEP - Florida Work Experience
- Florida Bright Futures
**Indian Affairs:** Please call 1-800-322-9186 for information.

**Workforce Investment Act:** (new title: Career Source Tampa Bay): Persons residing within Hillsborough County should call (813) 930-7400 for information. Pasco-Hernando County residents should call One Stop Centers in New Port Richey, Dade City, or Brooksville. Polk County residents should call (863) 683-5627.

**Veterans Administration:** All Erwin full-time programs are approved for veterans training. When the applicant has completed the enrollment procedures, Erwin’s VA Certifying Official will notify the VA by forwarding appropriate forms.

**Vocational Rehabilitation:** The Department of Health and Rehabilitative Services (HRS) sponsors eligible disabled students who need training or retraining to secure suitable employment. For detailed information, please call (813) 930-7494.

**Other Sources of Assistance:** Other agencies and programs that have provided financial assistance to Erwin students are: CARIBE, Florida Prepaid College Fund, Project Opportunity, Tampa Housing Authority, INVEST scholarships, and employer scholarships. See the Financial Aid office for additional information on these programs.

**Loans – Not Available:** No loans are processed through Erwin Technical College. Erwin reports enrollment to the National Loan Data Base System in order to defer previous student loans.

**STANDARDS OF ACADEMIC PROGRESS (SAP) FOR DISBURSEMENT OF FINANCIAL AID**

A student is considered to be making satisfactory academic progress if he/she successfully completes course hours (clock hours), achieves a specific cumulative grade point average (GPA), and does not exceed the maximum time limits to complete his/her course of study. Students' Satisfactory Academic Progress (SAP) will be checked prior to each financial aid disbursement. (No SAP is required prior to the first financial aid disbursement in a program.)

- Students must maintain an overall, cumulative GPA of at least 2.0 on a 4.0 scale.
- Students are allowed up to 150% of the scheduled clock hours to complete their program, but they may only receive financial aid for 100% of the program hours. Thereafter, the student must self-pay for any additional hours needed to finish the coursework and complete their program.
- Students must complete the required number of competencies within the time frame as defined by the individual's program guidelines for the evaluation period.
Students’ Rights & Responsibilities with SAP

All students are responsible for maintaining Satisfactory Academic Progress (SAP) in their course of study. Students who fail to maintain SAP will need to abide by the following guidelines in order to regain their Federal Student Financial Aid standing:

**Proof of SAP:** Documentation of the above guidelines will be collected from instructors, department heads, or other authorized individuals on a Satisfactory Academic Progress form, or by other official Erwin forms of communication. Documentation will include student name, program, and confirmation of progress meeting above guidelines.

**SAP - Financial Aid Warning:** Satisfactory progress is checked at the end of each payment period. Students who are below a 2.0 cumulative GPA will be placed on Financial Aid Warning. A school may do this without appeal or any other action by the student. Warning status lasts for one payment period, during which the student may continue to receive FSA funds.

**SAP - Financial Aid Probation:** Students who are still failing to make satisfactory progress after the Financial Aid Warning period will lose their aid eligibility, unless they successfully appeal and are placed on Financial Aid Probation.

**Appeals, Financial Aid Probation, and Academic Plans:** When a student is in danger of losing FSA eligibility because he/she failed to make satisfactory progress, he/she may appeal that result on the basis of: injury or illness, the death of a relative, or other special circumstances. The appeal must explain why he failed to make satisfactory progress and what has changed in his/her situation that will allow him/her to make satisfactory progress at the next evaluation. The school determines that he/she should be able to meet the standards after the subsequent payment period or if an academic plan has been developed that, when followed, will ensure that he/she will meet the standards by a specific time. Students who fail the satisfactory progress check after the end of the probationary payment period may only continue to receive aid if they successfully appeal, or there is a developed academic plan, and they are meeting its requirements. For specific instructions, see an advisor in Erwin’s Financial Aid department and consult the Consumer Information section on www.erwin.edu

**Academic Probation Status, Denial Status, and Reinstatement of Financial Aid:** Probation status will not prevent a student from receiving financial aid. The probationary period (one grading period, approximately nine weeks) is meant to inform the student of potential academic problems and provide time for corrective action. If a student does not meet the Satisfactory Academic Progress standards after the probationary period, denial status will be imposed. Denial status will prevent the student from receiving any Federal Title IV, state, or institutional financial assistance for the future enrollment, until such time as the student meets all Satisfactory Academic Progress standards. A student’s financial aid will be reinstated once he/she meets all Satisfactory Academic Progress standards.

**Each Term of Enrollment:** If a student meets the above guidelines, they are in compliance with the Satisfactory Academic Progress policy.

**Reinstatement of Financial Aid Eligibility:** Students must achieve a Satisfactory Academic Progress Report, as defined above, for the payment period following the forfeiture of aid.
PELL GRANTS

**Maximum Eligibility:** Starting with the 2012-2013 school year, a student may receive a total lifetime maximum of 6 years of Pell grants (known as 600%), combining all postsecondary institutions the student has attended. Erwin’s Financial Aid department will monitor each Pell student’s status and will notify any students who are nearing their maximum lifetime allotment.

If a student reaches 600% of Pell eligibility, no further Pell disbursements can be made through Erwin or any other postsecondary institution.

For continuing students who began their program at Erwin prior to July 1, 2012: If their 600% is reached before graduating from their current program, Erwin will work with those students to help them apply for full or partial grants to cover their remaining tuition in that particular program. If a student withdraws or transfers to another program, the student will be cash-paying upon re-entry or transfer.

**Policies for Return to Title IV:** Federal financial aid (Title IV funds) is awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws, the student may no longer be eligible for the full amount of Title IV funds that the student was originally scheduled to receive.

If a recipient of Title IV grants withdraws after beginning a program, the amount of Title IV grant assistance earned by the student must be determined. If the amount disbursed to the student is greater than the amount the student earned, unearned funds must be returned. If the student received less Federal Student Aid than the amount earned, a post-withdrawal disbursement will be made.

For complete policies, please reference the Consumer Information section on Erwin’s website: [www.erwin.edu](http://www.erwin.edu) or speak to a counselor in the Financial Aid department.

**Discontinuation of Ability-to-Benefit Eligibility:** Federal guidelines have changed regarding Ability-to-Benefit eligibility. Students who began a program at Erwin on July 1, 2012, or after, who have never attended Erwin or another postsecondary institution, or who cannot prove (with documentation) that they previously had attended a postsecondary institution as an ATB student will not be eligible to receive a Federal Pell Grant to attend Erwin.

A student who enrolled in a program at Erwin prior to July 1, 2012, and qualified as ATB student (by passing an ATB exam or by successfully completing 225 hours of instruction) will be allowed to continue to receive Federal Pell funding, when qualified to do so.

ATB exams will not be given to students at Erwin after July 1, 2012, nor will students be able to complete 225 hours of instruction to meet the eligibility requirement for ATB after July 1, 2012, in order to receive a Federal Pell Grant.
SCHOLARSHIPS

Scholarship Information is available on Erwin’s online education portal. To view scholarships available to Erwin students and apply for those scholarships, follow the steps below. For additional assistance, contact the Financial Aid office.

- Visit: www.erwinonline.org
- Log in or create a user account
- Click on “Check for new scholarship opportunities”
- Follow guidelines for specific applications

SPONSORING AGENCIES

There are many agencies that sponsor students at Erwin Technical College. Students are encouraged to check with individual agencies to determine the criteria for qualifying. Some of these agencies are:

- CARIBE (813) 231-1972
- Tampa Housing (813) 253-0551
- Vocational Rehab (813) 930-7494
- Veteran’s Administration 1-888-442-4551
- WIA (Career Source Tampa Bay) – Hillsborough County (813) 930-7400
- WIA (Career Source Tampa Bay) – Pasco-Hernando County (813) 377-1300, ext. 3431
- WIA (Career Source Tampa Bay) – Polk County (863) 683-5627
ACADEMIC AFFAIRS COMMITTEE (AAC)

Due Process: The Academic Affairs Committee (AAC) is designed to permit a student or staff member the opportunity to review concerns involving a student’s attendance, academic performance, or behavior. The AAC also ensures all students will receive due process in disciplinary matters.

If a currently-enrolled student desires an AAC meeting, that student is to contact the teacher. The teacher will contact the staff members who will comprise the committee and set up a meeting time. The instructor will notify the student of the time and place of the meeting.

If a previously-enrolled student desires an AAC meeting, the student may contact the appropriate program advisor or an assistant principal to set up the meeting.

The AAC is comprised of an administrator, and at least two of the following individuals: the program instructor, the student's program counselor/advisor, and/or department head. A student may petition the AAC to review circumstances that may have affected the student's training process. These circumstances may include a student's attendance, academic or clinical performance, or classroom behavior. The student and any individual the student designates may attend the review. Following the AAC's review, recommendations will be made concerning the student's future educational plans.

ACADEMIC DISHONESTY

In an attempt to clarify possible misunderstandings, Erwin’s faculty and staff have developed some definitions and examples of two types of academic dishonesty: cheating and plagiarism.

Cheating: is defined as giving or taking of information or material with the purpose of wrongfully aiding oneself or another person in academic work that is to be used in determining a grade.

Plagiarism: or literary theft, is appropriating the literary composition of another person, including parts, passages, or language of that writing, and passing off that material as one’s own. Plagiarism is the failure to give proper credit or citation to one’s sources of information. It includes the failure to use conventional methods of documentation for material quoted or paraphrased. Additionally, plagiarism includes allowing someone else to compose or rewrite an assignment for a student.

As with other violations of serious student misconduct, cheating and plagiarism will result in disciplinary action. Any student caught cheating or plagiarizing will receive a zero for that assignment, test, etc., and may involve additional disciplinary actions.

ACTIVITIES CALENDAR

A calendar for school activities is kept in the Administrative Office. Any organization planning an activity must clear it with the Administrative Office before scheduling an event.
ATTENDANCE – CLOCKING IN/OUT

Students use their badges to clock in and out for each session on a dedicated computer in their classroom. The computer records the exact minute the student scanned his/her badge. Students are to clock in, and be in their seats prepared to begin, before the start of each session. Only the student whose name is on the badge may use it to scan. Students may only use the computer/scanner in their classroom; they may not use the scanner in any other room on campus. Because accurate attendance and scanning locations are critically important for recordkeeping purposes, disciplinary actions will be taken if these rules are broken.

BOOKSTORE

The bookstore is open daily during scheduled school days from:

- 7:15 a.m. - 8:00 a.m.
- 10:00 a.m. - 12:00 noon
- 1:15 p.m. - 2:15 p.m.

Books/Supplies: Textbooks and classroom supplies are available for purchase in the bookstore. Erwin T-Shirts are available for sale in a variety of styles and colors.

Refunds: Returns can be made only if the book is unused, current, and needed for resale. After five (5) working days, a refund check may be picked up from the bookkeeper in the main office. Refunds are available only for self-paying students.

Methods of Payment: Cash, checks, or credit cards are accepted as payments. To write a check, a Florida driver’s license is necessary.

An approved Fee Sheet or voucher, issued through Financial Aid, is necessary to purchase items from the bookstore for students using scholarship or grant funds (including Pell) to pay for purchases.

CELL PHONE POLICY

Cellular phones must not interrupt class. Follow the guidelines below. Abuse of these policies will result in disciplinary action.

- Calls may not be received or placed in the classroom/shop/laboratory.
- Phone will be in silent mode during class hours.
- Phones may be on your person or in your purse; not on your desk.
- Calls and texting will be done during approved breaks and lunch, not during class times.
- Phones must not be on your person during a test.
- An instructor should be informed of an expected emergency call.
- Blue Tooth and similar devices are not allowed to be worn in class.
CHEMICALLY IMPAIRED OR MENTAL/PHYSICAL ILLNESS

Based upon behavior or reasonable suspicion indicative of chemical abuse, emotional illness, and/or any other conditions (including contagious diseases) that affect the student's suitability or ability to complete the program, the student will be referred for intervention or evaluation (at the student's expense).

This intervention or evaluation should be made by a qualified health professional, and a written recommendation should be submitted to Student Services as to the safety and suitability of the continuance of the student in his/her Erwin program.

CIVILITY STATEMENT

Civility Statement: In order to provide a safe, caring and orderly environment, Hillsborough County Public Schools expects civility from all who engage in school activities. Mutual respect, professionalism, and common courtesy are essential qualities that all need to demonstrate in promoting an educational environment free from disruptions, harassment, bullying, and aggressive actions.

Civility Agreement: All PSAV students are given a copy of this statement during registration to sign that states: “My signature below signifies that I have read the Hillsborough County Public School Civility Statement and agree to abide by the rules. I acknowledge that I have reviewed the Course Catalog and Program Guide and agree to abide by the policies and procedures.”

COOPERATIVE EDUCATION – ICE PROGRAM

Industrial Cooperative Education (ICE) is available in some industrial programs. The ICE program provides opportunities for qualified students to experience their chosen vocation through on-the-job training linked with classroom instruction.

Each work-based activity will have a written instructional plan for students, specifying the particular objectives, experiences, competencies, and evaluations that are required. An on-site employer representative will be responsible for guiding and overseeing the students’ learning experiences and participating in the students’ written evaluations. The program’s instructor and an administrator will work with the on-site employer representative to oversee the ICE program components.

Students attend classes until they have completed a minimum 50 to 75 percent of their course work before entering the workforce, via the ICE program, on a part- or full-time basis. Credit toward graduation may be earned when course competencies are met on-the-job.

Qualifications for the ICE program are based on the following factors: program instructor’s agreement and recommendation, grade point average, and attendance. Students receiving financial aid must see a Financial Aid counselor before beginning ICE.
CODE OF CONDUCT

Common courtesy is the code of the Erwin Technical College (ETC). Students are expected to refrain from causing interruptions that affect the learning experiences of others. Examples of interruptions include, but are not limited to: sleeping in class, side conversations during instruction, talking on a cellular device, use of profanity, harassment, etc.

1. All students are expected to conduct themselves in an acceptable manner and reflect the goals and purposes of ETC in their campus behavior.

2. Cheating and plagiarism are serious offenses which will result in a zero for the assignment, test, etc., with the possibility of suspension or withdrawal. Cheating is defined as giving or taking of information or materials with the purpose of wrongfully aiding oneself or another person in academic work that is to be considered in determining a grade. Plagiarism, considered literary theft, involves copying/passing off answers, ideas, or words of another as one’s own.

3. Possession of, sale and/or being under the influence of alcohol or narcotic drugs, including marijuana, is a violation of Hillsborough County School Board Policy (Section C-4, 7 and 8). Students found violating this policy are subject to withdrawal and referral to the appropriate law enforcement agency.

4. Possession on school property, and/or school activities, of knives, firearms, weapons, ammunition, and/or other explosive devices is prohibited. Violations of this policy may result in suspension and other disciplinary action and/or referral to law enforcement agencies.

5. MAJOR STUDENT VIOLATIONS: The following are very serious violations and will likely result in 10 day suspension, with a possibility of withdrawal. Some of the following also result in law enforcement personnel being involved. This is not an all-inclusive list.

   a. Threatening, assaulting, battering, or physically injuring students or school personnel.
   b. Theft, extortion, damage, or misuse of school and private property.
   c. Noncompliance with instructions of administrators, teachers, or other school personnel.
   d. Unlawful protest, marches, and picketing.
   e. Anyone contributing to the delinquency of a minor.
   f. Possession of, sale, and/or being under the influence of alcohol or narcotic drugs, including marijuana, at school and/or school activities.
   g. Use of profane or abusive language.
   h. School disruptions.
   i. Carrying or using weapons and dangerous instruments.
   j. Sending false fire alarms or bomb threats.
   k. Vandalism and defacing school property.
   l. Inappropriate use of attendance scanning devices (scanning in for another student and/or asking another student to scan in for you).
DISCIPLINARY ACTIONS

**Probation:** is an official warning that the student is in violation of Erwin Technical College’s policies and that continued enrollment depends upon satisfactory attendance, performance, or behavior during the period of probation.

**Suspension:** is the temporary removal of a student from Erwin Technical College’s campus for a period not to exceed ten days. A student who is suspended will receive a zero grade for any test or quiz given during the time of suspension. Days suspended are reported as regular absences and are counted in the accumulated total absences for withdrawal purposes.

**Withdrawal:** is the removal from a program due to academic failure, clinical failure, attendance, or behavior issues. A student who has been withdrawn may request an AAC meeting to determine guidelines for re-entry at a future date. See “Re-entry” and “AAC” information, above.

DRESS CODE

All students and visitors entering our building must abide by these policies set forth by Hillsborough County Public Schools and Erwin Technical College:

Shoes shall be worn. Skate tennis shoes and bedroom slippers are unacceptable and are not allowed. Lace-up shoes shall be tied.

Clothing that exposes the entire shoulder, tube tops, spaghetti straps, or similar type of clothing may only be worn with a blouse or shirt.

- Clothing exposing the torso or the midriff, either front, back, or sides shall not be worn. (This includes see-through or mesh garments.)
- Underwear shall not be visible.
- Clothing shall not expose the mid-chest area.
- Clothing not properly fastened or with tears that are indecent shall not be worn.
- Clothing traditionally designed as undergarments or sleepwear shall not be worn as outer garments.
- All pants shall be secured at the waist.
- Men’s shirts shall have sleeves.
- Shorts are not permitted. Women may wear mid-calf length capris, if acceptable in the student’s program of study.
- Mini skirts or mini dresses are not permitted.
- Hemlines shall be no shorter than fingertip length.
Hair shall be clean and neatly groomed. Head coverings (hats, caps, do-rags, etc.) shall not be worn in the building unless required for religious observance or health-related reasons.

Garments and/or jewelry which display or suggest sexual, vulgar, drug, gang, weapons, or alcohol-related wording or graphics, or which provoke or may tend to provoke violence or disruption in the school shall not be worn. Wallet chains (or spiked or other potentially threatening belts or jewelry) shall not be worn.

Uniforms are required in some programs and specific policies are in place. Students are notified of the uniform style and color requirements at registration. Policies are listed in each Program Guide.

**DRUG POLICIES**

Possession of, sale, and/or being under the influence of alcohol or narcotic drugs, including marijuana, at school and/or school activities, is a violation of Hillsborough County School Board Policy (Section C-4, 7 and 8). Students found violating this policy are subject to withdrawal and the involvement of the appropriate law enforcement agency.

**Drug Testing:** A random drug screening test will be done (at the student's expense) in Nursing and Allied Health programs. If the first test (done near the beginning of the program) shows positive, the student may re-test once (at the student's expense). If the results for the second screening are positive, the student will be withdrawn. Students failing the second screening must wait at least one year (from the date of screening) before applying for re-entry.

Drug screening test results must be negative and remain negative for the student to continue in the program. In addition, clinical agencies may impose routine/random drug toxicology screening requirements (at the student's expense) as a condition of a student’s participation in clinical experiences in their facilities. If such testing is imposed, the student must submit the results to the program instructor prior to beginning or continuing the clinical rotation, and the clinical facility’s decision on whether or not a student may enter their facility is final.

**ERWIN ONLINE – MOODLE**

Erwin Online is an electronic platform utilized by Erwin Technical College to disseminate general and course-specific information to students. The software platform used is Moodle. The terms Moodle and ErwinOnline are often used interchangeably by students and staff. In the Orientation packet, students will receive an instruction sheet detailing how to set up a Moodle account.

Many teachers use Moodle to electronically post assignments and give quizzes. Various departments post important information for students, such as: available scholarships, current job openings, and job placement helps. There are many general topics available to students, including an Orientation to our Media Center (“The HUB”), Voter Registration details and links, Copyright/Plagiarism information, and Constitution/Citizenship Day facts and links.
FINANCIAL MATTERS

Tuition Payments: Tuition is due on the first day of each accounting period. Tuition may be paid in installments throughout the accounting period, but tuition must be paid in full by the last day of each accounting period. Accounting periods for the 2015-16 school year are: August 25 – January 15, January 20 – June 10, and June 13 – July 14. Statements will be sent to self-paying students each month.

Students who are expecting federal funds (Pell, etc.) or an agency/scholarship to cover their tuition must check with the Financial Aid department to be certain all paperwork is complete. If for any reason the expected funding does not come through, students are responsible for paying their own tuition under the same date parameters outlined above.

NSF Check Policy: All checks must include the following: check writer’s or business’ name and local address, and the student’s identification number. Checks will be submitted only one time to the maker’s bank. If the check is returned due to non-sufficient funds, it will automatically be routed to a collection company contracted by the School District to handle returned checks.

It is important to note that students whose accounts are given to the collection agency will not be able to write checks at any establishment that employs the services of the collection agency contracted by the district, including non-school related businesses. The originator will have to make payment to the collection agency, and if repayment is not received, the person’s name may be entered onto the District’s NSF list, and the District will no longer accept their checks. Only money orders will be accepted from the individuals whose names appear on that list until the collection agency notifies the District that NSF checks have been satisfied.

ATM: An ATM machine is located on the first floor, in the center hallway.

GRIEVANCE PROCEDURES

A grievance is a situation occurring in the course of the school’s operation which causes students to consider themselves legally wronged. Schools are responsible for providing procedures for the expression and resolution of grievances (see HCPS procedures below).

Students who believe they have been aggrieved should first take their complaint/concern to their Program Counselor/Advisor and request that a Pre-Grievance Conference be scheduled with the Program Counselor/Advisor, the Program Instructor, and an Administrator.

If the grievant is not satisfied with the results of the Pre-Grievance conference, he/she should see the Principal’s Secretary to receive a copy of the Hillsborough County Public Schools Formal Grievance form (SB60801 form). The grievant should complete items 1 – 7 and attach a written statement, as stated below.

The Principal will investigate the alleged incident and talk to the necessary witnesses. The Principal will complete the requirements for a Level 1 Grievance and will respond, in writing, to the grievant within 10 school days from the date the form was received at the site.

See the grievance form procedures, provided below, for details regarding additional recourse.
**HCPS Grievance Procedures:** The official procedure for filing a written, formal grievance within Hillsborough County Public Schools is listed below:

A grievance subject to this procedure is a complaint of an alleged violation of federal, state or local laws applicable to the School Board including, but not limited to, claims of unlawful discrimination, harassment, retaliation, or violation of specific School Board policy(ies) or procedures(s). All other complaints may be addressed to the appropriate principal, immediate supervisor, or site administrator. The grievance process is not intended to replace other processes available because of various laws.

Pre-Grievance Conference: When an individual feels that he or she has a complaint or grievance (as defined above) he/she shall discuss the complaint or grievance with the individual, the principal of the school, the immediate supervisor, or that person’s supervisor as soon as possible. Every effort shall be made to arrive at a satisfactory resolution of the problem on an informal basis.

Completing a Formal Grievance Form (SB60801, Rev. 01/2010 form): Request the official grievance form from the Principal’s secretary. These are the instructions that are printed on the back of the form:

Submit completed form and attachments to:
- Original: General Manager of Employee Relations/Equity Coordinator
- Copy 1: Principal or Site Administrator’s office
- Copy 2: Grievant

1. Person(s) filing a Level 1 grievance must complete items numbered 1 – 7 of the Grievance Form and attach a written statement (see item number 6). A copy should be retained by the grievant. A grievance shall be presented within 60 days after the aggrieved person knows of the act or condition on which the grievance is based, and if not so presented, the grievance shall be considered waived. A Level 1 grievance must be precluded with a “pre-grievance conference.”

2. Person receiving the grievance form shall complete item number 8.

3. The principal or site administrator rendering the Level 1 decision shall respond in writing to the grievant within ten (10) school or work days from the date the form was submitted/received at the site.

4. The principal or site administrator rendering the Level 1 written response must complete item 9 of the form and forward a copy with attachments (see items 6 and 10) to the grievant and to the General Manager of Employee Relations/Equity Coordinator at the address above within ten (10) school or work days from the date they received the Level 1 decision from the principal or site administrator.

5. Person(s) wishing to appeal their grievance to Level 2 must complete the “Level 2 Grievance” section of the Formal Grievance (see items numbered 11 and 12) and submit documents to the General Manager of Employee Relations/Equity Coordinator at the address on the previous page within ten (10) school or work days from the date they received the Level 1 decision from the principal or site administrator.
6. Person(s) wishing to appeal their grievance to Level 3 must complete the “Level 3 Grievance” section of the Formal Grievance (see item 13) and submit documents to the General Manager of Employee Relations/Equity Coordinator at the address on the grievance form within ten (10) school or work days from the date they received the Level 2 decision from the Superintendent.

_Institutional Accreditation Agency – Grievance:_ If after exploring all possible solutions to a problem with the School District staff, a student may contact the Accrediting Commission of the Council on Occupational Education. Inquiries should be addressed to:

Dr. Gary Puckett, Executive Director/President  
Council on Occupational Education  
7840 Roswell Road, Building 300, Suite 325  
Atlanta, GA 30350  
Phone: (770) 396-3898  
FAX: (770) 396-3790  
http://www.council.org

**HONOR ROLL & PERFECT ATTENDANCE AWARDS**

Students who have completed sufficient credits, earning all A’s, during a grading period, will be listed on the Principal’s Honor Roll. The student’s report card must show they have earned at least 5 credit hours (equivalent to 150 clock hours) during the previous grading period to be eligible. All grades recorded for that grading period must be A’s.

Because programs and classes begin throughout each grading period, a student may not have 5 credit hours appearing on his/her report card for some grading periods. When this happens, the student is not eligible for Principal’s Honor Roll status for that grading period. (For instance, a student may start a program well into a 9-week grading period and may not be enrolled long enough to earn 5 credit hours during his/her first grading period. Or, a student may be enrolled in long classes which may not finish during the grading period, so 5 credit hours do not appear on his/her report card for that grading period.)

Perfect Attendance for a grading period is also based on 5 credit hours appearing on a student’s report card. Students who meet that criteria, and who have no tardies and no absences recorded on the report card for that grading period will be classified as having achieved “Perfect Attendance” for that grading period.

Students who are eligible for Principal’s Honor Roll and those eligible for Perfect Attendance will receive an award certificate for each grading period they achieve those designations.
JOB PLACEMENT ASSISTANCE

The school will assist students with job placement as follows: As job leads become available through employers, this information is made available to students (who are completing or who have graduated from the program) through his/her instructor and through postings available via the “Job Placement Assistance” link on the homepage of the Erwin Online website: www.erwinonline.org.

JURY DUTY

Time spent serving on jury duty will not count against a student’s allowable absences in a program, provided these guidelines are followed: (1) Students must give their instructor a copy of the jury summons as soon as it is received. (2) If a student is required to report for jury duty, he/she must request an attendance verification letter, with a date/time stamp, (provided in the jury waiting room) at the end of service and provide a copy of that letter to the instructor. (3) If classes are still in session when a student is released, the student is to report back to campus.

Other court-related issues, such as a student’s personal legal matters or a subpoena to testify in a court case, do not fall under the guidelines above. Those types of absences are personal and will count against a student’s allowable absences in a program.

LOST AND FOUND

All articles found on campus are to be turned in to the Administration office. Lost articles not claimed may be disposed of after 30 days.

LUNCH INFORMATION

Food, beverages, and snacks are to be consumed in the cafeteria or in the outside patio area, not in classrooms or hallways. All students are responsible for cleaning their eating area. Trays, dishes, silverware, and trash should be returned to the proper areas.

Vending machines are available in the cafeteria. Students may leave campus during lunch break.

As part of their training program, students in the Culinary Arts program prepare and sell food in the Pavilion area of the cafeteria many Thursdays and Fridays during lunch.

MEDIA RESOURCES

**Media Center:** Erwin’s Media Center/Library is called “The Hub”. It is located on the second floor and is open during posted hours throughout the week. An instructor experienced in operating the Media Center is available two days a week. The school’s technology resource
staff member is available throughout the week for technology assistance. Other staff members assist in providing coverage to ensure the Media Center is open each day. Erwin Technical College is a member of the American Library Association and the American Association of School Libraries.

Several newspapers, magazines, and journals are provided for leisure and course-related reading. A wide range of materials is available for student check-out, including fiction, non-fiction, reference books, magazines, and audio tapes. Most books and audio media can be checked out for two weeks; reference books and magazines circulate for two nights. Student copiers are available in the second floor hall area, outside The Hub, at a cost of 5 cents per copy. A change machine is located in the same area.

**Orientation:** An orientation to Erwin’s Media Center/Library is available on ErwinOnline (Moodle), Erwin’s electronic platform at: www.erwinonline.org The orientation is in the General category, under Media Center. The enrollment key is: hub

**Electronic Research:** Most students conduct research electronically. Located in the Media Center section on Moodle/ErwinOnline are links to the power of the virtual library. By using this rather than hard copy reference books (which can be out of date before publishing is complete) in a physical library, the virtual library provides cutting edge information.

**Virtual Libraries:** The school district has many resources and links available for Career and Technical research through their website: http://www.sdhc.k12.fl.us/doc/list/library-media-services/resources/69-266 Access to PDR (pharmaceutical information) www.pdr.net and EBSCOhost (medical information) http://search.ebscohost.com is provided to our students through Erwin’s Moodle/ErwinOnline platform.

**Computers & Internet Accessibility:** Computers with CD capability and Internet accessibility, are available in every program, as well as in The Hub. Erwin also has three computer labs available for teachers to use for class activities. Erwin Technical College has open wireless Internet available throughout the building for students to use the school’s computers or their own Internet-compatible devices.
MEDICAL ISSUES

Students who become ill or injured while on campus are to notify their instructor before signing out and leaving campus.

Students should notify their instructor each morning if they will be absent. See your instructor for preferred method of contact. Students must keep in mind that school policy requires that students be withdrawn from their program after three days of no-contact.

For the safety of the student, classmates, and staff, students experiencing certain medical conditions (illnesses or injuries) will be required to have a medical release from a physician which states there are no limitations of activity or assignment before they will be allowed to return to school and participate in class, lab/shop, or clinical experiences. This includes students who are contagious, infectious, or have any limitations in physical activity (such as a recent surgery or pregnancy, etc.)

NATIONAL TECHNICAL HONOR SOCIETY

To be considered for nomination to the Honor Society, a student must have a cumulative grade point average (GPA) of at least 3.5 out of a possible 4.0. Candidates must have completed at least 30% of his/her program, and a minimum of two grading periods. Students must also have demonstrated leadership skills, service to others, above-average interpersonal relationships, and good attendance, and be recommended by their instructor. A student could not have been on attendance or academic probation, suspended for any reason, or withdrawn for academic reasons within the past two years. See additional information on www.erwinonline.org.

PARKING

Student vehicles driven to school must be registered in the Administration Office. A parking hangtag will be issued that must be displayed in the vehicle at all times the vehicle is on campus. Unauthorized vehicles will be towed away at the owner's expense.

Parking areas are designated for staff, students, and visitors. The primary student parking lot is located across 20th Street on the west side of the building. Limited student parking spaces are available on the east side of the building and in the eastern half of the front parking lot. The western half (first 7 rows) of the front parking lot is for staff and visitors. Observe all posted signs. Maximum speed limit on the school grounds is 10 miles per hour.

No one will be permitted to loiter in the parking area during school hours. Sitting in cars is not permitted at any time, including during lunch breaks.
PERSONAL PROPERTY

Students are responsible for keeping up with their personal property and textbooks. You can help in the following ways:

- Do not leave books or personal property lying around.
- Report all missing items to the Administration office.
- Check with the Administration office for missing items that have been turned in.
- If you observe anyone taking items that do not belong to them, report it immediately.
- Do not carry large sums of cash.
- Do not bring unnecessary electronic devices to school.

SAFETY AND SECURITY

In accordance with federal policy, a Campus Safety and Security brochure is published each year that lists campus crime statistics for the previous three years. Also included in the brochure are safety policies and procedures and safety tips. These brochures are provided to new students during Orientation and are available throughout the campus. Students, staff, and guests are invited to provide input and suggestions on safety and security processes and procedures. See the Assistant Principal for Administration in the Main Office.

All personnel receive Emergency Action Checklists which outline School District procedures to be followed in the event of an emergency. Emergency drills, such as Fire Drills and Tornado Drills, will be held periodically. An alarm will sound when evacuation of the building is necessary. Evacuation maps are posted in all rooms. Students should move quickly, calmly, and quietly out of the building and proceed to designated areas during evacuations.

East and west doors are to be locked after 4:00 p.m. Students are not to prop open those doors. All staff and students are to wear school-issued picture ID badges at all times they are on campus. Badges are to be worn above the waist with the photo visible.

Keep all valuables on your person or secure them, out of sight, in locked vehicles.

Erwin Technical College has full-time security. Immediately report to the Administrative office or the nearest staff member any suspicious activity. Also report any non-students (any person without a school-issued ID badge) observed in the back hallway on the first floor or anywhere on the second floor. Make your instructor and Administrators aware of any potential domestic problems you may be experiencing, in case someone comes to campus looking for you. No information is given to callers or visitors regarding a student’s whereabouts.
SERVICES AVAILABLE

The following programs offer limited services for Erwin students, school district staff, and the public:

- Automotive Repair    (813) 769-5180, ext. 253  Call during school hours
- Barbering     (813) 769-5180, ext. 291   Call after 5:00 p.m., Mon - Thurs
- Computer Repair    (813) 769-5180, ext. 221  Call during school hours
- Cosmetology    (813) 769-5180, ext. 291  Call Wed, Thurs, or Friday
- Dental Clinic     (813) 238-7725     Call during school hours

SKILLS USA (INDUSTRIAL STUDENTS’ ORGANIZATION)

Students enrolled in Industrial programs are encouraged to participate in SkillsUSA. Regional competitions among postsecondary students in other vocational schools are held in Hillsborough, or a surrounding county, in February. First place winners, and often second and third place winners, are eligible to compete at the State level several weeks later. First place State winners are eligible to compete at the national level in June.

SMOKING POLICY

There will be no smoking and no use of tobacco products inside the building, in designated non-smoking areas, nor near doors/entrances to the building.

Electronic cigarettes may not be used inside the building, in designated non-smoking areas, nor near doors/entrances to the building.

The state law on a smoke-free workplace will be enforced.

Students who do not observe this policy will be subject to disciplinary action. Please use the provided receptacles for cigarettes. The receptacles are located in the designated smoking permitted area. Smoking is only permitted outside, on the northwest side of the building.

TELEPHONE MESSAGES

Students should inform all relatives and friends that they should not be contacted at school unless an emergency arises. In case of emergency, they should call the Administrative Office: (813) 769-5180. Phone calls will not be transferred to students and messages will only be taken when the nature of the emergency is known. The main office will notify students to return their emergency call.
TOURS

Many times during the school year we are visited by groups of students from other schools, school officials, educators from other school systems, and prospective students. Please extend all courtesies to these guests. All arrangements for group tours are scheduled through the Student Services Office.

TRANSCRIPTS

To obtain a transcript of school records, a Request for Transcript Form must be submitted to the Administration Office. The form is available from the receptionist or online at: www.erwin.edu. Requests cannot be taken by telephone. The student's account must be cleared, with no outstanding debts to the school, in order for the transcript or other school records to be released. The first transcript is free. The fee for each additional transcript is $2.

TRANSPORTATION

It is the student's responsibility to provide his/her own transportation to school, clinical facilities, and job sites assigned during the year.

HART monthly bus passes are available in the Administrative office for Erwin students to purchase at a discount.

VISITORS

Children are not to accompany Erwin students to school. School board policy permits only registered students to be on campus. Visitors to the campus must report to the Administration office. A visitor's pass will be issued to those persons having legitimate business with the school. It is the responsibility of Erwin Technical College students to notify their guests of the visitor's permit requirements and procedures. Persons on campus without a visitor's pass will be asked to leave. If a second violation should occur, law enforcement personnel may be summoned to remove the trespasser from campus.
ACCOUNTING OPERATIONS

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>900 clock hours</td>
<td>B070110</td>
<td>0552030202</td>
</tr>
</tbody>
</table>

FLDOE State Curriculum Framework:
Link: • Accounting Operations (B070110)

Program Information: The program is 900 clock hours (approximately 10 months). This program is taught in English, in a traditional classroom setting, and is offered during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (900 clock hours)</th>
<th>Fees</th>
<th>Estimated Books/Supplies</th>
<th>Certification Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,502.00</td>
<td>15.00</td>
<td>1044.01</td>
<td>98.00</td>
</tr>
</tbody>
</table>

Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed, according to school policies, in the following order. Each course is offered at least once per academic year.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>OTA0040</td>
<td>Information Technology Assistant</td>
<td>150 hrs</td>
<td>15-1151</td>
</tr>
<tr>
<td>B</td>
<td>ACO0040</td>
<td>Accounting Clerk</td>
<td>300 hrs</td>
<td>43-3031</td>
</tr>
<tr>
<td>C</td>
<td>ACO0041</td>
<td>Accounting Associate</td>
<td>300 hrs</td>
<td>43-3031</td>
</tr>
<tr>
<td>D</td>
<td>ACO0042</td>
<td>Accounting Assistant</td>
<td>150 hrs</td>
<td>43-3031</td>
</tr>
</tbody>
</table>

Licensure Information: A license is not required to work in this field. However, as part of this program, students are required to take the Quickbooks Certified User exam.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/15-1151.00
http://www.onetonline.org/link/summary/43-3031.00
Program Description:
This program is designed to develop job competencies, which require knowledge of bookkeeping principles that are concerned with classifying, recording, and summarizing numerical data; and with making computations to compile and keep financial records. Included in this program are occupations involving the use of computers to maintain financial records such as general ledgers and to compile financial reports.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education.

This program provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills.

The content includes but is not limited to double-entry accounting principles; methods of recording business transactions; preparation and analysis of various documents and financial statements; payroll records and tax forms; accounting control systems; account and transaction analysis; inventory methods; the aging process; depreciation; and the application of accounting principles to various entities.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

ACCOUNTING OPERATIONS B070110 900 HOURS

OTA0040 – Information Technology Assistant (150 clock hours)

A1 - Business Computer Skills
This course provides the student with an outline to information systems. Computer topics covered include operating systems, networking options, Internet and HTML, online databases and emerging technologies.

A2 – Workplace Essentials
This course provides practice in mathematics, keyboarding and the 10-Key calculator skills. All three are necessary when constructing a successful path to the accounting environment.

A3 - Business Communication Skills
In this course the student will learn and then demonstrate the significance of communication in the workplace. Opportunities for the student to present and evaluate their personal strengths and weaknesses as they relate to job objectives, career plans, and personal development and life goals will be offered. Students will also communicate effective workplace and classroom health, safety and fire prevention best practices.

ACO0040 – Accounting Clerk (300 clock hours)

B1 - Accounting Environment I
In this course emphasis will be placed on the role of communication and information in accounting. Written, oral, group presentation and leadership structures and functions in accounting departments will be covered. Students will think critically about customer service and credit management as it relates to making better decisions in the workplace and their own lives.
B2 – Accounting Principles I
This course prepares the student to have a successful introduction to the accounting workforce. Students will learn accounting principles that emphasize double-entry accounting for a service business. The student will learn the basic accounting equation, use T-Accounts to analyze business transactions, and prepare financial statements. Electronic alternatives will be used for additional practice.

B3 - Microsoft® Office 2010
This class uses the Microsoft Office Suite (Work, Excel, PowerPoint, Access and Outlook) to learn word-processing; create spreadsheets; build databases; design presentations, and manage schedules and calendars. Office technology skills will be learned to increase productivity in the workplace. Students will have the opportunity to earn Microsoft Office Operations Certification (for a testing fee). We highly recommend that students strive to earn certifications prior to completing the program.

ACO0041 – Accounting Associate (300 clock hours)

C1 - Accounting Environment II
Understanding the role of professional ethics, health, and environmental safety in the accounting department is essential. In this course, students will work collaboratively to set team goals and participate in work-based projects that simulate the workplace.

C2 – Accounting Principles II
This class continues to emphasize double-entry accounting; methods and principles of accounting involved in journalizing business transactions, including accounts receivable and accounts payable; petty cash; bank reconciliation; purchases; special journals; preparing financial statements; and recording adjusting and closing entries for the accounting cycle. Students will also explore uncollectible accounts, notes payable, and notes receivable.

C3 - QuickBooks
In this class the student will explore electronic accounting software options used to enhance work productivity. Students will be trained using QuickBooks software, which is recognized and widely used in the accounting industry today. Students will have the opportunity to take the QuickBooks Certified User Exam (offered by Intuit for a testing fee). We highly recommend that students earn this certification prior to completing the program.

ACO0042 – Accounting Assistant (150 clock hours)

D1 – Employability and Entrepreneurship
This course is a platform for students to apply the accounting knowledge they have developed, as they prepare to exit the program. The student will apply accounting principles and concepts to compare and explain the importance of employability and entrepreneurship skills. Topics covered include interviewing techniques, resume’ writing, self-evaluation, and dressing for success.

D2 – Personal Finance
Students learn how to complete and maintain financial forms for personal banking (withdrawal and deposit slips) and employer/employee tax forms (W2, W4, 940, 941 and 1040). Students will apply accounting information learned to management concepts and determine the appropriate accounting strategy to make more productive financial decisions for the workplace and themselves. Topics include personal money management concepts and financial goals, the decision-making process as it applies to personal and family financial choices, and the use of consumer credit reports.
AIR CONDITIONING, REFRIGERATION AND HEATING TECHNOLOGY

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>1350 clock hours</td>
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FLDOE State Curriculum Framework:  
Link: Air-Conditioning, Refrigeration and Heating Technology (PSAV – I470203)

Program Information: The program is 1350 clock hours. The day programs take approximately 15 months to complete. The evening program takes approximately 24 months to complete. All programs are taught in English, in traditional classroom/shop settings.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
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<th>Florida Resident Tuition (1350 clock hrs)</th>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed, according to school policies, in the following order. Each course is offered at least once per academic year.

<table>
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<td>C1</td>
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<td>A/C, Ref, Heating Technician</td>
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</table>

Licensure Information: Students will take exams to receive the following certifications: OSHA, EPA, and ESCO Employment Ready Tests.

Career Information (SOC Codes):  
[http://www.onetonline.org/link/summary/49-9021.00](http://www.onetonline.org/link/summary/49-9021.00)
**Program Description:**
The Air Conditioning, Refrigeration and Heating Technology program is a combination of classroom instruction, hands-on lab work and independent study to give the basics in the installation and repair of equipment. Emphasis in the course is on the hands-on troubleshooting and repair of air conditioning, refrigeration and heating equipment. Refrigerant recovery and recycling is also stressed to comply with the CFC Refrigeration Handling requirements. R-410A (Puron) Certification is also offered as an elective.

Students should elect to take the CFC Refrigeration Handling Certification test which may be arranged though the school. The testing fee is the responsibility of the student. CFC certification is required by the EPA for employees that work with refrigerants. This test is a requirement for graduation and gives a student a competitive advantage when applying for a job.

Students should elect to take the Employment Ready test which may be arranged at the end of each OPC. The testing fee is the responsibility of the student. The Employment Ready Test show future employers proof of certifications on Air Conditioning, Electrical, Basic Charging, Heat Pumps, and Troubleshooting which gives the student a competitive advantage when applying for a job.

**Job Opportunities:** Residential appliance service and repair, residential air conditioning service and repair, ice machine service and repair, commercial air conditioning servicing and repair, gas and oil heating service and repair, and air balancing technician.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed.

**AIR CONDITIONING, REFRIGERATION & HEATING TECHNOLOGY (PS) I470203 1350 hours**

**ACR0041 – A/C, Refrigeration and Heating Helper (250 clock hours)**

**A1 - Safety and Basic Hand Tools**
This course will be dealing with the safety issues in the shop environment and the history and concepts of the heating, air conditioning and refrigeration systems. Also, basic hand tools that are used in this field are introduced. The student will be able to identify and explain the usage of tools that are common to this field. The student will understand the importance of health, safety and fire prevention.

**A2 - Electrical Theory**
In this course you will learn to identify electrical symbols and their physical components, learn to read an electrical wiring diagram, and learn to use electrical test equipment.

**A3 - Electrical Circuit Testing**
In this course you will learn how to wire up and to troubleshoot basic electrical circuits found in heating, air conditioning and refrigeration systems.

**A4 - Electrical Motors**
In this course you will learn how electrical motors work, how they are wired and then how to troubleshoot the components to repair the motor circuit.
ACR0043 – A/C, Refrigeration and Heating Mechanic Assistant (250 clock hours)

B1 - Employability Skills
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms.

B2 – Communications Skills
In this course the student will be introduced to the needs of industry to be able to effectively communicate in both written and verbal fashions. The student will also have to use various written materials to obtain information needed for the job market.

B3 - Introduction to HACR and Refrigeration Theory
This is an introduction to the Air Conditioning, Refrigeration and Heating Technology course. This course is an introduction to the theory of refrigeration and is the basis for all refrigeration and air conditioning systems.

B4 - System Components
In this course you will be introduced to the components that are used in air conditioning and refrigeration systems and be able to diagnose simple refrigeration problems.

B5 - Evaporative Condensers
In this course you will learn to test and adjust evaporative condensers as used in the air conditioning systems.

B6 - Fittings and Soldering
This course is an introduction to the selection and ordering of fittings and the soldering of fittings and tubing to obtain a leak free connection.

ACR0047 – A/C, Refrigeration and Heating Mechanic 1 (250 clock hours)

C1 - Line Sizing for Air Conditioning and Refrigeration
In this course you will learn to properly select the line size for a particular air conditioning and refrigeration system.

C2 - Entrepreneurship
The entrepreneurship course starts with an overview of the advantages and disadvantages of being your own boss and the personal characteristics needed to be successful. The importance of small business to the U. S. economy is emphasized. Specific information is given on starting and running a small business.

C3 - System Start Up and Charging
In this course you will learn how to assist the technician in the installation and start up of an air conditioning system.

C4 - Recovery and Recharge of Systems
In this course you will learn the proper way to recover the refrigerant from a system that needs to be worked on and charge the system after the repair has been completed. EPA Testing will be offered at this time.
C5 - Heating Systems
In this course you will learn how to maintain, troubleshoot, and repair heating systems.

ACR0049 – A/C, Refrigeration and Heating Mechanic 2 (250 clock hours)

C6 - Heating Air Conditioning and Refrigeration Accessories
In this course you will learn to maintain, test, and adjust commercial heating and air conditioning accessories.

C7 - System Troubleshooting
In this course you will learn to how to check the proper operation of an air conditioning and diagnose the system and a heat pump system, troubleshoot and diagnose the system

C8 – Refrigeration Repair
In this course you will learn to how to troubleshoot and repair different refrigeration systems.

C9 - Psychrometrics
In this course you will learn about the properties of air as it is used in the air conditioning industry.

ACR0044 – A/C, Refrigeration and Heating Technician (350 clock hours)

D1 - Enthalpy Chart Operation
In this course you will learn how the enthalpy chart relates to the actual operation of a refrigeration system.

D2 - Indoor Air Quality
In this course you will learn the standards of indoor air quality.

D3 - Advanced System Troubleshooting
In this course you will learn to troubleshoot and repair a heating and air conditioning system. A ride along with a field technician for two days is helpful to gain experience in real field experience.

D4 - Commercial Ice Machines
In this course you will learn the proper way to install and maintain all types of ice machines along with properly charge the system after the repair has been completed.

D5 - Heat Load Calculations
In this course you will learn to calculate the heating and cooling requirements for a load.

D6 – Air Distribution Systems
In this course you will learn to calculate duct work layout for the heating and cooling.

D7 – Alternative HVAC Systems
In this course you will learn to troubleshoot other types of heating and cooling systems.
AUTOMOTIVE SERVICES TECHNOLOGY

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<tr>
<td>1800 clock hours</td>
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FLDOE State Curriculum Framework:

Program Information: The program is 1800 clock hours (approximately 21 months). This program is taught in English, in a traditional classroom/shop setting, and is offered during the day. This program is approved by the National Automotive Technicians Education Foundation (NATEF). The on-site automotive service facility has multiple bays and is equipped with modern diagnostic and testing equipment, to provide students with the opportunity to service automobiles brought to the facility for repair.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed, according to school policies. Each course is offered once every other academic year. Courses are taught in a rotating order, not necessarily in “A” through “I” order.

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<td>300 hrs</td>
<td>49-3023</td>
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<tr>
<td>B</td>
<td>AER0110</td>
<td>Engine Repair Technician</td>
<td>150 hrs</td>
<td>49-3023</td>
</tr>
<tr>
<td>C</td>
<td>AER0257</td>
<td>Automatic Transmission/Transaxle Technician</td>
<td>150 hrs</td>
<td>49-3023</td>
</tr>
<tr>
<td>D</td>
<td>AER0274</td>
<td>Manual Drivetrain &amp; Axle Technician</td>
<td>150 hrs</td>
<td>49-3023</td>
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<tr>
<td>E</td>
<td>AER0453</td>
<td>Automobile Suspension &amp; Steering Technician</td>
<td>150 hrs</td>
<td>49-3023</td>
</tr>
<tr>
<td>F</td>
<td>AER0418</td>
<td>Automotive Brake System Technician</td>
<td>150 hrs</td>
<td>49-3023</td>
</tr>
<tr>
<td>G</td>
<td>AER0360</td>
<td>Automotive Electrical/Electronic Sys Technician</td>
<td>300 hrs</td>
<td>49-3023</td>
</tr>
<tr>
<td>H</td>
<td>AER0172</td>
<td>Automotive Heating &amp; A/C Technician</td>
<td>150 hrs</td>
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</tr>
<tr>
<td>I</td>
<td>AER0503</td>
<td>Automotive Engine Performance Technician</td>
<td>300 hrs</td>
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</table>
Licensure Information: Students will take the ASE industry certification tests while enrolled in the program. However, two years full time work experience in the field is required for the individual to be certified in a specific area. Each 2 months of school counts as 1 month toward that two years requirement.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/49-3023.00

Program Description:
The purpose of this program is to prepare students for entry-level employment in the automotive repair trade. Students learn to repair, adjust or replace parts of the automobile, restoring it to the conditions and specifications recommended by the manufacturer.

Learning experiences cover the components of the vehicle, including engine, powertrain, steering, brakes, air conditioning, accessories and electrical systems. Training includes the use of diagnostic and testing equipment, and tools used in the general repair process. Methods of instruction include theory, laboratory and classroom work as each relates to all phases of the automotive repair field. The program has been awarded NATEF certification through May 2019, after having completed the rigorous re-accreditation process and site visit in April 2014.

Classroom instruction and hands-on shop experiences in each course prepare students to take ASE certification tests at the end of each course. ASE certification can be a condition of employment, and often employers offer better starting salaries to certified applicants. Erwin Technical College will assist students in registering for ASE testing.

Job Opportunities: Technician (general) in dealership and independent repair facilities, as well as, high volume shops, fleet service, power companies and truck repair. Also specialist in certain areas, service writer, service manager, and shop owner.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**AUTOMOTIVE SERVICE TECHNOLOGY** I470608
1800 HOURS

**AER0014 – Automobile Services Assistor (300 clock hours)**

A1 to A6 – Safety/Services I to VI
This 300-hour course is divided into six 50-hour segments (classes A1 – A6) taught in conjunction with OCPs B, C, D, E, F, and H. A grade for each 50-hour segment will be given upon completion of the program.

The orientation curriculum covers shop safety, the use of shop equipment, tool room policy, the use and safety of chemicals, how to work with hand tools as well as precision measuring instruments, fasteners, instruments, fasteners, fire prevention, and first aid concepts.

Of special importance during this initial period is the concept of working in a team environment. All shop equipment and the Alldata information system, will be taught through pyramid learning in which one group of students teaches another group necessary skills. In this manner, group problem solving is learned and utilized throughout the program and will be eminently transferable into the professional environment.
Prior to graduation, students will complete an Employability unit, in the preparation for job placement. This unit of instruction will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist in finding the right job for each person. Interviewing skills are taught. Students will produce a resume and cover letter in “letter perfect” format.

**AER0110 – Engine Repair Technician (150 clock hours)**

**B1 - Engine Theory & Repairs**
Students will learn basic theory and repair of gasoline engines. The removal and installation procedures will be taught.

The student will learn how to test for all types of mechanical problems such as whether or not to overhaul an engine, overheating problems, oil consumption problems, leaks, noise identification, and problems in the oiling system. Students will perform maintenance such as valve or rocker adjustment and oil and oil filter changes.

Students learn engine assembly through knowledge gained in the lectures along with practical experience in the shop. In this course, the student will learn all machinery procedures on heads and measurements of all tolerances of parts. Students will learn about valve jobs (regrinding valves; setting up springs, push rods, and lifter assemblies). Instruction will be given on the procedure for crack inspection and pressure testing. Students will learn to identify all components of cylinder head assembly.

**AER0257 – Automatic Transmission and Transaxle Technician (150 clock hours)**

**C1 – Automatic Transmission & Transaxle Technician**
Students will perform in-car transmission services for preventative maintenance, diagnosis of malfunctions, and repair. They will perform the procedures associated with unit replacement. Emphasis will be placed on technique and proper diagnostic procedures.

During the automatic transmission course, the student will learn hydraulic theory and how fluid pressure is used to operate an automatic transmission. The students will learn components and their function in an automatic transmission, the purpose of the valve body in shifting the automatic transmission, proper pressure testing procedures, and how to diagnose automatic transmission failure.

This course is lecture based and enhances all of the skills learned in a cumulative fashion in the other courses taught in this Term, namely, automatic transmission service and safety. Lectures are given on a daily basis with written tests being given every week. A final exam is given at the end of the courses. Students learn automatic transmissions through knowledge gained in the lectures along with practical experience in the shop.

**AER0274 – Manual Drivetrain and Axle Technician (150 clock hours)**

**D1 - Manual Drivetrain and Axle**
This is a lecture-based course in which students are taught theory and functions of manual transmissions. The students will learn about different gear types and power flows through manual transmissions. This will include front wheel as well as rear wheel drive transmissions. Instruction will be given on the inspection and diagnosis of worn parts, disassembly and assembly techniques, lubrication fundamentals, troubleshooting of noises, gear failures, and shifting problems.
Instruction is given on clutch assembly, theory, parts diagnosis, and function. The students will learn how the clutch disc and pressure plate transfer power from the engine to the transmission. Also, students learn front wheel drive, rear wheel drive, and drive line theory. Instruction is presented on the balance of drive shafts, the purpose of universal joints, the diagnosis of drive line vibrations, the removal and repair of universal joints, and constant velocity joints. Students learn how the drive line of a front wheel vehicle transfers torque during a turn using constant velocity joints. Students learn differential assembly components and their function in the diagnosis and repair of differential failures as well as the proper procedures to disassemble and reassemble differential assemblies.

The students will replace clutches, disassemble and examine manual transmissions and differentials, remove and replace universal joints, remove and replace constant velocity joints on front wheel drive vehicles. Students will be exposed to the diagnosis of various drive line noises.

AER0453 – Automobile Suspension and Steering Technician (150 clock hours)

E1 - Steering & Suspension
The student will learn to diagnose and interpret tire wear patterns and determine whether wheel balancing, tire rotation, or wheel alignment is needed for proper service. The student will learn to properly diagnose Tire pull (lead) and demonstrate proper tire rotation procedures and will perform static and dynamic balancing on computerized wheel balancing equipment. The front steering and suspension components will be explained. The geometry of suspension systems will be learned. Proper alignment techniques for both front and rear alignments will be demonstrated. Concepts of total four wheel and thrust angle alignments will be emphasized. Computerized ride control systems will be explained as well as air ride suspension systems used on today's vehicles.

Students learn front and rear suspension through knowledge gained in the lectures along with practical experience in the shop. In a live shop atmosphere; students will inspect front and rear suspension components for wear. Wherever wear is noted, proper repair procedures will be utilized to correct the situation. Reciprocating ball and rack and pinion style steering gears will be inspected, diagnosed, repaired/replace. Steering system components on both front wheel and rear wheel drive vehicles will be inspected and serviced.

Computerized four-wheel alignment equipment will be used to properly adjust alignment angles for the maximum tire service and the best handling. The concepts of thrust line, geometric center line, camber, caster, toe, set back, and steering axis inclination will be used in alignment service.

Each student will perform both thrust angle and four-wheel alignments. Throughout this course, proper safety procedures will be emphasized and high tech equipment will be used.

AER0418 – Automobile Brake System Technician (150 clock hours)

F1 - Brake System
During this course, drum and disc brake functions and components will be explained. Proper service procedures of the drum and disc brake systems will be demonstrated. The power assist systems (hydraulic and vacuum) will be explained. The proper use of brake servicing equipment is demonstrated so that the student may competently service brake systems. The laws of friction and force will be presented.
Drum brake procedures will include: replacement of wheel cylinders, techniques to remove and replace brake linkages, adjusters, springs and shoes. Measurement and resurfacing of brake drums using the appropriate equipment, and the use of proper brake bleeding and adjusting procedures.

Disc brake services will include: inspection of disc brake calipers, disc pad replacement, measurement and resurfacing of disc brake rotors, and the use of appropriate equipment for measuring thickness, parallelism, and run-out.

The students will also learn how brake hydraulic fluid is used to transfer energy within the brake system. The process of converting standard measurements to metric and vise-versa will be covered.

The students will also learn troubleshooting and repair of brake systems. Fundamental operation, diagnosis, and service of anti-lock brake systems will be taught. The role of electronic devices and the relationship computer controls have on braking systems will be explored.

**AER0360 – Automobile Electrical/Electronic System Technician (300 clock hours)**

**G1 - Electrical System**
In this course the students will learn about automotive electrical and electronic circuits, the tools (test light, DVOM, logic probe) necessary to measure and test for electricity, and troubleshooting techniques for electrical problems through the use of a computer interactive medium. The student will learn the basics of voltage, current, and resistance, read wiring diagrams, and electrical system diagnosis and service. Emphasis will be placed on diagnostic procedures and safety.

Lectures are given on a daily basis with written tests being given every week, and a final exam is given. Students learn electrical system service through knowledge gained in the lectures along with practical experience in the shop and in the computer laboratory as needed.

The student will use voltage, current, and resistance, reading wiring diagrams, and performing electrical system diagnosis and servicing on gauges and warning systems, supplemental restraints (air bags) and cruise control systems etc. Emphasis will be placed on diagnostic procedures and safety.

**AER0172 – Automobile Heating and Air Conditioning Technician (150 clock hours)**

**H1 - Heating & Air Conditioning**
During the study of air conditioning systems, the system components and the physics involved in the way an air conditioning system works are thoroughly outlined and evaluated. The student will explore the differences between R-12 and R-134A systems. Recovery and recycling of refrigerants will be explained, and proper service techniques and safety procedures will be learned along with air conditioning service, system operation, diagnosis, and safety. The computer lab may also be in use to allow students to become certified in the handling and recovery for section 609 from the ASE online training.

In a live shop atmosphere, the student will use air conditioning gauges, air conditioning charging stations, recovery and recycling stations, and leak detecting equipment to diagnose and repair air conditioning problems on import and domestic vehicles. Using proper test procedures and equipment, computer controlled air conditioning systems can be diagnosed for failures and needed repairs. Emphasis will be placed on diagnostic procedures and safety.
I1 - Engine Performance
In this course, the student will learn about the way primary ignition systems (trigger systems) work. Information is presented about secondary systems and how voltage is amplified from the primary to the secondary system. Students will learn how spark plugs work, their heat ranges, and wear patterns. Ignition timing and how it is advanced and retarded will be presented. Students will learn the various types of ignition systems - point style, electronic, and distributorless - and how the primary trigger system differs among those. The course in engine performance theory explains the use of computers to control engine performance functions, for example ignition systems, fuel delivery systems, and air management. The result of such computer control is lowest possible exhaust emissions and highest engine performance.

The students will learn that on board computer control system uses input sensors to give the computer information about engine operating conditions. Also, the computer uses output actuators to control various engine performance functions, for example, idle speed, ignition timing, and fuel delivery. This course will deal with how the input and output system works and how the computer processes the information to perform its engine control functions.

In a shop setting students will learn to diagnose and repair electronic controls, ignition systems, fuel systems, fuel injection systems, perform engine tune-ups, operate engine analyzers, and related safety practices. Students learn to diagnose and repair engine performance problems by combining knowledge gained in the lectures along with practical experience solving engine performance problems. Lectures are given on a daily basis, written tests being given every week. Students may also use the computer laboratory to enhance the lectures and the hands-on work in the shop. Emphasis will be placed on diagnostic procedures and safety.
BARBERING

<table>
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<tbody>
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FLDOE State Curriculum Framework:

Link: • Barbering (I120402)

Program Information: The program is 1200 clock hours. This program is taught in English, in a traditional classroom/shop setting. This program is taught evenings only, Mondays through Thursdays, and takes approximately 19 months to complete. The shop area is a full-service salon, open for customers several evenings per week.

(Individuals who hold a current Cosmetology license may join this class during the final 300 hours of the program to gain the knowledge and develop the skills needed to sit for the Barbering licensing exam. See additional information at the end of this program description, labeled as “Barbering II”.)

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

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</tr>
</tbody>
</table>

Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in order, according to school policies. Each course is offered at least once every 19 months.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>COS0150</td>
<td>Restricted Barber 1</td>
<td>333 hrs</td>
<td>39-5011</td>
</tr>
<tr>
<td>A2</td>
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<td>333 hrs</td>
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<tr>
<td>A3</td>
<td>COS0152</td>
<td>Restricted Barber 3</td>
<td>334 hrs</td>
<td>39-5011</td>
</tr>
<tr>
<td>B</td>
<td>COS0671</td>
<td>Barber</td>
<td>200 hrs</td>
<td>39-5011</td>
</tr>
</tbody>
</table>

Licensure Information: Graduates are eligible to take the State of Florida Barber licensing exam upon successful completion of this program.
Career Information (SOC Codes):  
http://www.onetonline.org/link/summary/39-5011.00

Additional Information: Barbering II (300 hours, 6 months, evenings) is offered approximately once each year. Students must have a valid State of Florida Cosmetology license to enroll. Contact Student Services for more details.

Program Description:  
The purpose of this program is to develop the manipulative skills and the technical knowledge necessary to pass the examination given by the State Board of Barbering and to perform the functions of the trade. Course requirements are designed to meet the standards of conditions that are as near as possible to actual work in the Barbershop.

Job Opportunities: Color technician, Barbering Technician, platform artist, salon artist, company or product representative, Barbershop owner or manager, wig fitter, and skin care technician

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**BARBERING** I120402 1200 HOURS

**COS0150 – Restricted Barber 1 of 3 (333 clock hours)**

A1 - Salon Operations  
This course includes the topics of health, safety, fire prevention, etc., in the Barbering field. This course is an introduction to the barbering occupation and covers fundamentals of salon operations. Salon Operations includes orientation to school, introduction to barbering, history of barbering

A2 - Barbering I  
This course is an introduction to the Barbering occupation and covers fundamentals of study Skills, History of Barbering, and Professional Image.

A3 - Barbering II  
Barbering II includes the topics of health, safety, fire prevention, etc., in the Barbering field. This course provides an introduction to Bacteriology and Infection Control. This course also covers the Implement, Tools and Equipment in the barbering field.

A4 - Hair Care I  
Hair Care I is designed to provide instruction pertaining to properties of the hair and scalp, disorders and diseases. Hair Care I also consists of scalp treatments, disorders, diseases of the scalp and hair. The shampoo procedure, shampoos, conditioners, tonics, draping procedures and scalp massage are also covered in this section.

A5 - Hair Care Lab I  
Hair Care Lab I consists of hands-on practical salon experience on mannequins, other students, or customer clientele. The focus of the course will be application of shampoos, conditioners, rinses and tonics. This lab also consists of scalp massage techniques and treatments.

A6 - Hair Care II  
Hair Care II is designed to provide instruction pertaining to basic wet styling techniques, blow drying techniques and thermal curling the hair. Hair Care II consists of hair pressing curly hair.
A7 - Hair Care Lab II
Hair Care Lab II consists of hands-on practical salon experience on mannequins, other students, or customer clientele. During Period II, the focus of the course will be application of basic hair care techniques. (Hair wrapping, blow drying and use of a curling iron, thermal pressing the hair, roller setting, wettest).

A8 - Barbering III
Barbering III consist of the anatomy and physiology pertaining to the Barbering profession. Barbering III includes structure and reproduction of cells, the structure of the skull, and the important muscles of the head, face, and neck that relate to the Barbering profession.

A9 - Hair Care III-A
This course consists of permanent waving, sectioning, wrapping techniques, and application of the chemicals. This course also consists of Chemical hair relaxing and Reformation Curls.

COS0151 – Restricted Barber 2 of 3 (333 clock hours)

A10 - Hair Care III-B
This course consists of permanent waving, sectioning, wrapping techniques, and application of the chemicals. This course also consists of Chemical hair relaxing and Reformation Curls.

A11- Hair Care Lab III
This course consists of permanent waving, sectioning, wrapping techniques, and application of waving lotion and neutralizer. This course also consists of Chemical hair relaxing and Reformation Curls.

A12- Hair Care IV
This course consists of theory and instruction pertaining to basic woman’s haircutting, and texturing techniques.

A13- Hair Care Lab IV
Hair Care Lab IV consists of hands on practical salon experience on mannequins, students or clients. The practical grade consists of performing the four basic woman’s haircuts, and texturizing the hair.

A14 - Employability Communication Skills
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms.

A15 - Hair Care V
This course consists of theory and instruction pertaining to basic men’s haircutting, principles of hair design, describe fundamental terms in haircutting, and name the sections of the head as it pertains to haircutting. This course also consists of shaving and facial hair design.

COS0151 – Restricted Barber 3 of 3 (334 clock hours)

A16 - Hair Care Lab V
This course consists of theory and instruction, pertaining to basic men’s haircutting, principles of hair design, describe fundamental terms in haircutting, and name the sections of the head as it pertains to haircutting. This course also consists of shaving and facial hair design.
A17 - Florida Law/Barbering
Barbers in the State of Florida must be licensed under state law in order to practice. This course covers the regulations, which govern this career field. Florida law introduces Florida Statute Laws, Rules and Regulations as set by the Florida State Board of Barbering.

A19 - HIV-AIDS 101
This course covers HIV/AIDS education.

A19 - Specialized Services I
This course is designed to provide the theory and instruction on Men’s facial massage and treatments.

A20 - Specialized Services Lab I
Special Services Lab I will offer hands on in the application of basic facial techniques.

A21 - Specialized Services II
Specialized Services II consists of identifying types of hair used in wigs, measuring, fitting, cutting, and cleaning a men's hairpiece. It also consists of alternative replacement techniques.

A22 - Specialized Services Lab II
Specialized Services Lab II consists of measuring, fitting, cutting and cleaning men’s hairpieces.

A23 - Hair Care VI
This course consists of hands of practical salon experience on a mannequin, students or customers. During Hair Care Lab II focus will be on the application of temporary color, semi-permanent color, permanent color, bleach application, creative lightening, and toning.

A24 - Hair Care Lab VI-A
This course consists of hands of practical salon experience on a mannequin, students or customers. During Hair Care Lab II focus will be on the application of temporary color, semi-permanent color, permanent color, bleach application, creative lightening, and toning.

COS0671 – Barber (200 clock hours)

B1 - Hair Care Lab VI-B
This course consists of hands of practical salon experience on a mannequin, students or customers. During Hair Care Lab II focus will be on the application of temporary color, semi-permanent color, permanent color, bleach application, creative lightening, and toning.

B2 - Barbering Management
This course is an introduction to barbershop management, planning and operating a salon, entrepreneurship, employability skills, creating a resume, interviewing skills, and building a clientele.

B3 - State Board Prep
Students prepare for and must pass final tests covering all competencies in barber theory, practice, and laws and rules of the Board of Barbering to prepare them for the Florida State Board Examination for Licensing.

B4 - State Board Prep Lab
Students prepare for and must pass final tests covering all competencies in barber theory, practice, and laws and rules of the Board of Barbering to prepare them for the Florida State Board Examination for Licensing.
BARBERING II

Program Information: Individuals who hold a current Cosmetology license may join the regular Barbering program for the final 300 clock hours of the program to gain the knowledge and develop the skills needed to sit for the Barbering licensing exam. This program is taught in English, in a traditional classroom/shop setting. This portion of the program is taught evenings only, Mondays through Thursdays, and takes approximately 4 – 5 months to complete the 300 clock hours. The shop area is a full-service salon, open for customers several evenings per week.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (300 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
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</table>

Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in order, according to school policies. Each course is offered at least once every 19 months.

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<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
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</thead>
<tbody>
<tr>
<td>A1</td>
<td>COS0150</td>
<td>Restricted Barber 1</td>
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<td>39-5011</td>
</tr>
<tr>
<td>A2</td>
<td>COS0151</td>
<td>Restricted Barber 2</td>
<td>30 hrs</td>
<td>39-5011</td>
</tr>
<tr>
<td>A3</td>
<td>COS0152</td>
<td>Restricted Barber 3</td>
<td>80 hrs</td>
<td>39-5011</td>
</tr>
<tr>
<td>B</td>
<td>COS0671</td>
<td>Barber</td>
<td>100 hrs</td>
<td>39-5011</td>
</tr>
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</table>

Licensure Information: Graduates are eligible to take the State of Florida Barber licensing exam upon successful completion of this program.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/39-5011.00

The purpose of this program is to develop the manipulative skills and the technical knowledge necessary to pass the examination given by the State Board of Barbering and to perform the functions of the trade. Course requirements are designed to meet the standards of conditions that are as near as possible to actual work in the Barbershop.

Job Opportunities: Color technician, Barbering Technician, platform artist, salon artist, company or product representative, Barbershop owner or manager, wig fitter, and skin care technician

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:
BARBERING II I120402 300 HOURS

COS0150 – Restricted Barber 1 of 3 (90 clock hours)
A1 - Barbering I
This course is an introduction to the Barbering occupation and covers fundamentals of study Skills, History of Barbering, and Professional Image.

A2 - Barbering II
Barbering II Includes the introduction to Bacteriology and Infection Control. This course also covers the Implements, Tools and Equipment used in the barbering field.

A3 - Barbering III
Barbering III consist of the anatomy and physiology pertaining to the Barbering profession. Barbering III includes structure and reproduction of cells, the structure of the skull, and the important muscles of the head, face, and neck that relate to the Barbering profession.

COS0151 – Restricted Barber 2 of 3 (30 clock hours)
A4 - Hair Care V
This course consists of theory and instruction pertaining to basic men’s haircutting, principles of hair design, describe fundamental terms in haircutting, and name the sections of the head as it pertains to haircutting. This course also consists of shaving and facial hair design.

COS0151 – Restricted Barber 3 of 3 (80 clock hours)
A5 - Hair Care Lab V
This course consists of theory and instruction, pertaining to basic men’s haircutting, principles of hair design, describe fundamental terms in haircutting, and name the sections of the head as it pertains to haircutting. This course also consists of shaving and facial hair design.

A6 - Specialized Services
This course is designed to provide the theory and instruction on Men’s facial massage and treatments, including hands-on application of basic facial techniques. This course also includes identifying the types of hair used in men’s hairpieces, as well as measuring, fitting, cutting and cleaning men’s hairpieces. Alternative replacement techniques are discussed.

A7 - Florida Law/Barbering
Barbers in the State of Florida must be licensed under state law in order to practice. This course covers the regulations, which govern this career field. Florida law introduces Florida Statute Laws, Rules and Regulations as set by the Florida State Board of Barbering.

A8 - HIV-AIDS 101
This course covers HIV/AIDS education.

COS0671 – Barber (100 clock hours)
B1 - Barbering Management
This course is an introduction to barbershop management, planning and operating a salon, entrepreneurship, employability skills, creating a resume, interviewing skills, and building a clientele.

B2 - State Board Prep
Students prepare for and must pass final tests covering all competencies in barber theory, practice, and laws and rules of the Board of Barbering to prepare them for the Florida State Board Examination for Licensing.
BUILDING CONSTRUCTION TECHNOLOGIES

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>1050 clock hours</td>
<td>I460401</td>
<td>0646041502</td>
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FLDOE State Curriculum Framework:

- Link: • Building Construction Technologies (I460401)

Program Information: The program is 1050 clock hours (approximately 12 months). This program is taught in English, in a traditional classroom/shop setting, and is offered during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1050 clock hrs)</th>
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<th>Estimated Tools/Books/Supplies</th>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in order, according to school policies. Each course is offered at least once each year.

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<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>BCV0400</td>
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<tr>
<td>B1</td>
<td>BCV0401</td>
<td>Building Construction Technician 1</td>
<td>300 hrs</td>
<td>49-9071</td>
</tr>
<tr>
<td>B2</td>
<td>BCV0402</td>
<td>Building Construction Technician 2</td>
<td>300 hrs</td>
<td>49-9071</td>
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</tbody>
</table>

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/49-9071.00
Program Description:
The purpose of the Building Maintenance program is to prepare students for employment. The program will provide students training in carpentry, interior repairs, plumbing, electricity, air conditioning, painting, and masonry. The program outcome will enable students to work proficiently and safely in the building industry.

The Construction labor market information indicates this field is expected to expand greatly over the next ten years.

Job Opportunities: maintenance positions for residential housing, apartment maintenance positions, commercial and governmental office buildings, and governmental maintenance departments.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed.

BUILDING CONSTRUCTION TECHNOLOGIES    I460401  1050 HOURS

BCVO400 – Building Construction Helper (450 clock hours)

A1 – Orientation & Shop Safety
This course will provide an introduction to Erwin policies and procedures; as well as an introduction to health, safety, and fire and accident prevention.

A2 - Construction Math
This course is a basic math class for students needing a review in fractions, decimals, percentages, and problem solving. A pretest is administered to determine need for this course.

A3 – Carpentry Tools & Materials
Students will learn the properties and characteristics of woods, plastics, metals and other materials used in the construction industry, and the tools and fasteners appropriate to appointed tasks.

A4 - Employability & Entrepreneurship Skills
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms. Students will also learn about entrepreneurship, including personal characteristics needed to be successful and information about starting and running a small business.

A5 - Fundamentals of Electricity
This is a theory-based class, lecture format, which covers both D/C and A/C principles, meter usage, NEC regulations, and commercial installation.

A6 - Electrical Systems Maintenance
This course covers basic wiring skills needed for residential and commercial installations. Emphasis is placed on the students' practical application.
**BCV0401 – Building Construction Technician 1 (300 clock hours)**

**B1 - Air Conditioning I**
The student will learn physical properties of refrigerants and the refrigeration cycle, the tools necessary to properly troubleshoot and diagnose refrigeration and air conditioning problems and the ability to perform a scheduled maintenance program. The student will also have the skills to pass the CFC Certification required by EPA.

**B2 - Air Conditioning II**
In an effort to protect the Ozone Layer, Laws have been put in place that govern the safe handling and transporting of REF- Regulations as well as the certification of field technicians. The student will have the skills and be required to pass the EPA CFC certification.

**B3 - Plumbing**
Introduction to basic plumbing repairs.

**BCV0401 – Building Construction Technician 2 (300 clock hours)**

**B4 - Blueprints and Codes**
In this course students learn the interpretation of Construction Blueprints and Building Codes.

**B5 - Carpentry**
Introduction to and use of: common tools, materials, and fasteners used in constructing and maintaining a dwelling. Orientation to structural components of a building, as well as, application of finish materials of a dwelling.

**B6 – Masonry & Concrete**
Orientation to materials and tools necessary to the repair and maintenance of masonry components including brick, block, stone, concrete, and stucco.

**B7 - Painting**
Introduction to preparation and applying finishes for cosmetic and preventive maintenance purposes.

**B8 - Heavy Construction Equipment & Materials**
Students will learn to identify types of heavy construction and related materials and equipment.
CARPENTRY

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>1200 clock hours</td>
<td>I460202</td>
<td>0646020105</td>
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FLDOE State Curriculum Framework:
http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/2015-16-frameworks/architecture-construction.stml
   Link: • Carpentry (I460202)

Program Information: The program is 1200 clock hours (approximately 12 months). This program is taught in English, in a traditional classroom/shop setting, and is offered during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1200 clock hrs)</th>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in order, according to school policies. Each course is offered at least once each year.

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<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
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<th>SOC Code</th>
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<td>BCV0107</td>
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<td>B</td>
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<td>Trim and Finish Carpenter</td>
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<td>BCV0122</td>
<td>Carpenter, Rough</td>
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<tr>
<td>D</td>
<td>BCV0128</td>
<td>Carpenter</td>
<td>150 hrs</td>
<td>47-2031</td>
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Career Information (SOC Codes):
http://www.onetonline.org/link/summary/47-3012.00
http://www.onetonline.org/link/summary/47-2031.00
Program Description:
Carpentry prepares students to apply a full range of carpentry skills including blueprint reading, estimating, knowledge of building codes, framing and trim techniques and more.

Job Opportunities: Concrete form carpenter, framing carpenter, trim carpenter, roof shingle, cabinetmaking and installation, metal studs and drywall application, window installer, surveyor's helper, fence installation, acoustical ceiling installation, aluminum/screened enclosures, insulator, superintendent, contractor, and estimator.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
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<td>Carpentry I</td>
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<td>1200</td>
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<td>BCV0107</td>
<td>Carpenter Helper (300 clock hours)</td>
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<td>BCV0111</td>
<td>Trim and Finish Carpenter (300 clock hours)</td>
<td>111</td>
<td>300</td>
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BCV010202 – Carpentry

A1 - Orientation and Shop Safety
This course will provide an introduction to the Carpentry program and Erwin's policies and procedures. Fundamentals of general safety (including health, safety, and fire and accident prevention) as well as general shop and individual tool safety will be covered.

A2 - Construction Math
Students learn problem solving using formulas to determine information in construction-related activities.

A3 - Carpentry Tools & Materials
The study of forestry and their products; the actual process used in the manufacturing of lumber, also, the use of hand and power tools used in the Industry.

A4 – Blueprints & Codes
The student will acquire the basic fundamentals of reading blueprints and their use in the industry.

A5 - Employability & Entrepreneurship Skills
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms. Students will also learn about entrepreneurship, including personal characteristics needed to be successful and information about starting and running a small business.

BCV0111 – Trim and Finish Carpenter

B1 - Interior Trim
Interior finish is a term used to describe the process of completing the interior of a building. It collectively refers to installing the finished floor, finished ceiling, and moldings. Moldings are strips used to cover the seams or joints between different building materials, such as drywall and window jambs. In this course you will study the components and techniques of finishing the interior of a building.

B2 - Cabinets
Cabinets and countertops complete the interior finish with usable workspace and storage. Countertops, cabinet doors, and drawers may be customized in a wide variety of styles and sizes. However, most cabinets are pre-manufactured and sent to the job site, you may from time to time have to build them on site. So, your workmanship is the grade stamp carpenters leave behind on their work.
B3 - Exterior Trim
The installation of: windows, doors, siding and decks.

B4 - Stairs
May kinds of stair finish parts are manufactured in a wide variety of wood species, such as oak, beech, cherry, poplar, pine, and hemlock. It is important to identify each of the staircase parts, know their location, and understand their function. It is helpful to know that all stairs are laid out using the same theory. This theory is also similar to that used for rafter layout. Stairs reveal the personality and dedication of the carpenters who labor over them.

BCV0122 – Carpenter Rough (450 clock hours)

C1 - Leveling Instruments and Forming
The first step in construction for the carpenter is locating where the building will be on the lot. Lines are laid out to show the location and elevation of the building foundation. Accuracy in layout allows for smooth transitions from one phase of construction to another, saving time, effort, and money. The best way to do this is using the leveling instruments to set batter boards and forming for the foundation and slab.

C2 - Floor Framing
The floor frame is the first section installed after the foundation is completed. The floor system has many components, which include sills, girders, joists, bridging, and adding strength to the building. In order to assemble a floor and a floor frame, a carpenter must be able to identify all the components accurately, locate their positions, and cut each member to fit.

C3 - Wall Framing
During the wall-framing phase of construction, the building begins to take shape. Walls and partitions are laid out to locate positions and openings that occur in them. Exterior walls are constructed to the correct height, braced plumb, and straightened. Window and door rough openings are framed to specified sizes. Interior rough framing is performed with the installation of partitions, backing, blocking, and ceiling joist.

C4 - Rigging and Scaffolding
Safe operations of installing scaffolding, and the proper use of rigging materials.

C5 - Roof Framing
The straight-forward math and geometry in roof framing is helpful in making accurate measurements and cuts. Once roof framing members are identified and understood, roofs can be constructed with great precision and speed.

C6 - Finish Roofing
Roofing is a general term to describe materials used to cover a roof making it weather tight. A wide variety of types and styles of roofing materials (flashings, asphalt shingles, roll roofing) are often installed by carpenters who specialize in roofing. In this course, you will study and practice completing a roof.

BCV0128 – Carpenter (150 clock hours)

D1 - Structural Timber Directed Study
Study of methods and materials of timber construction

D2 - Pre-Cast Walls Directed Study
Identification, fabrication and the use of Cast -in-Place walls.
COMMERCIAL FOODS AND CULINARY ARTS

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>1200 clock hours</td>
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FLDOE State Curriculum Framework:

Link: • Commercial Foods and Culinary Arts (PSAV – N100500)

Program Information: The program is 1200 clock hours (approximately 12 months). This program is taught in English, in a traditional classroom/kitchen setting, and is offered during the day. Students are taught to prepare and serve food in pavilion (cafeteria) and café (seated dining, serving plated entrees) settings

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1200 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in order, according to school policies. Each course is offered at least once each year.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
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<tr>
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<td>35-2021</td>
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<td>B</td>
<td>HMV0170</td>
<td>Cook – Restaurant</td>
<td>300 hrs</td>
<td>35-2014</td>
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<td>C</td>
<td>HMV0171</td>
<td>Chef/Head Cook</td>
<td>300 hrs</td>
<td>35-1011</td>
</tr>
<tr>
<td>D</td>
<td>HMV0126</td>
<td>Food Service Management</td>
<td>300 hrs</td>
<td>11-9051</td>
</tr>
</tbody>
</table>

Licensure Information: Students will take Food Handler’s certification exam.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/35-2021.00
http://www.onetonline.org/link/summary/35-2014.00
http://www.onetonline.org/link/summary/35-1011.00
http://www.onetonline.org/link/summary/11-9051.00
Program Description:
Training in Commercial Foods and Culinary Arts covers the broad field of institutional food preparation emphasizing the five major areas: short order cooking, baking, salads and sandwiches, dinner cooking and management training. A commercially styled kitchen, bakery and cafeteria are provided with commercial equipment for students' practice and use.

Job Opportunities: Hotels, restaurants, cafeterias and catering.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

COMMERCIAL FOODS & CULINARY ARTS    N100500    1200 HOURS

HMV0100 – Food Preparation (300 clock hours)

A1 - Orientation to Culinary Arts
This course begins with an introduction to Erwin Technical College and program policies in the field of Commercial Foods and Culinary Arts. Students will learn the principles and applications of customer relations for dining room, table, and line services. Included are storage and maintenance of equipment of special needs, customer service, supervision of serving staff, appearance of dining room, taking reservations, serving and replenishing food items, consumer math applications, and record keeping principles.

A2 - Technical Math
This course is a basic math class for students needing a review in fractions, decimals, percentages, and problem solving. A pretest is administered to determine need for this course.

A3 - Employability Skills
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms.

A4 Culinary Skills I
Review application of basic math applications, recipes, conversion of weights and measures, terminology and work station assignments.

A5 Culinary Skills II
Students will learn about health safety and fire prevention, along with food borne illnesses and diseases in relation to the Hospitality Industry.

A6 - Equipment
Course covers handling, operation, and maintenance of kitchen equipment, as well as selection and use of basic hand tools.

HMV0170 – Cook, Restaurant (300 clock hours)

B1 – Nutrition and Food Science
Overview of Nutrition, and the understanding of Vitamins, Calories, Fats, Proteins, Minerals and the essential part they have to create well balanced, healthy foods.
B2 – Housekeeping
Overview and application of principles and industry standards of sanitation, safety, and food storage.

B3 – Beverages and Sandwiches
The study and application of food preparation principles of beverages and sandwiches to include storage, reconstituting powdered beverages, sandwich fillings, extracting juice from fruits and vegetables, preparation of hot and cold sandwiches.

B4 - Pantry Skills
The study and application of food preparation principles of salads to include preparation of greens for salads, garnishes; sliced meats for cold buffets; vegetable salads, meat salads, seafood or fish salads; setup and serve buffets; seafood cocktails; preparation of salad dressings and cold sauces, cheese boards, canapes and cold hors d'oeuvres, hot hors d'oeuvres, jellies and aspics, fondue, mousses.

B5 - Yeast Products
Study and application of baking principles related to preparation, production, and storage of yeast products and quick breads.

B6 - Desserts
Study and application of baking principles related to preparation, production, and storage of dough, fillings, cakes, icings, pies, and cookies.

HMV0171 – Chef/Head Cook (300 clock hours)

C1 - Baking Specialties
The study and application of baking principles related to preparation, production, and storage of specialty desserts.

C2 - Dairy/Eggs, and Starches
Identification and selection of cheeses, mild, creams and butter; cereals; cooking pancakes, griddle cakes or waffles; storage and handling of fresh, frozen, and cooked dairy products; preparing scrambled, poached, egg batters, omelets; whipped cream, cooking pastas, cream and cheese dressings, spreads and fillings, custards and cream fillings, cooking crepes, dumplings and soufflés.

C3 - Fruits/Vegetables
The study and application of food preparation principles of fruits/vegetables to include selection and storage; puree, simmer, stew or cream, broil, baking, braising, marinating; preparing processed fruits/vegetables; deep frying and sautéing.

C4 – Stocks/Soups/Sauces
The study and application of food preparation principles of stock/soups/sauces to include white stocks, brown stocks, fish stocks, cream soups, chowders tomato sauce and derivatives, soup and sauce garnishes, cold soups, mustard and curry sauces, clear soup stocks, bisque and specialty soups, hollandaise and mayonnaise.

C5 - Poultry Preparation
The study and application of food preparation principles of poultry to include identifying and selecting, cooking methods and techniques, presentation methods, handling and storage, and portion control.
C6 - Meat Preparation
The study and application of food preparation principles of meat to include identifying and selecting, cooking methods and techniques, presentation methods, handling and storage, and portion control.

C7 - Seafood Preparation
The study and application of food preparation principles of seafood to include identifying and selecting, cooking methods and techniques, presentation methods, handling and storage, and portion control.

HMV0126 – Food Service Management (300 clock hours)

D1 – D2 – Management I, II
Principles of purchasing, storage and inventory in food service. Calculation and scheduling of man hours for employees, handling customer complaints, determining food and beverage requirements, purchasing food and beverages, ordering supplies and equipment and billing customers.

D3 - Menu Planning
Prepare production sheet to include specialty, limited, standard and extensive menu types. Apply principles from course in management
COMPUTER SYSTEMS AND INFORMATION TECHNOLOGY

<table>
<thead>
<tr>
<th>Program Length</th>
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<th>CIP Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>900 clock hours</td>
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</table>

FLDOE State Curriculum Framework:

Program Information: The program is 900 clock hours. This program is taught in English, in a traditional classroom/shop setting, and is offered during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and software required for this program are available in the program classroom and/or computer labs on campus. Students are required to have a Windows or Macintosh computer (not more than 7 years old) with Broadband Internet connectivity at home.

Course Sequence: Courses must be successfully completed in order, according to school policies. Each course is offered at least once each year.

<table>
<thead>
<tr>
<th>OCP</th>
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<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
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<tbody>
<tr>
<td>A</td>
<td>CTS0082</td>
<td>Computer Systems Technician</td>
<td>300 hours</td>
<td>15-1152</td>
</tr>
<tr>
<td>B</td>
<td>CTS0083</td>
<td>Computer Network Technician</td>
<td>150 hours</td>
<td>15-1142</td>
</tr>
<tr>
<td>C</td>
<td>CTS0084</td>
<td>Computer Networking Specialist</td>
<td>150 hours</td>
<td>15-1142</td>
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<tr>
<td>D</td>
<td>CTS0069</td>
<td>Computer Security Technician</td>
<td>300 hours</td>
<td>15-1142</td>
</tr>
</tbody>
</table>

Licensure Information: Students will take coursework to prepare them to take the following exams: A+ Essentials, A+ IT Technician. In addition, the following exams are also available: Windows 7 or 8, Network Plus, CISCO 100-101-ICND1 Exam (part I of CCNA), and CISCO 200-101-ICND2 Exam (part II of CCNA).

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/15-1152.00
http://www.onetonline.org/link/summary/15-1142.00
Program Description:
The Computer Systems & Information Technology Program prepares the student for a job in Information Technology (IT). Experience with Microsoft Windows, Word, Excel and Internet is highly recommended. Courses prepare the student to take the CompTIA A+, Network+ and Security+ certified technician exams.

To qualify for a diploma, the following courses must be satisfactorily completed:

**Computer Systems & Information Technology**

Y100200     900 hours

**CTS0082 – Computer Systems Technician (300 clock hours)**

A1, A2 - Computer Systems Technician I, II (A+ Certification)
The student will learn to install, configure, upgrade, and maintain Microsoft Windows operating systems and effectively utilize a customer-oriented approach to resolve user problems. You will also provide computer hardware and software support based upon a set of standard and systematic diagnostic principles. Computer Systems Technician 1 & 2 will help prepare you for the CompTIA A+ Essentials and the IT Technician exams.

The CompTIA A+ Essentials Exam validates your knowledge of basic computer hardware and operating systems. It covers skills such as installation, building, upgrading, repairing, configuring, troubleshooting, optimizing, diagnosing and preventive maintenance, along with elements of security, documentation, soft skills, health, safety and fire prevention.

The CompTIA A+ IT Practical exam is targeted for individuals who work or intend to work in a mobile or corporate technical environment with a high level of face-to-face client interaction. Example job roles include: Enterprise Technician, IT Administrator, Field Service Technician, PC Technician.

A+ certification proves that you have a broad base of knowledge and competency in core hardware and operating system technologies including installation, configuration, diagnosing, preventive maintenance and basic networking. The A+ certification is widely recognized as the entry level certification for IT. As a result, obtaining the A+ certification is a prerequisite for the remaining courses in the program. You must earn the A+ certification by passing both exams in order to continue in the program into CTS0083 (OCP B).

Students have an opportunity to repair and upgrade computers in the Lab. Students will be required to wear specific polo shirts when working with the public in the Lab setting.

**CTS0083– Computer Network Technician 150 clock hours)**

B1 - Computer Network Technician (Network+ part 1)
A current, valid A+ Certification is a pre-requisite for this class. In this course, the student will prepare for the CompTIA Network+ certification exam as they learn how resources are shared and communications are enabled by networks of all types and sizes. Networks will be classified by function as well as geography (LAN, WAN, SAN, etc.).

Students will learn about networking standards such as the Open Systems Interconnect (OSI) model and the international organizations that publish them. Networking media including twisted pair, fiber optic and wireless and network devices such as Network Interface Cards (NICs), switches, and routers are also an integral part of this course.
The Network+ certification is an internationally recognized validation of the technical knowledge required of foundation-level IT network practitioners. The CompTIA Network+ and A+ exams can be applied together toward the Microsoft Certified Systems Administrator (MCSA) program. Corporations such as Novell, Cisco and HP also recognize CompTIA Network+ as part of their certification tracks.

**B2 - Employability Skills**
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms.

**CTS0084 – Computer Networking Specialist (150 clock hours)**

**C1 – Computer Networking Specialist (Network+ part 2)**
Students will learn how resources are shared and communications are enabled by IT networks. Students will gain an understanding of Transmission Control Protocol/Internet Protocol (TCP/IP), IPv4 addressing and IPv6 addressing. Additionally, students will learn to secure network communications and resources.

Students will gain the knowledge and skills to manage, maintain, troubleshoot, install, operate and configure basic network infrastructure, describe networking technologies, adhere to wiring standards and use testing tools.

Students are encouraged to pass the Network+ certification exam to continue in the program into CTS0069 (OCP D).

**CTS0069 – Computer Security Technician (300 clock hours)**

**D1 – Computer Security Technician I (Security+ part 1)**
In this course, students will prepare for the CompTIA Security+ certification exam as they learn appropriate mitigation and deterrent techniques for network attacks and vulnerabilities. Security concerns associated with cloud computing, BYOD (Bring Your Own Device) and SCADA (Supervisory Control And Data Acquisition) will be covered. SCADA systems gather information, such as failures and/or security breaches, then transfer this information to a central site where it is evaluated and appropriate action is taken. SCADA systems can be relatively simple, such as one that monitors environmental conditions of a small office building, or incredibly complex, such as a system that monitors all the activity of a municipal water system.

Security+ is a mandated certification for the US Department of Defense, and is accredited by both the American National Standard Institute (ANSI) and the International Organization for Standardization (ISO).

**D2 – Computer Security Technician II (Security+ part 2)**
Students will continue to prepare for the Security+ certification exam. Access control, identity management and cryptography are important topics. Access control refers to the selective restriction to a resource based on identity. Identity management ensures users and processes are authentic. Cryptography is a method of storing and transmitting data in a particular form so that only those for whom it is intended can read and process it. Students are encouraged to pass the Security+ certification exam to complete the program and find gainful employment in the IT industry.

Students who earn A+, Network+, and Security+ certifications and have time remaining during the 900 clock hour Computer Systems & Information Technology program may opt in to Cisco CCENT/CCNA certification training to gain additional knowledge toward future certification(s).
COSMETOLOGY

<table>
<thead>
<tr>
<th>Program Length</th>
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FLDOE State Curriculum Framework:
Link: • Cosmetology (D500100)

Program Information: The program is 1200 clock hours. This program is taught in English, in a traditional classroom/shop setting, during the day. The shop area is a full-service salon, open for customers several days per week.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed, according to school policies. Courses are not necessarily completed in the order shown below. Each course is offered approximately twice a year.

<table>
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<th>OCP</th>
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<td>CSP0009</td>
<td>Grooming and Salon Services Core, Facials, and Nails</td>
<td>225 hrs</td>
<td>39-5012</td>
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<tr>
<td>A2</td>
<td>COS0002</td>
<td>Cosmetologist and Hairdresser 1</td>
<td>300 hrs</td>
<td>39-5012</td>
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<tr>
<td>A3</td>
<td>COS0003</td>
<td>Cosmetologist and Hairdresser 2</td>
<td>300 hrs</td>
<td>39-5012</td>
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<tr>
<td>A4</td>
<td>COS0009</td>
<td>Cosmetologist and Hairdresser 3</td>
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Licensure Information: Graduates are eligible to take the State of Florida Cosmetology licensing exam upon successful completion of this program.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/39-5012.00
Program Description:
The purpose of this program is to develop the manipulative skills and the technical knowledge necessary to pass the examination given by the State Board of Cosmetology and to perform the functions of the trade. Course requirements are designed to meet the standards of conditions that are as near as possible to actual work in the beauty salon.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**COSMETOLOGY**

**D500100**

**1200 HOURS**

**COS0002 – Cosmetology and Hairdresser 1 (One) (300 clock hours)**

**A1 - Salon Operations**
This course is an introduction to the cosmetology occupation and covers fundamentals of salon operations. Salon Operations includes orientation to school, introduction to cosmetology, bacteriology, sanitation and safety in the salon. Job-related health, safety, and fire prevention will be covered, along with appropriate work habits and work attitudes.

**A2 - Specialized Services I**
Specialized Services I is designed to provide instruction pertaining to the draping of clientele. The science of hair is also covered with emphasis on shampooing and conditioning techniques, hair and scalp treatments. Properties of the hair and scalp which will provide knowledge, structure, functions, and characteristics of the hair are also covered.

**A3 - Specialized Services Lab I**
Specialized Services Lab I is designed to provide hands on practical experience on other students or customer clientele. During Grade Period I, the focus of the course will be on the procedure for draping the client correctly. The student will perform a complete shampoo and condition with manipulations and have the proper supplies necessary. The student will perform scalp manipulation and treatments.

**A4 - Hair Care I**
Hair Care I is designed to provide instruction pertaining to roller setting, finger waving, pin curling, (includes, shaping, carved curls, ridge curls, stand up pin curls, c-shaping and skip waves) teasing the hair and combing out the desired hairstyle, and hair braiding. Hair Care I consists of blow drying the hair, and styling the hair with thermal curling irons.

**A5 - Hair Care Lab I**
Hair Care Lab I consists of hands-on practical salon experience on mannequins, other students, or customer clientele. During Grade period I, the focus of the course will be application of basic hair care techniques (finger waving, pin curls, rollers, blow drying and use of thermal curling irons, as well as, hair braiding.

**A6 - Hair Care II**
This course consists of theory and instruction pertaining to temporary color, semi- permanent color, permanent color and hair lightening. This theory consists of the color wheel, consultation, predisposition testing and application of all hair color. This course also consists of hair cutting, which is designed to provide instruction pertaining to basic terms in hair cutting, consulting client to determine their needs and preferences, identifying (explaining/listing) hair shaping implements, elevations in hair cutting, safety and sanitation.
procedures, razor shaping, use of thinning shears, clipper cutting, and the cutting of over-curly hair.

**COS0003 – Cosmetology and Hairdresser 2 (Two) (300 clock hours)**

**A7 - Hair Care Lab II**
This course consists of hands on practical salon experience on a mannequin, students or customers. During Hair Care Lab II focus will be on the application of temporary color, semi-permanent color, permanent color, bleach application, creative lightening, and toning, hair shaping (cutting), with scissors, razor, thinning shears, clipper cutting, and cutting overly curly hair.

**A8 - Hair Care III**
This course consists of theory and instruction pertaining to thermal pressing and marcel curling. This course also consists of permanent waving, sectioning, wrapping techniques, and application of the permanent wave.

**A9 - Hair Care Lab III**
Hair Care Lab III consists of hands on practical salon experience on mannequins, students or clients. The focus will be the purpose and procedure for the application of a thermal pressing and thermal curling. Hair Care Lab II will also incorporate permanent waving.

**A10 - Hair Care IV**
This course consists of theory and instruction of chemical hair relaxing, soft curl permanents (reconstructive curls) and chemical blowouts.

**A11 - Hair Care Lab IV**
This lab consists of hair relaxing and (reconstructive) soft curl permanent, as well as the procedure and application of these products.

**CSP0009 – Grooming and salon Services, Facials and Nails (225 clock hours)**

**A12 - Specialized Services II**
Specialized Services II is designed to provide instruction and theory, for manicures, pedicures, artificial nails, nail wraps, client consultation, and removal of artificial nails. Specialized Services II also includes Nail diseases, disorders, structure and growth.

**A13 - Specialized Services Lab II**
Specialized Services Lab II is designed to provide hands on practical experience on students and or clientele. The course will focus on the basic procedures for manicures, pedicures and the application of artificial nails and nail wraps. Also includes the removal of artificial nails and wraps.

**A14 - Specialized Services III**
Specialized Services III is designed to provide theory pertaining to hair removal, skin disorders and diseases. It will also include theory and instruction on Facials and Facial make-up.

**A15 - Specialized Services Lab III**
Special Services Lab III will offer a hands on practical procedure for hair removal, facials, facial make-up and artificial lash application.
COS0009 – Cosmetology and Hairdresser 3 (Three) (375 clock hours)

A16 - Specialized Services IV
This course is designed to provide the theory and instruction of the elements and principles of hair design and analysis of facial types. It will also include artificial hair, which includes cleaning, cutting, coloring and styling of wigs, as well as, securing artificial hair to the scalp or hair using chemical bonding or interlocking with a needle or hook. Specialized Services IV will also include electricity and light therapy.

A17 - Specialized Services Lab IV
Special Services Lab IV focuses on the principles of hair design to be able to camouflage facial flaws, and understand the different facial types and elements in a good hair design. It will also include, cleaning, cutting, coloring and styling of artificial hair. Also includes bonding or attaching artificial hair.

A18 - Salon Management
This course is an introduction to shop management, planning and operating a salon, entrepreneurship, employability skills, creating a resume, interviewing skills, and building a clientele.

A19 - Employability/Skills
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms.

A20 - Florida Law
Cosmetologists in the State of Florida must be licensed under state law in order to practice. This course covers the regulations, which govern this career field. Florida law introduces Florida Statute Laws, Rules and Regulations as set by the Florida State Board of Cosmetology. This course also includes HIV / AIDS education.

A21 - State Board Preparation
Students prepare for and must pass final tests covering all competencies in cosmetology theory, practice, and laws and rules of the Board of Cosmetology to prepare them for the Florida State Board Examination for Licensing.

A22 - State Board Preparation Lab
Students complete required services and hours covering all competencies in cosmetology practical applications including continued practice on clients and mannequins, to prepare them for the Florida State Board Examination for Licensing.
DENTAL ASSISTING
TECHNOLOGY AND MANAGEMENT - ATD

<table>
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<tr>
<th>Program Length</th>
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<th>CIP Code</th>
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<tbody>
<tr>
<td>1230 clock hours</td>
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FLDOE State Curriculum Framework:
http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/2015-16-frameworks/health-science.stml

Link: • Dental Assisting Technology and Management (ATD – 0351060108 / H170113)

Program Information: The program is 1230 clock hours. This program is taught in English, in a traditional classroom setting, during the day. A non-profit dental clinic facility is attached to the classroom area. Students’ externship experiences are performed in the clinic during the last 18 weeks of their training. During externship, students attend approximately 7 hours per day, and, as a result, graduate in 12 months.

ATD Information: Students entering an ATD program must have a high school diploma or GED. Through Florida Department of Education policies, graduates of an ATD program at a vocational technical center will be awarded some college credits upon enrollment in a corresponding program at a community college within three years following the date of the award of an ATD.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in the order shown below, according to school policies. Each course is generally offered twice a year.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
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<tbody>
<tr>
<td>A</td>
<td>DEA0725</td>
<td>Introduction to Dental Assisting*</td>
<td>90 hrs</td>
<td>31-9099</td>
</tr>
<tr>
<td>B</td>
<td>DEA0726</td>
<td>Dental Infection Control Assistant</td>
<td>210 hrs</td>
<td>31-9099</td>
</tr>
<tr>
<td>C1</td>
<td>DEA0727</td>
<td>Dental Assistant 1</td>
<td>465 hrs</td>
<td>31-9091</td>
</tr>
<tr>
<td>C2</td>
<td>DEA0728</td>
<td>Dental Assistant 2</td>
<td>465 hrs</td>
<td>31-9091</td>
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</tbody>
</table>
*Students who have previously completed the Health Core (HSC0003) as part of this degree or the Dental Assisting Technology and Management-ATD are not required to take the Introduction to Dental Assisting module (standards 1-10) and should be given advanced standing in the program.

Licensure Information: Graduates are eligible and highly encouraged to take the DANB exam.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/31-9099.00
http://www.onetonline.org/link/summary/31-9091.00

Program Description:
The Dental Assisting student is trained in subject areas such as ethics, goals of the dental profession, head and neck anatomy and physiology, dental equipment, instruments and materials, dental radiology techniques, sterilization, oral hygiene, and office management.

Practical clinical experience is one of the program's strong points. Approximately 3,000 patients are treated in the on-site dental clinic each year. Most conceivable situations, which will be eventually encountered in the private dental office, are usually seen first in the school clinic. We are fortunate to be able to provide all training, including clinical, on campus.

Students are typically in attendance 5 days a week from 8:00a – 2:00p; however, during the final two “clinical terms” the students will be expected to stay until 3:00p. Also there is the likelihood that the summer term may be abbreviated. With that in mind, those hours are subject to change.

The program is accredited by the American Dental Association, as recognized by The Council on Dental Accreditation.

Dental Assisting graduates exit the program with certificates in Dental Radiography and Expanded Functions issued by the State of Florida through the Erwin Dental Assisting Program, thereby meeting standards dictated by the Florida Board of Dentistry.

During the first 90 of the program, in Health Science Core, students study First Aid, CPR, Bloodborne Pathogens, Domestic Violence, and Prevention of Medical Errors and receive certificates indicating successful completion of these topics.

Since Health Science Core is 18 days at the beginning of the total program and is of a short duration and fast pace, a student will only be allowed 3 absences within these days. Any absences in Core will count towards the total allowable within the program.

Students must submit a physical examination form, along with proof of immunizations prior to admission. They must also complete drug screening and a background check through the school district.

Job Opportunities: Graduates of this program gain employment in general dentistry offices, as well as dental specialty practices.
To qualify for an Applied Technology Diploma (ATD), the following courses must be satisfactorily completed:

**Dental Assisting Technology & Management-ATD**

**DEA0725 – Introduction to Dental Assisting (90 clock hours)**

**A1 - Health Science Core**
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content includes communication skills as it applies to the professional medical environment, learning and study strategies, math and computational skills, legal and ethical practices, employability skills, safety and security procedures, medical terminology, scientific principles based on fundamental body structure and function, infection control, HIV/Bloodborne Pathogen awareness, CPR, First Aid, wellness and disease concepts, computer literacy, and representative skills performed by health care workers, such as vital signs.

**DEA0726 – Dental Infection Control Assistant (210 clock hours)**

**B1 - Dental / General Anatomy**
This course offers the student a broad, general exposure to general anatomy with head and neck emphasis. Students will learn the bones of the skull and face, the associated muscle relationships, the bony sinuses, the nerves involved in dental structures, and the blood vessels that supply the dental structures. This background will ensure that the student understands the anatomy of dental structures and is able to converse properly with other professionals and with patients. In addition, the student will have a basic understanding of the relationship of the body systems.

**B2 - Pre-Dental Sciences**
This course covers seven broad areas of study including the oral cavity, salivary glands, preventive dentistry, nutrition, psychology, microbiology and disease transmission and infection control. Students will learn terminology and functioning basic to the oral cavity. The study of preventive dentistry emphasizes the importance of plaque in the development of dental disease as well as the proper techniques of tooth brushing and other tooth cleansing techniques. Oral hygiene instruction will be followed and implemented. The importance of a well-balanced diet as well as the nutritional relationships to health and disease prevention will be discussed. Fundamental psychological concepts will be defined as well as their application to dentistry.

In microbiology and disease transmission, students learn about microorganisms and the ways that diseases travel. Students will learn the difference between sterilization and disinfection. They will apply this knowledge to maintaining a sterile/disinfected environment in the dental office at all times following prescribed infection control techniques. The protocols for asepsis, infection, and hazard control come from three sources: Infectious and Communicable Disease Guidelines for Students Enrolled in Health Occupations Education, Public Service Education, and Cosmetology by the Schools District of Hillsborough County, Occupational Exposure to Blood borne Pathogens by the School District of Hillsborough County, and OSHA Hazard Communication Standard. Students will be monitored throughout their clinical training to be sure that all protocols are rigorously followed.
B3 – Employability & Communication Skills
This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms.

B4 - Office Management (Directed Study)
This course in applied dental office management requires students to begin managing the day to day dental operation. Telephone management, written communication, and operating basic business equipment are part of this course. Students experience appointment control, receipt of payment for services, completion of third-party reimbursement forms, data entry for charges and payments, patient records, and scheduling.

DEA0727 – Dental Assisting 1 (465 clock hours)

C1 - Dental Radiology
This course provides the knowledge base regarding dental radiography necessary for the hands-on laboratory experiences. The history of radiology presents the inventors and pioneers in the field. Study, of the progression of science, leads into a discussion of the radiology equipment. Students will label the radiographic tube and know the functions of all the parts. Adjustment of the machinery to enable radiographic production with the proper contrast and detail will be mastered.

In studying the biological and hygienic aspects of radiology, students learn to protect themselves and the patient using distance, lead aprons, thyroid collars, kilovoltage and amperage adjustment, and faster film. The sole object is to lessen the time all parties involved are potentially exposed to radiation.

Students will study film development learning the chemistry of the liquids used in the developing and fixing process as well as the processing errors that can occur. Students will learn how to mount radiographs according to morphology, the film landmarks, and anatomical landmarks. In addition, students will learn the different techniques for taking bisecting angle and paralleling radiographs, and accompanying instrumentation.

Successful completion of the Dental Radiology course and the Dental Radiology Lab course, followed by the clinical x-ray components, will lead to a certificate as a Dental Radiographer that is recognized by the Florida Board of Dentistry.

C2 - Dental Radiology Lab
The Dental Radiology Lab course is the practical application of the theory learned in Dental Radiology. Students will learn to use the paralleling, and bisecting techniques for taking dental radiographs, using the appropriate instrumentation for each technique. Students will practice film placement, position indicating device placement, angulation, and patient positioning. All training will be done on adult and mixed dentition manikins.

Manual developing and mounting of films will be covered, as well as the use of the automatic processor.

C3- Dental Development and Pathology
This course encompasses several broad areas of study. In the study of embryology, the students will learn about the development of the face and oral cavity and the life cycle of a tooth, from the beginning of formation to the eruption of the tooth. Students will study the periods of growth, the calcification process, and the eruption schedule of deciduous and permanent teeth. The anatomic parts of a tooth and disturbances of dental development will also be studied.
Instruction will also be given in morphology, which is the study of the form and the structure of individual teeth and their relationship to the dental arch. Areas of study will include classification of teeth, characteristics of the dental arch, numbering systems, and the anatomic features of each individual tooth. Students will learn charting, which is the conversion of verbal descriptions of dental findings to a diagram or picture form.

Students will study the effect of diseases and developmental disturbances that result in variations from normal conditions, also known as pathology. This includes developmental disturbances, metabolic and circulatory disorders, inflammation, and neoplasia.

**C4 - Patient Evaluation and Pharmacology**

In pharmacology the study focuses on the definitions of pharmacology and drugs, drug sources, and management of controlled substances. Students are introduced to prescriptions and the common abbreviations used in prescription writing. Also studied will be the effects of drugs, categories of drugs commonly used in a dental practice, and routes of administration.

In the area of anesthesia, students study relative analgesia, general anesthesia with emphasis on the planes of analgesia and stages of general anesthesia. Local anesthesia is concerned with application of the topical by the dental assistant, sites of application, and the armamentarium. The study of local anesthesia includes the two chemical families of local anesthetics, the mode of action of a local anesthetic, vasoconstrictors used in local anesthesia, the different techniques of administration, equipment used, and the procedures for preparing syringes and helping the dentist. A performance test will be required in which the student makes proper preparations, administers the topical, and assists the dentist in administration of the local anesthetic. Aseptic technique is evaluated at each stage of the anesthesia performance test.

Patient assessment includes taking a proper medical history and preparing and maintaining accurate patient records. Students will get an opportunity to practice vital signs and discuss recording procedures. Performance tests will be given on taking blood pressure, temperature, respirations, and pulse. Types of office emergencies studied include pre-existing medical problems, accidental injury during a medical emergency, and adverse reactions to drugs. The focus is on preventing emergencies from occurring and recognizing and managing such emergencies. Everyone's responsibility on the team is defined.

Legal considerations are studied, specifically the Good Samaritan Rule. Students study the types of emergencies, namely unconsciousness, cardiovascular, respiratory, seizures, and allergic reactions. As a prerequisite to this course, students are required to have CPR and First Aid certification, which they get in Health Science Core.

**C5 - Introduction to Clinical X-Ray**

During the second term, students studied Dental Radiology and Dental Radiology Lab to gain the foundation knowledge necessary to receive their radiology certificates from the State of Florida. The purpose of Introduction to Clinical X-Ray is for the students to refresh their knowledge and skill of radiography in preparation for 18 weeks of clinical experience. For this review, students will review medical histories, complete appropriate paperwork and expose radiographs on eligible volunteers or clinical patients of the Hillsborough County Dental Research Clinic, including one panoramic/extra-oral film, two half-mouth series, two sets of bite wings, and occlusal films. Dental radiology will continue to be a focus in the subsequent two clinical terms.

**C6 - Dental Materials**

This course provides an in-depth study of the materials used in a dental practice. Students will study the functions, uses, and properties of five different categories of materials, namely gypsum,
restorative, cements and bases and liners, impression materials and acrylics. All the ways to manipulate these materials will be explored as well as the factors that affect those materials, such as temperature, spatulation times, and water/powder ratio.

Gypsum materials are used in obtaining diagnostic/study models and in fabrication of dental appliances. Elements of emphasis include weak-strong mixtures, setting time, and setting expansion. Restorative materials such as amalgam and composite, restore the oral cavity to its normal, healthy, functioning mode. Cements, bases, and liners are used to retain appliances or restorations in the mouth and work as barriers to protect the pulp. Methods for utilizing these in operative procedures will be discussed.

Impression materials are used for duplication of the oral cavity such as replicating a tooth that has been prepared for a crown or a type of dental appliance. Resins and acrylics are the materials used for temporary restorations and denture based materials.

**C7 - Dental Materials Laboratory**
The Dental Materials Lab course is the in-depth, practical application of the theory learned in Dental Materials. Students will actually manipulate dental materials, namely gypsum, restoratives, cements and bases and liners, impression materials and acrylics. Students will learn how to use gypsum products in making diagnostic/study models and in fabricating dental appliances; strength, setting time, and setting expansion will be of great importance.

Practice will be given in mixing and preparing restorative materials. Cements, bases, and liners will be manipulated to the proper consistencies. Impression materials such as alginate, hydrocolloid, rubber base, and polyvinylsiloxane will be used to duplicate the oral cavity and fabricate appliances or restorations.

**C8 - Dental Specialties, Clinical Practice & Expanded Functions**
Students learn how to operate the equipment in the clinical area such as operation of the chairs, ultrasonic units, and the equipment in the laboratories. Also included during this course are the proper techniques for oral evacuation, cleaning and polishing removable appliances, and the concepts of four handed dentistry and instrument exchange. Students also become familiar with suture removal.

Instruction is given on the basic tray set-ups, sequence of events during procedures as well as delivery of patient postoperative instructions for the various dental procedures performed in the clinic. Students also learn the application of the matrix band and rubber dam and are trained in tooth polishing and sealant application.

**C9 - Dentrix Dental Computer Software**
Dentrix Computer Software (or one related) is an office management software. Students will simulate all activities associated with the management of a practice including appointment control, receipt of payment for services, completion of third party reimbursement forms, data entry for charges and payments, managing recall systems, patient records, scheduling, printing reports, and producing statements. Instruction will be given on filing claims electronically.

The direct application of office management skills to a dental practice occurs in the fourth and fifth terms during the office rotation as students participate in their clinical experiences.
**DEA0728 – Dental Assisting 2 (465 clock hours)**

**C10 - Clinical X-Ray I**
During the second term, students studied Dental Radiology and Dental Radiology Lab to gain the foundation knowledge necessary to receive their radiology certificates from the State of Florida. In Introduction to Clinical X-Ray, students applied their knowledge when radiographing real patients/volunteers for the first time rather than manikins. In this course the radiology component as it relates to total patient care will be emphasized. Each patient is unique and requires different considerations in order for radiographs to be sharp and clear. Patients differ in age, body size and shape, and in dentition; examples include those who are edentulous, partially edentulous, or have complete dentition. The dental assistant will have to make adjustments for all of these factors.

Dental assistants learn to deal with patients and to educate them as to why and what areas will be radiographed. Students learn strategies for dealing with people with a strong gag reflex during exposures; taking a patient's mind off the procedure requires specific skill. Students also learn the purposes for which patients need radiography including endodontic procedures, periodontic procedures, and regular diagnosis. During this course, students learn to exercise good judgment and to produce radiographs of high quality on clinical patients.

**C11 - Clinical and Expanded Functions I**
This course is a practical application of all knowledge gained and skills developed thus far in the areas of the laboratory, clinic, and supply/sterilization. Students will have achieved a mastery level of at least “C” on each clinical component in Dental Specialties and Expanded Functions in term three. This course begins in term four and continues in term five and should be considered as one clinical experience in which skill and speed will be steadily developed. Students will be given a task list for this term, which lists the minimum number of tasks to be completed.

In the laboratory, students will fabricate custom trays, temporary crowns and bridges, and pour and trim models. In the clinical area, students will perform tasks that introduce them to the duties of a chairside dental assistant and will continue their mastery of expanded functions as listed by the Board of Dentistry. They will be sterilizing instruments and supplies, maintaining supplies, checking the inventory, and performing instrument control.

Time will be set aside for periodic student seminars. This will provide an opportunity for the clinical director to meet with students in clinical training to discuss pertinent issues, experiences, and concerns. At the end of Term 4, students who have failed to complete the x-ray, lab requirements and/or tasks in the Clinical area may not begin working on Term 5 assignments until all performances have been satisfied. It is also important for students to take note of the attendance policy. More than three days absence in this term must be made up at the student's own expense after the senior term. To summarize, students can be held over for failure to complete assigned duties or for violations of the attendance policy.

**C12 - Clinical X-Ray II**
During the second term, students studied Dental Radiology and Dental Radiology Lab to gain the foundation knowledge necessary to receive their radiology certificates from the State of Florida. In Introduction to Clinical X-Ray, students applied their knowledge when radiographing patients/volunteers, for the first time, rather than manikins. In Clinical X-Ray II, students are expected to be more productive and accurate than in Clinical X-Ray I. Each patient is unique and requires different considerations in order for radiographs to be sharp and clear. Patients differ in age, body size and shape, and in dentition. The dental assistant will have to make adjustments for all of these factors.
In addition, dental assistants continue to deal with patients who each present their own individual challenges and to educate them in the importance of radiography in the diagnostic process. Strategies to deal with special concerns and needs remain a focus. During this course, students demonstrate good judgment; work at a faster pace to approximate production in a real dental office; and to produce radiographs of high quality on clinical patients.

**C13 - Clinical & Expanded Functions II**

Students, now referred to as seniors, will gain clinical competence in performing expanded functions as listed by the Board of Dentistry and will be capable of assuming the duties of a dental assistant upon completion of this term. The number of tasks in the area of laboratory, clinic, and supply/sterilization will be increased from that of term 4, and chairside evaluation will be added. Students will have a task list for this term which lists the minimum number of tasks, to be completed. Students will be required to maintain a daily log of their clinical activities.

In the laboratory, students will fabricate custom trays, temporary crowns and bridges, and pour and trim models. In the clinical area, students will continue to perform tasks that introduce them to the duties of a chairside dental assistant. They will be sterilizing instruments and supplies, maintaining supplies, checking the inventory, and performing instrument control.

Time will be set aside for periodic student seminars. This will provide an opportunity for the program director to meet with students in clinical training to discuss pertinent issues, experiences, and concerns. Students must complete all the tasks on the senior list in order to graduate. As in Term 4, students who have more than three days' absence during their senior term can also be held over into the next term at their own expense. Completion of tasks and good attendance should be a priority for the graduating student.
DRAFTING

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>1500 clock hours</td>
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FLDOE State Curriculum Framework:
http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/2015-16-frameworks/architecture-construction.stml

Link: • Drafting (PSAV – C100200)

Program Information: The program is 1500 clock hours. (approximately 17 months). This program is taught in English, in a traditional classroom setting, during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1500 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
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<td>4,170.00</td>
<td>15.00</td>
<td>852.38</td>
<td>35.00</td>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in the order shown below, according to school policies. Each course is generally offered twice a year.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>TDR0070</td>
<td>Blueprint Reader</td>
<td>150 Hours</td>
<td>17-3011</td>
</tr>
<tr>
<td>B</td>
<td>TDR0370</td>
<td>Drafting Assistant</td>
<td>450 Hours</td>
<td>17-3011</td>
</tr>
<tr>
<td>C</td>
<td>TDR0775</td>
<td>Drafting Detailer 1</td>
<td>150 Hours</td>
<td>17-3011</td>
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<tr>
<td></td>
<td>TDR0776</td>
<td>Drafting Detailer 2</td>
<td>150 Hours</td>
<td>17-3011</td>
</tr>
<tr>
<td>D</td>
<td>TDR0570</td>
<td>Architectural Drafter</td>
<td>150 Hours</td>
<td>17-3011</td>
</tr>
<tr>
<td>E</td>
<td>TDR0874</td>
<td>Civil Drafter</td>
<td>150 Hours</td>
<td>17-3011</td>
</tr>
<tr>
<td>F</td>
<td>TDR0777</td>
<td>Mechanical Drafter</td>
<td>150 Hours</td>
<td>17-3013</td>
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<tr>
<td>G</td>
<td>TDR0875</td>
<td>Structural Drafter</td>
<td>150 Hours</td>
<td>17-3019</td>
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Licensure Information: Students will take the Autodesk Certified Professional (AutoCAD) test. The optional Autodesk Certified User test is also available.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/17-3011.00
http://www.onetonline.org/link/summary/17-3013.00
http://www.onetonline.org/link/summary/17-3019.00
Program Description:
The Drafting Program will prepare students to be employed in any field requiring the ability to visualize concepts and designs. This field has changed rapidly in the past few years and now involves the use of highly sophisticated hardware and software to produce drawings which describe design concepts of all types. Students will learn the use of hardware and software employed by professionals to present their designs and to prepare documents for the manufacturing or construction process. The application of these advanced computer methods to specific occupational areas will be studied as part of the student's education. The program begins with a series of courses using core drafting methods. These courses are designed to prepare students for continued training in fields such as Commercial and Residential Architecture, Civil Engineering, Structural Engineering and Mechanical. Students will exit upon completion of this program with a diploma in Drafting.

JOB OPPORTUNITIES
Upon completion of this program students are prepared to enter a variety of fields such as:
Structural and Residential Architecture – this includes housing and large buildings. Civil – this includes roads, land development for housing areas, water lines and storm water drainage, highways and bridges. Electrical – this includes residential and commercial electrical, circuit boards, electrical panels, cable lines, optical lines, networking layouts. Mechanical – this includes plant/factory design, and equipment design such as tools and machine parts.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**DRAFTING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDR0070</td>
<td>Blueprint Reader (150 clock hours)</td>
<td>1500 HOURS</td>
</tr>
</tbody>
</table>

A1 – Blueprint Reader I
This class will begin with an introduction and orientation to the Drafting program. In addition, health, safety, fire prevention, emergency procedures, building evacuation, and other topics will be covered.

During this first class, topics will be divided into five primary categories:

**Basic Drafting Skills:** Use drafting equipment, measuring scales and drafting instruments. Identify the various drafting media and techniques. Use various freehand and other lettering techniques. Prepare title blocks and other drafting formats. Demonstrate the use of the Alphabet of Lines. Prepare axonometric, oblique and multi-view freehand sketches. Prepare charts, graphs and diagrams. Apply geometric construction techniques. The student will receive information regarding the policies and procedures of the Erwin Technical College and the Computer Aided Drafting program.

**Mathematics:** The student will demonstrate knowledge of arithmetic operations. Solve arithmetic problems. Solve algebra problems. Solve right-angle trigonometric problems. Solve geometry problems. Apply multiple discipline calculations. Analyze and apply data and measurements to solve problems and interpret documents. Construct charts/tables/graphs using functions and data. Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items. Demonstrate an understanding of federal, state and local taxes and their computation. Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares and cylinders. Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
Multi-View Drawing: The student will learn to draw a three-dimensional object in a series of planes (views) and center those views on a drawing. The student will be able to include any hidden features of the object using hidden lines. The student will be able to draw a missing view using two or more views through a projection method and without the aid of a three-dimensional illustration.

Section View Drawing: The student will learn the methods of placing information on a drawing that requires the manufacture or assembly of a part with details that are hidden. This type of view is controlled by specific standards that will be explained to all students. If you were to cut a carburetor in half and make a drawing of what you saw, that would be a section view.

Auxiliary View: The student will learn a method of projection that will provide information on a drawing about a part with surfaces other than 90 degrees to the standard views of a drawing. Auxiliary views show the true size and shape of a surface that cannot be shown in any other view. For example, to show the true size and shape of a pyramid, you must draw an auxiliary view.

**A2 – Blueprint Reader II**

During this class, topics will be divided into three primary categories:

- **Basic Dimensioning**, which is a precise method of conveying information regarding a mechanical part. The dimensional information provided will control the size, shape, surface finish, and manufacture-ability of those parts in a high production environment. The method of applying dimensional information and the use of tolerancing will affect the size and shape of the part. Several drawings will be produced reflecting the skills learned in dimensioning and tolerancing.
- **Pictorial Drawings**, a method used by draftspersons for centuries to display intricate parts or equipment in a manner that helps the viewer more easily visualize or understand the object(s). These drawings are part of normal documentation because of their usefulness in conveying an accurate description of a part or an assembly of parts to manufacturing personnel.
- **Surface Developments**, which is a method of determining the intersection of planes (flat surfaces or sheet of paper) and various prisms, cylinders, cones, spheres, and pyramids as well as the intersection of these geometric shapes with each other. The student will learn to layout sheet metal patterns and use descriptive geometry to find true lengths of skewed lines and surfaces. These methods are accomplished by a series of steps explained by the instructor. Determining these intersections is necessary to give true size and shape of structural features.

**TDR0370 – Drafting Assistant (450 clock hours)**

**B1 – Drafting Assistant I**

- **Basic Electrical/Electronic Literacy**: Identify electrical/electronic symbols. Prepare schematic/block diagrams and/or electric plans.
- **Basic Computer Aided Drafting Functions**: Perform drawing set up. Construct geometric figures of lines, splines, circles and arcs. Create and edit text using appropriate style and size to annotate drawings. Use and control accuracy enhancement tools for entity positioning methods such as snap and XYZ. Identify, create, store and use standard part symbols and libraries. Utilize editing commands. Control entity properties by layer, color and line type. Use viewing commands to perform zooming and panning. Plot or print drawings on media using layout and scale. Understand how to minimize file size. Use query commands to interrogate database for entity characteristics, distance, area and status. Apply standard dimensioning rules.

**B2 – Drafting Assistant II**

During this class, topics will be divided into three primary categories:

- **Basic Electronic Literacy** This course will enable the student to learn the basic terminology used in the design of electrical systems within residential construction. Concepts will be in the areas of...
electrical wiring design, including the recognition of electrical symbols used in Building Design. Students will demonstrate this knowledge by graphically presenting it on a drawing.

Basic Computer Aided Drafting functions

**Continued**

Perform drawing set up. Construct geometric figures of lines, splines, circles and arcs. Create and edit text using appropriate style and size to annotate drawings. Use and control accuracy enhancement tools for entity positioning methods such as snap and XYZ. Identify, create, store and use standard part symbols and libraries. Utilize editing commands. Control entity properties by layer, color and line type. Use viewing commands to perform zooming and panning. Plot or print drawings on media using layout and scale. Understand how to minimize file size. Use query commands to interrogate database for entity characteristics, distance, area and status. Apply standard dimensioning rules.

**B3 – Employability & Entrepreneurship Skills**

Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms. In addition, students will study entrepreneurship, including the advantages and disadvantages of being your own boss and the personal characteristics needed to be successful. The importance of small business to the U.S. economy is emphasized. Specific information is given on starting and running a small business.

**B4 - Architectural Drafting I**

Students will create working and presentation drawings of a single story home within guidelines given by the instructor. Circulation patterns, functional use of the different areas, and the specific equipment used every day will be analyzed with respect to graphic presentation through the use of two-dimensional drawings.

The students will receive instruction from three different sources: Lectures by the instructor, assignments from the textbook, and observation of the habitat around them. Being aware of how things are put together and what are the component parts of an assembly will be the two most important lessons learned from this project.

The drawings prepared by the student will be assembled to form a basic set of construction documents of a house.

**B5 – Civil Drafting I**

This course will enable the student to learn the basic terminology used by civil and structural engineers. Concepts will include: describing property and establishing the horizontal and vertical controls which locate a structure and related facilities on the site, and understanding the types of civil drawings that are utilized in a variety of construction industries and land uses. Students will demonstrate this knowledge by graphically presenting it on drawings.

**TDR0775 – Drafter Detailer 1 (150 clock hours)**

**C1 – Map Drawings & Detailing**

This course will instruct students in the preparation of map drawings using information provided by surveyors. Map drawings are used for a variety of reasons including subdivision layout, traffic flow, location maps, zoning, and road maps. Students will also learn to create CAD details at multiple scales and prepare CAD details for AEC.
TDR0776 – Drafter Detailer 2 (150 clock hours)

C2 – Architectural Drafting II
Students will prepare construction and presentation drawings related to two story residential buildings. Students will study materials and their applications in commercial and residential construction. Students will learn the basic techniques of construction, which are in common use throughout the nation. Written reports and drawings will be required.

TDR0570 – Architectural Drafter (150 clock hours)

D1 – Architectural Drafting III
Students will learn to create maps and site plans which can be used in architectural related projects, as well as drawings related to residential and commercial buildings. Structure will be studies, including bridges, buildings, and towers. In addition, students will investigate some of the code restrictions, which govern the design of commercial buildings and review manufacturer's specifications for building products. Written reports and drawings will be required.

TDR0874 – Civil Drafter (150 clock hours)

E1 – Civil Drafting II
This course will build on the Civil Drafting I course, and students will prepare land development drawings. This course will also instruct the student in the surveying and mapping procedures associated with locating and plotting information required to generate map drawings for land development and boundary plotting. Written reports and drawings will be required.

TDR0777 – Mechanical Drafter (150 clock hours)

F1 - Mechanical Drafter I
This course will instruct student to prepare drawings using modeling techniques.

F2 - Mechanical Drafter II
This course will build upon the mechanical modeling I course. Students will learn to prepare advanced drawings using modeling techniques.

TDR0875 – Structural Drafter (150 clock hours)

G1 - Structural Drafting
This course will instruct students to prepare structural drawing and details for residential and commercial projects. Students will also learn to use BIM techniques to produce 2 and 3 dimensional models and details. Written reports and drawings will be required.
**ELECTRICITY**

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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</thead>
<tbody>
<tr>
<td>1200 clock hours</td>
<td>I460312</td>
<td>0646030202</td>
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</table>

**FLDOE State Curriculum Framework:**

*Link: • Electricity (I460312)*

**Program Information:** The program is 1200 clock hours (approximately 12 months). This program is taught in English, in a traditional classroom/shop setting, and is offered during the day.

**Program Costs (2015-16 academic year):** Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1200 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
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</table>

**Technology Information:** Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

**Course Sequence:** Courses must be successfully completed in order, according to school policies. Each course is offered at least once each year.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
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<td>A</td>
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<td>Electrician Helper</td>
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<td>47-3013</td>
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<tr>
<td>B</td>
<td>BCV0640</td>
<td>Residential Electrician</td>
<td>450 Hours</td>
<td>47-2111</td>
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<tr>
<td>C</td>
<td>BCV0652</td>
<td>Commercial Electrician</td>
<td>450 Hours</td>
<td>47-2111</td>
</tr>
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</table>

**Licensure Information:** Students will take coursework and exams to receive OSHA and NCCER Core & Electricity Level 1 certifications.

**Career Information (SOC Codes):**
[http://www.onetonline.org/link/summary/47-3013.00](http://www.onetonline.org/link/summary/47-3013.00)
[http://www.onetonline.org/link/summary/47-2111.00](http://www.onetonline.org/link/summary/47-2111.00)
Program Description:
The Electricity program is a combination of classroom instruction and shop experiences. The work in the shop closely simulates the job conditions of the electrician. Most of the emphasis is on the working skills the student must master to become an electrician. The student will utilize energized circuits while learning to install, maintain, and troubleshoot electrical systems found in residential, commercial, and industrial areas.

Job Opportunities: Construction electrician for residential, commercial, and industrial; control panel fabricator; marine electrician; high rise building maintenance electrician, and mobile home factory electrician; plant maintenance electrician include: manufacturing facilities, processing facilities, phosphate industry, and citrus industry.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**ELECTRICITY** I460312 1200 HOURS

**BCV0603 – Electrical Helper (300 clock hours)**

**A1 - Electrical Trade**
This class is a power point, lecture format, which provides the student with the electrical safety procedures for the shop, job site, health, fire prevention, OSHA training (10 hour OSHA class) and concepts of Direct Current and Alternating Current operating characteristics as well as the application of various electrical components.

**A2 - Blueprint Skills**
The student will learn the skills basic to blueprint usage; among these will be scales, scale rules, symbols and practices.

**A3 - Circuits, Devices, and Raceways**
This course covers basic electrical devices, circuits, and switching methods. The student will install and connect switches, receptacles, and associated devices in basic circuits on desktop boards and upright wiring boards.

**A4 - Technical / Core Math**
This course is a basic math class for students needing a review in fractions, decimals, percentages, and problem solving. A pretest is administered to determine need for this course.

**A5 - Employability Skills**
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms.

**A6 - Entrepreneurship**
The entrepreneurship course starts with an overview of the advantages and disadvantages of being your own boss and the personal characteristics needed to be successful. The importance of small business to the U. S. economy is emphasized. Specific information is given on starting and running a small business.

**A7 - Codes & Applications I**
This is a theory-based course, lecture format, which covers content, usage, and local applications of the National Electrical Code. The student will be exposed to a broad variety of selected topics.
germane to the electrical trade with emphasis upon the National Electrical Code. National Electrical Code and Application 1-4 cover, on a rotating basis, all topics addressed in the "Code" which pertain to the OCP area a student is studying.

Codes and Applications I will cover rules regarding Commercial installations.

A8 - Electrical Helper Review
During this course, the student will demonstrate, by an assigned on-campus study, their proficiency as an Electrical helper.

BCV0640 – Residential Electrician (450 clock hours)

B1 - Residential Wiring I
In this course, the student will draw, color code, circuit and install commonly encountered switches and receptacles in a variety of uses and configurations. The installation shall be done using cable on freestanding boards and wood stud partitions. Students will wire projects which will be energized.

B2 - Codes & Applications II
This is a theory-based course, lecture format, which covers content, usage, and local applications of the National Electrical Code. The student will be exposed to a broad variety of selected topics germane to the electrical trade with emphasis upon the National Electrical Code. National Electrical Code and Application 1-4 cover, on a rotating basis, all topics addressed in the "Code" which pertain to the OCP area a student is studying. Codes & Applications II will cover rules regarding Commercial installations.

B3 - Residential Wiring II
In this course, the student will draw, color code, circuit and install commonly encountered switches and receptacles in a variety of uses and configurations. The installation shall be done using cable on freestanding boards and wood stud partitions. Students will wire projects which will be energized.

B4 – Residential Services
Common residential services will be built in this course. The student will install common residential overhead and underground service entrances.

B5 - Raceway Bending and Installation I
In this course, the student will learn basic bending skills using EMT. These skills will then be applied to installing EMT in wood stud partitions. Additionally, the student will learn bending methods pertaining to rigid metal conduit and plastic conduit. These methods will be applied to installations in wood stud partitions.

B6 - Codes & Applications III
This is a theory-based course, lecture format, which covers content, usage, and local applications of the National Electrical Code. The student will be exposed to a broad variety of selected topics germane to the electrical trade with emphasis upon the National Electrical Code. National Electrical Code and Application 1-4 cover, on a rotating basis, all topics addressed in the "Code" which pertain to the OCP area a student is studying. Codes & Applications III will cover rules regarding Commercial installations.

B7 - Raceway Bending and Installation II
In this course, the student will learn basic bending skills using EMT. These skills will then be applied to installing EMT in wood stud partitions. Additionally, the student will learn bending
methods pertaining to rigid metal conduit and plastic conduit. These methods will be applied to installations in wood stud partitions.

**B8 - Residential Electrical Review**
During this course, the student will demonstrate, by an assigned on-campus study, their proficiency in Residential wiring.

**BCV0652 – Commercial Electrician (450 clock hours)**

**C1 - Commercial Services**
In this course the student will be introduced to the fundamentals of fire alarm systems, emergency lighting, and burglar alarm systems.

**C2 - Motor Control I**
In this course, the student will connect fundamental motor control devices to form proper motor control circuits.

**C3 - Codes & Application IV**
This is a theory-based course, lecture format, which covers content, usage, and local applications of the National Electrical Code. The student will be exposed to a broad variety of selected topics germane to the electrical trade with emphasis upon the National Electrical Code. National Electrical Code and Application 1-4 cover, on a rotating basis, all topics addressed in the "Code" which pertain to the OCP area a student is studying. Codes & Applications IV will cover rules regarding Commercial installations.

**C4 - Motor Control II**
This course requires the student to connect and install complex motor control circuits. Additionally, the student will troubleshoot motor control devices.

**C5 - Fundamentals of Logic**
This course introduces the basic terms and fundamentals of solid state logic and controls. Students will connect solid state circuits and devices.

**C6 - Transformers**
In this course, the student will connect single phase and three phase transformers in a variety of configurations and study the characteristics thus achieved.

**C7 - Programmable Controllers**
This course covers the fundamentals and uses of programmable controllers. Students will program and troubleshoot a variety of manufacturers' equipment.

**C8 – Commercial Electrical Review**
This course represents an overall review of certain areas within the Electricity program and prepares the student, who is about to graduate from the program, a hands-on update as they enter the electrical work-force.
ELECTRONEURODIAGNOSTIC TECHNOLOGY

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>1250 clock hours</td>
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Program Information: The program is 1250 clock hours. This program is taught in English, in a traditional classroom setting, during the day. During externships, students’ schedules varying and include additional hours. As a result, students graduate from this program in 12 months.

Program Accreditation Information: The END program is accredited by the Commission on Accreditation of Allied Health Education Program upon the recommendation of the Accreditation for Education in Neurodiagnostic Technology (CoA-NDT). Commission on Accreditation of Allied Health Education Programs (CAAHEP), 1361 Park Street, Clearwater, FL 33756. (727) 210-2350. [www.caahep.org](http://www.caahep.org)

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1250 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students do need to have access off campus to a computer with Internet connectivity and word processing software.

Course Sequence: Courses must be successfully completed in the order shown below, according to school policies.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
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<td>31-9099</td>
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<td>175 hours</td>
<td>29-2099</td>
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<td>B</td>
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<td>Electroneurodiagnostic Technologist 2</td>
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<tr>
<td>B</td>
<td>ETN0007</td>
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<td>Electroneurodiagnostic Technologist 5</td>
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<td>29-2099</td>
</tr>
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</table>
Licensure Information: Graduates are eligible and highly encouraged to take the ABRET exam.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/31-9099.00
http://www.onetonline.org/link/summary/29-2099.00

Program Description:
This program teaches the student how to perform Electroneurodiagnostic exams, which are commonly known as "brain wave" tests. Through classroom lectures, hands-on activities, and actual hospital experiences, the student will gain sufficient knowledge and skills to adequately perform Electroneurodiagnostic tests. Upon completion of the program, students are able to secure jobs in EEG labs and are eligible to take The American Board of Registration of Electroencephalographic and Evoked Potential Technologists, (ABRET) National Exam, which confers membership in a national registry.

Criminal background checks and random drug screenings are required for students entering this program.

Job Opportunities: Employment for EEG technologists is expected to grow much faster than the average occupation through the year 2015. There will be more testing as newer tests and procedures are developed and the population grows older. Typical job settings are found in hospitals and large clinics. EEG technologists are in high demand by hospitals. Starting salaries for a formally trained technologist range from $16 - $24 an hour.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**ELECTRONEURODIAGNOSTIC TECHNOLOGY**

H170204 1250 HOURS

**HSC0003 – Basic Healthcare Worker (90 clock hours)**

A1 - Health Science Core
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content includes communication skills as it applies to the professional medical environment; learning and study strategies; math and computational skills; legal and ethical practices; employability skills; health, safety, fire prevention, and security procedures; medical terminology; scientific principles based on fundamental body structure and function; infection control; HIV/AIDS; blood borne pathogen awareness; CPR; First Aid; wellness and disease concepts; computer literacy; and representative skills performed by health care workers, such as vital signs. Students may need to complete HealthCenter21 online assignments outside of class, requiring the student to have access to a computer and the Internet.

**ETN0005 – Electroneurodiagnostic Technologist 1 (175 clock hours)**

B1 - EEG Instrumentation I
This course covers the operation of electroneurodiagnostic equipment used in everyday lab practices. The student will be introduced to the fundamental techniques involved with everyday practice. Through lectures, classroom demonstrations and hands-on lab practicums, EEG and Evoke Potential instrument controls and functions are explained. Some items covered are:
electrodes, electrode application techniques, calibrations, jack box, amplifiers, sensitivity, filters, oscillograph, pens, ink jets, linear vs. nonlinear, chart drives, power supply, instrumentational calibration adjustments, frequency response curve, noise, electrode tests, polarity, electrical safety, troubleshooting EEG equipment, and an introduction to evoke potential instrumentation.

**B2 - Medical Terminology**
Through this course the student will gain a thorough understanding of the use and construction of medical terms. Emphasis will be placed on special EEG terms and abbreviation, as well as medical and hospital abbreviations. A supplemental film will follow each chapter on the basic medical terms. Student participation in class is expected during review of all terms.

**B3 - Clinical Lab I**
During the Clinical Lab I course, students are involved in hands-on workshops, short lectures, discussion groups, and demonstrations. Under direct supervision from the program instructor, the majority of Clinical Lab I time is spent on actual hands-on techniques. Emphasis is placed on the 10\20 system of electrode measurement and electrode application techniques.

The students begin the hands-on labs by practicing measurement techniques and practicing electrode placement. Instrument calibration, instrument care, patient clean-up, instrument clean-up, and proper record annotation are also practiced. Students are instructed in each technique through short lectures, demonstrations and discussion groups. Students also practice taking patient histories through role playing and simulated medical chart summaries.

Students first begin the hands-on 10\20 measurement system practice on Styrofoam wig heads.

**B4 - EEG Electronics**
This is a basic course on the principles and theory of electronics and the applications of it in EEG. Items covered will include: atomic theory, electrostatics, current, voltage, resistance, Ohm's Law, the coulomb, magnetism, meters, AC current, inductance, capacitance, and electrical safety. Students are expected to participate in all class discussions and reviews of material.

**B5 - EEG Theory and Techniques I**
This course will introduce the student to the theory and techniques used in Electroneurodiagnostic clinical procedures. Some items covered are: the EEG Technologist roll and responsibilities, patient history taking, EEG terminology, the International 10\20 Measurement System, hospital montages, EEG frequencies, activational procedures, montage selection, artifacts, normal adult patterns, abnormal adult patterns, normal premature patterns, normal children patterns, portable recordings, electrocerebral silence recordings, special electrodes, and special activational procedures.

**B6 - Anatomy and Physiology I (Directed Study)**
This course reviews the systems of the body including respiratory, sensory, urinary, reproductive, cardiac, endocrine, skeletal, integumentary, muscular and central nervous systems. Anatomical body positions, cell structures, and the basic chemistry of the body are investigated.

The students will read the textbook, answer the questions at the end of each chapter and turn these in for homework grades. A workbook accompanies the text. The students will also complete each corresponding chapter in the workbook for homework grades. There may be pop quizzes on the chapters. Section\Unit exams may be given on combinations of chapters. A comprehensive final exam may be given. The more pertinent chapters will have an exam.
ETN0006 – Electroneurodiagnostic Technologist 2 (250 clock hours)

B7 - Anatomy and Physiology II (Directed Study)
This course further reviews the systems of the body including respiratory, sensory, urinary, reproductive, cardiac, endocrine, skeletal, integumentary, muscular, and central nervous system. Emphasis is placed on anatomical body positions, the nervous system, cell structures, and the basic chemistry of the body. A workbook accompanies the text. The students will read the textbook, answer the questions at the end of each chapter and turn these in for homework grades. The students will also complete each corresponding chapter in the workbook for homework grades. There may be pop quizzes on the chapters. Section/Unit exams may be given on combinations of chapters. A comprehensive final exam may be given which will cover all of the chapters. Class participation in discussion of the chapters is expected of each student. Exam will be given on more pertinent chapters.

B8 - EEG Instrumentation II
As a continuation of EEG Instrumentation I, many topics are covered in greater detail. Through lectures, classroom demonstrations, and practicums, EEG and Evoke Potential instrument controls and functions are explained.

Some items covered are: electrodes, electrode application techniques, calibrations, jackbox, amplifiers, sensitivity, filters, oscillograph, pens, ink jets, linear vs nonlinear, chart drives, power supply, instrumental calibration adjustments, frequency response curve, noise, electrode tests, polarity, electrical safety, troubleshooting, and an introduction to evoke potential instrumentation.

The use and function of digital EEG, digital filters, aliasing, sampling rates, resolution and storage mediums are explored.

B9 - Basic Neuroanatomy
Basic neuroanatomical structures are studied. The central nervous system - brain and spinal cord - are emphasized. Surface anatomy of the brain is covered. The basic physiology of the nervous system and the elementary elements of the action potential of a nerve cell are examined.

B10 - Clinical Lab II
During the Clinical Lab II course, students continue to be involved in hands-on workshops, short lectures, discussion groups, and demonstrations. Under direct supervision from the program instructor, the majority of Clinical Lab II time is spent on actual hands-on techniques. Emphasis is placed on the 10/20 system of electrode measurement and electrode application techniques. Students begin to record EEG's on each other and are tested on their proficiency.

The students continue the hands-on labs by practicing measurement techniques, practicing electrode placement, and EEG recordings. Instrument calibration, instrument care, patient clean-up, instrument clean-up, and proper record annotation continue to be practiced. Students are instructed in each technique through short lectures, demonstrations, and discussion groups. Students continue to practice taking patient histories through role playing and simulated medical chart summaries.

B11 - Clinical Experience I
Under supervision of Electroneurodiagnostic Technologists, students gain clinical laboratory experience through the CARS (Clinical Affiliate Rotation Sites) program. During Grading Periods 2, 3, 4, and 5, students gain hands-on training and experience in the real world of electroneurodiagnostic labs.
During this Grading Period, the student will begin to rotate through various affiliate medical facilities in the Tampa Bay area. During this portion of the clinical experience, the students are watched very closely and are directly supervised. Students must keep a clinical experience log of each patient they work with in each Clinical Experience course. Students will be rated on each patient contact and procedure in which they engage. The Program Instructor, the Lab Supervisor or the affiliate Technologists at each site will record the areas of competence or inadequacy on the log. The Program Instructor, the Lab Supervisor or the affiliate Technologists at each site will designate a grade and initial the student's clinical experience log. This log will be used in grading the student.

Initially the student will only observe the tests performed in these labs. Students will begin by reviewing patient charts and taking patient histories. Gradually the student will begin to take a more active role in the testing procedures. Students will assist the technologist performing the procedure by calibrating the instrument, performing a simplified patient history and facilitating the test procedures. After a few weeks of observation, the student will take a more active role in the testing procedures. Students will begin to measure the patient's heads using the 10\20 system. The student will apply the electrodes. Students will also perform the basic EEG recording, as well as the other basic END recordings (EP and NCV).

**B12 - EEG Theory and Techniques II**  
This course will further cover the theory and techniques used in Electroneurodiagnostic clinical procedures. Some items covered are: artifacts, normal adult patterns, abnormal adult patterns, normal premature patterns, normal children patterns, portable recordings, electrocerebral silence recordings, special electrodes and special activational procedures, the EEG Technologist role and responsibilities, patient history taking, EEG terminology, the International 10\20 Measurement System, hospital montages, EEG frequencies, activational procedures, and montage selection.

**ETN0007 – Electroneurodiagnostic Technologist 3 (235 clock hours)**

**B13 - Basic Arrhythmias**  
This course will cover basic EKG Arrhythmias. The main focus will be on life-threatening rhythms and the appropriate procedures the EEG technician should institute. The pathway for the electrical functioning and pumping of the heart is covered. How an EKG is performed is discussed. The basic normal and abnormal EKG rhythms are examined.

**B14 - Clinical Sciences I**  
This course focuses on the neurological disorders and the corresponding EEG correlates. There are three Grading Periods of this material. This course will cover new material, as well as further detail topics covered in the Instrumentation courses and the EEG theory and techniques courses.

New topics will include: Medications, Epilepsy, Headaches, CNS Tumors, Cerebral Vascular Diseases, CNS Infections, Metabolic Disorders, Endocrine Disorders, Head Trauma, Degenerative Disorders, Movement Disorders and Psychiatric Disorders.

Some items covered in more detail are: activational procedures, montage selection, artifacts, normal adult patterns, abnormal adult patterns, normal premature patterns, normal children patterns, portable recordings, electrocerebral silence recordings, special electrodes, special activational procedures, specific EEG patterns, the EEG Technologist role and responsibilities, patient history taking, EEG terminology, the International 10\20 Measurement System, hospital montages, and EEG frequencies.
B15 - Neurologic Studies I
This course will emphasize the neuroanatomy, neurophysiology, and neuropathology of the nervous system as they apply toward electroneurodiagnostics. These topics are covered over three Grading Periods. Each will build upon the other, and each course will become more detailed.

B16 - Neurodiagnostics I
This course will concentrate on the other tests an Electroneurodiagnostic technician may perform. This course will introduce the student to the diversified field they are entering. The main emphasis will be placed upon the basic techniques and theory of the evoked potentials, nerve conduction, and polysomnography. There is a laboratory section that complements this course in which the student will practice the techniques. Long term epilepsy monitoring, surgical monitoring, brain mapping, ERG's and ENG's will be discussed.

B17 - Neurodiagnostics Lab I
Through demonstrations, hands-on practice, performance practicums, and discussions the student will practice electroneurodiagnostic procedures encountered by technologists in the field. The main emphasis will be on the three evoked potential modalities, and nerve conduction. 
During the lab section students are actively involved in hands-on workshops, short lectures, discussion groups, and demonstrations UNDER direct supervision of the program instructor. Emphasis is placed on the 10/20 system of electrode measurement and electrode application techniques. Students will perform EEG, EP’s, NCV’s, PGS’s, Digital EEG’s and Ambulatory EEG’s.

Students must be willing to be a simulated patient throughout the entire Electroneurodiagnostic Technician program. Students must practice on each other during the year. Students will be expected to submit to all Electroneurodiagnostic tests.

Students must pass clinical competency standards for measurement, accuracy, and time. Students must pass these competencies in order to remain in the program.

The competency trials are all job related duties and are in accordance with expected accuracy and time restraint guidelines by employers. The competency trials are also in accordance with the standards set by the American Board of Registered Electroneurodiagnostic Technologists.

B18 - Clinical Experience II
Under supervision of Electroneurodiagnostic Technologists, students gain clinical laboratory experience through the CARS (Clinical Affiliate Rotation Sites) program. During Grading Periods 2, 3, 4, and 5, students gain hands-on training and experience in the real world of electroneurodiagnostic labs.

During Grading Period 4, the student will rotate through various affiliate medical facilities in the Tampa Bay area. During this portion of the clinical experience, the students are directly supervised but begin to work more independently and are encouraged to demonstrate more initiative on EEG recordings. Students must keep a clinical experience log of each patient they work with in each Clinical Experience course.

Students will be rated on each patient contact and procedure they engage. The Program Instructor, the Lab Supervisor or the affiliate Technologists at each site will record the areas of competence or inadequacy on the log and will designate a grade and initial the student’s clinical experience log. This log will be used in grading the student.
Students will take patient histories. Students will assist the technologist performing the procedure. Students will measure the patients' heads using the 10\20 system. The student will apply the electrodes. Students will clean all paste, glue and marks from the patient. Students will perform EEG recordings, as well as basic EP, NCV and PSG recordings.

**ETN0008 – Electroneurodiagnostic Technologist 4 (250 clock hours)**

**B19 – EEG Psychosocial Issues**
This course is designed to give the student a perspective of the psychological and social issues a person afflicted with a disease such as epilepsy might encounter in their everyday lives. The student is exposed to psychological principles, psychological disorders, therapies, anxiety disorders, personality disorders, affective disorders, EST, ECT therapy, psychological theories, pharmacotherapy, alcohol abuse, drug abuse, and death issues.

**B20 - Clinical Sciences II**
This course further focuses on the neurological disorders and the corresponding EEG correlates. There are three Grading Periods of this material. New topics will include: Anticonvulsants, CNS Infections, Metabolic Disorders, Endocrine Disorders, Head Trauma, Degenerative Disorders, Movement Disorders, Psychiatric Disorders, Medications, Epilepsy, Headaches, CNS Tumors, Cerebral Vascular Diseases, Idiopathic Epilepsy, and Status Epilepticus.

Some items covered in more detail are: Specific EEG patterns, the EEG Technologist role and responsibilities, patient history taking, EEG terminology, the International 10\20 Measurement System, hospital montages, EEG frequencies, activational procedures, montage selection, artifacts, normal adult patterns, abnormal adult patterns, normal premature patterns, normal children patterns, portable recordings, electrocerebral silence recordings, special electrodes, and special activational procedures.

**B21 - Neurologic Studies II**
This course will emphasize the neuroanatomy, neurophysiology, and neuropathology of the nervous system as they apply toward electroneurodiagnostics. This is a continuation of Neurological Studies I. These topics are covered over three Grading Periods. Each will build upon the other, and each course will become more detailed.

**B22 - Neurodiagnostics II**
This course will further concentrate on the other tests an Electroneurodiagnostic technician may perform. This course will introduce the student to the diversified field they are entering. The main emphasis will be placed upon the basic techniques and theory of the evoked potentials, nerve conduction, and polysomnography. There is a laboratory section that complements this course in which the student will practice the techniques. Long term epilepsy monitoring, surgical monitoring, brain mapping, ERG's and ENG's, will be discussed.

**B23 - Neurodiagnostic Lab II**
Through demonstrations, hands-on practice, performance practicums, and discussions the student will continue to practice electroneurodiagnostic procedures encountered by technologists in the field. The main emphasis will be on the three evoked potential modalities and nerve conductions and polysomnographic recordings.

During the lab section students are actively involved in hands-on workshops, short lectures, discussion groups, and demonstrations under direct supervision from the program instructor. Emphasis is placed on 10\20 system of electrode measurement and electrode application techniques. Students record these tests from each other and must get readable recording.
Students will perform EEG’s, all EP’s, NCV’s, digital EEG and ambulatory recordings.

Students must pass clinical competency standards for measurement accuracy and time. Students must pass these competencies in order to remain in the program.

Students must be willing to be a simulated patient throughout the entire Electroneurodiagnostic Technician program. Student must practice on each other during year. Students will be expected to submit to all Electroneurodiagnostic tests.

The competency trials are all job related duties and are in accordance with expected accuracy and time restraint guidelines by employers. The competency trials are also in accordance with the standards set by the American Board of Registered Electroneurodiagnostic Technologists.

**B24 - Clinical Experience III**
Under supervision of Electroneurodiagnostic Technologists, students gain clinical laboratory experience through the CARS (Clinical Affiliate Rotation Sites) program. During Grading Periods 2, 3, 4, and 5, students gain hands-on training and experience in the real world of electroneurodiagnostic labs.

During Grading Period 4, the student will rotate through various affiliate medical facilities in the Tampa Bay area. During this portion of the clinical experience, the students are directly supervised but begin to work more independently and are encouraged to demonstrate more initiative on EEG recordings. Students must keep a clinical experience log of each patient they work with in each Clinical Experience course.

Students will be rated on each patient contact and procedure they engage. The Program Instructor, the Lab Supervisor or the affiliate Technologists at each site will record the areas of competence or inadequacy on the log and will designate a grade and initial the student's clinical experience log. This log will be used in grading the student.

Students will take patient histories. Students will assist the technologist performing the procedure. Students will measure the patients' heads using the 10/20 system. The student will apply the electrodes. Students will clean all paste, glue and marks from the patient. Students will perform EEG recordings, as well as basic EP, NCV and PSG recordings.

**B25 - Employability Skills**
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter.

Computers are available for student use in the HUB and in classrooms.

**ETN0009 – Electroneurodiagnostic Technologist 5 (250 clock hours)**

**B26 - Clinical Sciences III**
This final course in clinical sciences further focuses on the neurological disorders and the corresponding EEG correlates. New topics will include: ASET guidelines, Primary tumors, cerebral hemorrhages, herpes encephalitis, Idiopathic Epilepsy, Status Epilepticus, anticonvulsants, CNS Infections, Metabolic Disorders, Endocrine Disorders, Head Trauma, Degenerative Disorders, Movement Disorders, Psychiatric Disorders, Medications, Epilepsy, Headaches, CNS Tumors, and Cerebral Vascular Diseases.

Some items covered in more detail are: abnormal adult patterns, normal premature patterns, normal children patterns, abnormal children patterns, portable recordings, electrocerebral
silence recordings, special electrodes and special activational procedures, specific EEG patterns, special activational procedures, montage selection, and artifacts.

**B27 - Neurologic Studies III**
This course will emphasize the neuroanatomy, neurophysiology, and neuropathology of the nervous system as they apply toward electroneurodiagnostics. This is the final course in the series on Neurological Studies.

**B28 - Neurodiagnostics III**
This course will further concentrate on the other tests an Electroneurodiagnostic technician may perform. This course will introduce the student to the diversified field they are entering. The main emphasis will be placed upon the basic techniques and theory of the **Evoked Potentials, Nerve Conduction, and Polysomnography**. There is a laboratory section that complements this course in which the student will practice the techniques. Long term epilepsy monitoring, surgical monitoring, brain mapping, ERG's, and ENG's will be discussed.

**B29 - Neurodiagnostic Lab III**
Through demonstrations, hands-on practice, performance practicums, and discussions, the student will continue to practice electroneurodiagnostic procedures encountered by technologists in the field. The main emphasis will be on the three evoked potential modalities and nerve conduction records. During the lab section, students are actively involved in hands-on workshops, short lectures, discussion groups, and demonstrations. Under direct supervision from the program instructor, the majority of lab time is spent on actual hands-on techniques. Emphasis is placed on the 10\20 system of electrode measurement and electrode application techniques.

**B30 – Clinical Experience IV**
Under supervision of Electroneurodiagnostic Technologists, students gain clinical laboratory experience through the CARS (Clinical Affiliate Rotation Sites) program. During Grading Period 5, the students continue to rotate through various affiliate medical facilities in the Tampa Bay area. Students regularly accompany technologists to the operating room to assist in all aspects of monitoring. Students rotate through sleep labs in the evening to perform all PSG recordings. During this portion of the clinical experience, the students work more independently and are encouraged to demonstrate greater initiative on EEG, NCV, PSG and EP recordings. Students also rotate through various LTM labs.

Students must keep a clinical experience log of each patient they work with in each Clinical Experience course. Students will be rated on each patient contact and procedure in which they engage. The Program Instructor, the Lab Supervisor or the affiliate Technologists at each site will record the areas of competence or inadequacy on the log, designate a grade, and initial the student's clinical experience log. This log will be used in grading the student.

Students will take patient histories. Students will assist the technologist performing the procedure. Students will measure the patients' heads using the 10\20 system. The student will apply the electrodes. Students will clean all paste, glue, and marks from the patient and will perform the EEG, EP, PSG, and NCV recordings.

**B31 - Entrepreneurship**
The entrepreneurship course starts with an overview of the advantages and disadvantages of being your own boss and the personal characteristics needed to be successful. The importance of small business to the U.S. economy is emphasized. Specific information is given on starting and running a small business.
MASSAGE THERAPY

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>750 clock hours</td>
<td>H120405</td>
<td>0351350100</td>
</tr>
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</table>

FLDOE State Curriculum Framework:
  Link: • Massage Therapy (H120405)

Program Information: The program is 750 clock hours. This program is taught in English, in a traditional classroom setting, during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (750 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
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</table>

Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in the order shown below, according to school policies.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HSC0003</td>
<td>Basic Healthcare Worker</td>
<td>90 hours</td>
<td>31-9099</td>
</tr>
<tr>
<td>B</td>
<td>MSS0205</td>
<td>Massage Therapist 1</td>
<td>360 hours</td>
<td>31-9011</td>
</tr>
<tr>
<td>B</td>
<td>MSS0206</td>
<td>Massage Therapist 2</td>
<td>300 hours</td>
<td>31-9011</td>
</tr>
</tbody>
</table>

Licensure Information: Graduates are eligible to take the MBLEx exam, and after passing to apply for a Florida license.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/31-9099.00
Program Description:
The Massage Therapy program is designed to enhance the health-care profession by providing therapists who are well trained in the art of touch and who are mature and respectful when relating with clients as well as other health care professionals. Upon graduating, you will be adequately prepared to take and pass the MBLEx exam. After passing the exam, you will apply for Florida licensure.

Job Opportunities: The majority of Licensed Massage Therapists are self-employed. They contract their services to medical doctors, rehabilitation centers, chiropractors, health/exercise facilities and sports massage facilities. Some therapists work in hospital wellness centers or perform corporate chair massage. Many therapists travel to client’s homes to provide massage therapy treatments.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed with a grade of “C” or higher. A “C” is 70% - 79%.

MASSAGE THERAPY H120405 750 HOURS

HSC0003 – Basic Healthcare Worker (90 clock hours)

A1 - Health Science Core
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content includes communication skills as it applies to the professional medical environment; learning and study strategies; math and computational skills; legal and ethical practices; employability skills; health, safety, fire prevention, and security procedures; medical terminology; scientific principles based on fundamental body structure and function; infection control; HIV/AIDS; Blood Borne Pathogen awareness; CPR; First Aid; wellness and disease concepts; computer literacy; and representative skills performed by health care workers, such as vital signs. Students may need to complete HealthCenter21 online assignments outside of class, requiring the student to have access to a computer and the Internet.

MSS0205 – Massage Therapist 1 (360 clock hours)

B1 - Anatomy and Physiology I
This course has been designed to provide general knowledge about the healthy functions of the human body and the structures related to these functions. It is divided into eleven (11) units of study. Each unit will be taught separately, correlating each system’s contributions to the total function of the body, as a synergistic and unified whole.

B2 - Basic Massage Theory and History I
Massage Theory and History I introduces the student to the basic theories and principles of therapeutic massage. The effects of massage on the body systems as well as the physiological and psychological aspects of massage will be explored along with the history of massage. The student will learn the preparation skills needed to become a competent massage therapist. The techniques of Swedish massage will be introduced. Instruction will focus on developing a client/therapist relationship and developing a loving, compassionate spirit. The book, The Educated Heart will be read and explored by the student as a guideline for learning to take care of self and to develop professional boundaries with client.
B3 - Kinesiology I
This course is an introduction to Kinesiology. The student will learn basic anatomical terminology, as well as being able to identify the planes and movements of the body. The student will also be able to identify the bones of the face and skull and the three abnormal curves of the spinal column. The student will learn to palpate the various landmarks on these bones. The student will also learn the names of all of the bones of the body.

B4 - Clinical Practicum I
Clinical Practicum I will complement Massage Theory I by applying the theories and principles already introduced. The instructor will demonstrate the techniques of therapeutic massage and the student will begin to practice these techniques on his classmates. This course will emphasize the importance of developing the art of good touch and the value of learning to listen with your hands and your heart. This course will focus on developing good palpation skills and good body mechanics, as well as perfecting techniques and learning a basic massage routine. Students will begin practicing their massage skills on their family and friends.

B5 - Intro to Theory and Practice of Hydrotherapy
This course is an introduction to Hydrotherapy. The student will learn basic principles of Hydrotherapy. The student will learn how to apply heat packs and cold packs and perform a foot soak, scrub and massage treatment to various classmates.

B 6 - Kinesiology II
This course is a continuation of Introduction to Kinesiology. The student will:

- Identify the origin, insertion, and action of the muscles located on the upper part of the body
- Master the ability to identify individual bones/muscles and gain a better understanding of the relationship between the various muscle groups.
- Identify major vessels, nerves, as well as, endangerment sites found in the upper region of the body.

B7 - Business, Career Development I
This course will include an overview of:

a. Employment opportunities
b. The concept of building a career
c. Learning to communicate in an effective manner

Each student will develop their brochure and business card.

B8 - Allied Modalities I
This course will explore different types and styles of massage. The history and the principles of certain modalities will be researched by each student. Modalities/specialties outside of the scope of practice of massage will be identified.

B9 - Anatomy and Physiology II
This course is a continuation of Anatomy & Physiology I, and has been designed to provide general knowledge about the healthy functions of the human body and the structures related to these functions. It is divided into eleven (11) units of study. Each unit will be taught separately, correlating each system’s contributions to the total function of the body, as a synergistic and unified whole.
B10 - Pathology I
From the perspective of massage therapeutic intervention, the following will be explored: indications/ contraindications for massage; medical terminology; viruses, bacteria, fungi, parasites; hygiene practices for the massage therapist; the inflammatory process; stages of healing; and modalities used for various pathological conditions.

MSS0206 – Massage Therapist 2 (300 clock hours)

B11 - Pathology II
From the perspective of massage therapeutic intervention, the following will be explored: the mechanisms of disease, patterns of disease, common traditional medical regimes, common diagnostic procedures and the pathology of all body systems. This course is a continuation of Pathology I.

B12 - Basic Massage Theory and History II
Massage Theory II will discover and explore various massage techniques and the student will be encouraged to develop his own style of creativity. Integrated-style massage is woven in to the program. The focus of this course will be to learn assessment skills to evaluate the clients’ needs. Interviewing skills, communication skills, and listening skills will be explored.

B13 - Clinical Practicum II
This course will allow students the opportunity to continue practicing massage therapy on each other and to practice massage techniques on family and friends. The majority of the class time will be spent practicing and perfecting techniques, strokes, and ROM manipulations.

B14 - Florida Law and Rules, and Professional Ethics
This course will explore and discuss the Florida Massage Therapy Practice Act and the Rules of the Board of Massage Therapy (Chapter 480, F.S. and Rules 64B7-) as well as discuss the history of the massage profession. Students will explore leadership/human relations skills and discuss the ethical practice of massage therapy. The purpose of Chapter 456 will also be discussed.

B15 - Allied Modalities II
In Modalities II, Traditional Chinese Medicine (TCM) will be introduced to the student. The philosophy of Shiatsu; meridians, the concept of yin/yang, and the fundamentals of health will be discussed. NMT, Myofascial Release, Cranial Techniques, Prenatal/Infant Massage, Foot Massage/Reflexology and Facial/Scalp neck massage will be introduced to student.

B16 - Kinesiology III
This course is a continuation of the two previous Kinesiology courses. The student will:

- Identify the origin, insertion, and action of the muscles located on the lower part of the body
- Master the ability to identify individual bones/muscles and gain a better understanding of the relationship between the various muscle groups.
- Identify major vessels, nerves, as well as, endangerment sites found in the lower region of the body.

B17 - Business, Career Development II / Medical Errors
The student will design and develop his business brochure and business card. The ethical practice of massage therapy will be discussed. The concept of boundaries and confidentiality will be explored.
B18 - Theory and Practice of Hydrotherapy
This course will cover the principles and the theory of hydrotherapy. The student will have the opportunity to use hot packs, cold packs, ice treatments, salt glow treatment to lower legs and feet and paraffin wax treatment to hands.

B19 - Clinical Practicum III
Clinical Practicum III will be the Erwin Massage Clinical. Outside clients will be invited to participate in our massage clinical. This learning opportunity is for the student to experience massaging people with a variety of muscular dysfunctions and to set up a massage protocol for each individual client. The student will continue developing good palpation skills as well as practicing good body mechanics.

B20 - Business, Career Development III
The student will spend time developing a business outline. In the business outline, several criteria will be included such as his/her resume and cover letter; business card, brochure, policy statement, business start-up costs, type of business, competition, the type of people you want to attract, your basic marketing plan. Also, include your personalized informed consent form. You will also write out chapter objectives of several chapters in the Business Mastery book. Fill out applications online to take the MBLEx exam. You will be able to pay the cost of the exam and licensure online with your credit card. You will also include the 25 outside massages that you performed during the course of the massage program. You will include health history forms, informed consent, SOAP notes and client feedback forms.
MEDICAL ASSISTING

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
</tr>
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<tbody>
<tr>
<td>1300 clock hours</td>
<td>H170515</td>
<td>0351080102</td>
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**FLDOE State Curriculum Framework:**
Link: • Medical Assisting (H170515)

**Program Information:** The program is 1300 clock hours. This program is taught in English, in a traditional classroom (with lab) setting, during the day.

**Program Costs (2015-16 academic year):** Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

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**Technology Information:** Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments and using the software that comes with the textbook but are not required to do so.

**Course Sequence:** Courses must be successfully completed in the order shown below, according to school policies.

<table>
<thead>
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<tbody>
<tr>
<td>A</td>
<td>HSC0003</td>
<td>Basic Healthcare Worker</td>
<td>90 hours</td>
<td>31-9099</td>
</tr>
<tr>
<td>B</td>
<td>MEA0002</td>
<td>Introduction to Medical Assisting</td>
<td>250 hours</td>
<td>43-4171</td>
</tr>
<tr>
<td>B</td>
<td>MEA0501</td>
<td>Medical Office Procedures</td>
<td>75 hours</td>
<td>43-4171</td>
</tr>
<tr>
<td>C</td>
<td>MEA0521</td>
<td>Phlebotomist, MA</td>
<td>75 hours</td>
<td>31-9097</td>
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<tr>
<td>D</td>
<td>MEA0543</td>
<td>EKG Aide, MA</td>
<td>75 hours</td>
<td>31-9099</td>
</tr>
<tr>
<td>E</td>
<td>MEA0581</td>
<td>Clinical Assisting</td>
<td>230 hours</td>
<td>31-9092</td>
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<tr>
<td>E</td>
<td>MEA0530</td>
<td>Pharmacology for Medical Assisting</td>
<td>90 hours</td>
<td>31-9092</td>
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<tr>
<td>E</td>
<td>MEA0573</td>
<td>Laboratory Procedures</td>
<td>125 hours</td>
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<tr>
<td>E</td>
<td>MEA0506</td>
<td>Administrative Office Procedures</td>
<td>90 hours</td>
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<td>E</td>
<td>MEA0942</td>
<td>Practicum Experience</td>
<td>200 hours</td>
<td>31-9092</td>
</tr>
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</table>
Licensure Information: Upon successful completion of the program, graduates are eligible and highly encouraged to take the CMA (AAMA) certification exam.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/31-9099.00
http://www.onetonline.org/link/summary/31-9092.00
http://www.onetonline.org/link/summary/43-4171.00
http://www.onetonline.org/link/summary/31-9097.00

Program Entrance Requirements: A high school diploma, or equivalent, and a physical examination are required. Random drug screenings are required for students entering this program at their expense.

Program Accreditation: The Erwin Technical College Medical Assisting Program is accredited by the Accrediting Bureau of Health Education Schools, 777 Leesburg Pike, Suite 314 – N, Falls Church, VA 22043. Phone: (703) 917-9503.

Job Opportunities: Medical assistants practice in physician's private practice, outpatient clinics, HMO facilities, walk-in clinics, dialysis clinics, and in hospitals as scribes. Medical Assisting is listed among the top 20 fastest growth occupations for 2008-2018. See: http://www.ehow.com/list_6647555_top-10-medical-careers.html projected to be among the top 10 careers

Program Description:
The Medical Assisting program is designed to prepare students for employment in a physician's office or clinic with administrative and clinical skills that will be performed under the direct supervision of the physician and/or clinical supervisor.

Students in the Medical Assisting program are part of a comprehensive competency-based type of instruction. National certification is highly recommended through the American Association of Medical Assistants.

This program is designed to develop job competencies in using the telephone, scheduling appointments, preparing and maintaining medical records, maintaining files, preparing insurance forms, performing general bookkeeping procedures, handling office correspondence, preparing sterile equipment, assisting with examinations, administering emergency aid, performing pharmacy duties, assisting with physical therapy, performing hematology procedures, performing blood chemistry tests, performing urine tests and demonstrate knowledge of radiography.

This program also provides a 200-hour externship in community physicians' offices and clinics for the student to demonstrate proficiency in both administrative and clinical areas, to demonstrate ability to adjust to changing office situations and to demonstrate ability to work with others in a clinical setting. Students are not paid during this work experience and are required to work the assigned scheduled office hours.

Random drug screenings are required for students entering this program at their expense.

The Erwin Technical College Medical Assisting Program is accredited by the Accrediting Bureau of Health Education Schools, 777 Leesburg Pike, Suite 314, N. Falls Church, VA 22043. Phone: 703 917-9503
Job Opportunities: Medical assistants practice in physician’s private practice, outpatient clinics, HMO facilities, walk-in clinics, dialysis clinics, and in hospitals as scribes. Medical Assisting is listed among the top 20 fastest growth occupations for 2008-2018. See: http://www.ehow.com/list_6647555_top-10-medical-careers.html projected to be among the top 10 careers

A high school diploma, or equivalent, and a physical examination are some of the requirements of this program.

To qualify for a Vocational Certificate, the following courses/course components must be satisfactorily completed:

**MEDICAL ASSISTING**

**H170515**  
**1300 HOURS**

**HSC0003 – Basic Healthcare Worker (90 clock hours)**

**A1 - Health Science Core**
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content includes communication skills as it applies to the professional medical environment; learning and study strategies; math and computational skills; legal and ethical practices; employability skills; health, safety, fire prevention, and security procedures; medical terminology; scientific principles based on fundamental body structure and function; infection control; HIV/AIDS; blood borne pathogen awareness; CPR; First Aid; wellness and disease concepts; computer literacy; and representative skills performed by health care workers, such as vital signs. Students may need to complete HealthCenter21 online assignments outside of class, requiring the student to have access to a computer and the Internet.

**MEA0002 – Introduction to Medical Assisting (1 of 2) (250 clock hours)**

**B1 – Introduction to Medical Assisting**
This component addresses the duties and functions of medical assistants and their relationship with the health care team. The medical assistant’s legal and ethical responsibilities will be heavily emphasized along with HIPAA regulations and patient’s rights. Patient education, psychology of health care and nutrition are addressed. Through this component the student gains the knowledge necessary to become a source of guidance for the patient.

**B2 – Medical Terminology**
This component covers medical terminology and some anatomy and physiology, relevant to the following: prefixes, suffixes, basic body structure, the integumentary system, the digestive system, the respiratory system, the musculoskeletal system, the genitourinary system, the female reproductive system, the endocrine system, the nervous system and special senses.

**B3 - Anatomy & Physiology**
This course includes structure and function, and common disorders of the following chapters/systems: Organization of the Body, Skeletal System, Muscular System, Respiratory System, Cardiovascular System, Immune System, Nervous System, Sensory System, Endocrine System, Reproductive System, Digestive System, Integumentary System and Urinary System. Recognizing and responding to emergency situations in the office, maintaining a safe and secure medical environment will also be covered as well as Emergency Preparedness in the personal arena.
MEA0501 – Medical Office Procedures (2 of 2) (75 clock hours)

B4 - Medical Office Receptionist
This course includes principles of basic clerical and medical office duties. The components include communication skills, receiving patients and visitors, organization and managing supplies, electronic medical records, filing, telephone management, management of the appointment schedule as well as physician travel schedule and keyboarding in the medical office.

MEA0521 – Phlebotomist, MA (75 clock hours)

C1 - Hematology/Phlebotomy
This course teaches anatomic structure and function of the Circulatory System, and the composition and function of blood, as well as the methods of blood specimen collections.

MEA0543 – EKG Aide, MA (75 clock hours)

D1 - Electrocardiography
This course teaches the student to do an EKG and includes basic anatomy of the heart, patient preparation, equipment operation, troubleshooting and documentation.

MEA0581 – Clinical Assisting (1 of 5) (230 clock hours)

E01 - Clinical Assisting
This course provides demonstration and practice of clinical assisting skills involving physical therapy procedures, measurement of vital signs, monitoring and addressing problems with an IV site, skills involving the ear and hearing testing, the eye and vision testing, respiratory testing and treatments, assisting with the CPE as well as specialty exams such as OB/GYN, rectal exam and the infant exam.

E02 - Medical Asepsis/Radiology
This course includes fundamentals of microbial control through medical and surgical aseptic techniques, including but not limited to disinfection, sanitation and sterilization, and assisting with office surgery. Also included in this course is hands-on practice of aseptic procedures.

MEA0530 – Pharmacology for Medical Assisting (2 of 5) (90 clock hours)

E03 - Pharmacology
This course teaches basic principles of pharmacology including legal and ethical considerations, knowledge of drug categories and actions of drugs, and brand and generic drug name recognition, calculation of dosage, and methods of administering medication.

MEA0573 – Laboratory Procedures (3 of 5) (125 clock hours)

E04 - Clinical Laboratory and Diagnostic Procedures
In this component the student will learn various urine tests, how to properly collect the necessary specimens and performance of these tests as well as performance of basic diagnostic blood laboratory procedures and preparing the patient, including pre- and post-instructions, for diagnostic radiological procedures.
**MEA0506 – Administrative Office Procedures (4 of 5) (90 clock hours)**

**E05 - Administrative Assisting**
This course covers practical applications of medical office bookkeeping, payroll, and third party billing. The student also reviews basic English rules to assist in the management of outgoing correspondence. Competency testing of knowledge and skills is performed for every course.

**MEA0942 – Practicum Experience (5 of 5) (200 clock hours)**

**E06 – Externship 1**
Students prepare for employment in a medical office or clinic and have an opportunity to practice and observe those duties performed by medical assistants in an actual medical office.

**E07 – Externship 2**
Students prepare for employment in a medical office or clinic and have an opportunity to practice and observe those duties performed by medical assistants in an actual medical office.
MEDICAL CLINICAL LABORATORY TECHNICIAN - ATD

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
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FLDOE State Curriculum Framework:
http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/2015-16-frameworks/health-science.stml

Link: • Medical Clinical Laboratory Technician (ATD – 0351100401 / H170600)

Program Information: The program is 1515 clock hours. This program is taught in English, in a traditional classroom (with attached laboratory) setting, during the day. During externship, students attend additional hours per day, and as a result, graduate in about 16 months.

ATD Information: Students entering an ATD program must have a high school diploma or GED. Through Florida Department of Education policies, graduates of an ATD program at a vocational technical center will be awarded some college credits upon enrollment in a corresponding program at a community college within three years following the date of the award of an ATD.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1515 clock hrs)</th>
<th>Fees</th>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students do need to have access off campus to a computer with Internet connectivity and word processing software during their externship.

Course Sequence: Courses must be successfully completed in the order shown below, according to school policies.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>HSC0003</td>
<td>Basic Healthcare Worker</td>
<td>90 hours</td>
<td>31-9099</td>
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<tr>
<td>B</td>
<td>MEA0520</td>
<td>Phlebotomist</td>
<td>75 hours</td>
<td>31-9097</td>
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<tr>
<td>C</td>
<td>MLT0009</td>
<td>Introduction to Medical laboratory Technology</td>
<td>90 hours</td>
<td>29-2012</td>
</tr>
<tr>
<td>C</td>
<td>MLT0640</td>
<td>Clinical Chemistry</td>
<td>255 hours</td>
<td>29-2012</td>
</tr>
<tr>
<td>C</td>
<td>MLT0335</td>
<td>Hematology and Hemostasis</td>
<td>280 hours</td>
<td>29-2012</td>
</tr>
<tr>
<td>C</td>
<td>MLT0220</td>
<td>Urinalysis and Body Fluids</td>
<td>135 hours</td>
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<tr>
<td>C</td>
<td>MLT0450</td>
<td>Microbiology and Parasitology</td>
<td>275 hours</td>
<td>29-2012</td>
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<tr>
<td>C</td>
<td>MLT0505</td>
<td>Immunology</td>
<td>60 hours</td>
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<td>C</td>
<td>MLT0520</td>
<td>Immunohematology</td>
<td>255 hours</td>
<td>29-2012</td>
</tr>
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</table>
Licensure Information: Graduates are eligible and highly encouraged to take the ASCP, AMT, or AAB certification exam and become licensed in the State of Florida.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/31-9099.00
http://www.onetonline.org/link/summary/31-9097.00
http://www.onetonline.org/link/summary/29-2012.00

Program Accreditation: The Erwin Technical College Medical Clinical Laboratory Technician (ATD) program is accredited by the Accrediting Bureau of Health Education Schools (ABHES), 777 Leesburg Pike, Suite 314 – N., Fall Church, VA 22043. Phone: (703) 917-9503.

Program Description:
The program is designed to train students to perform routine tests in the laboratory departments of chemistry, bacteriology, parasitology, urinalysis, hematology, serology, and blood bank. The technician finds causes of diseases through diagnostic testing procedures so that the physician can find the cures. The program consists of approximately one half year of internship in Tampa's hospitals or a private reference laboratory.

Students completing the course will receive 40 hours of credit toward an Associate Degree at any community college in the State of Florida that offers the Medical Laboratory Technical Program.

Special entrance requirements: high school graduates or associate degree or bachelor's degree. Enrollment is once a year. Physicals are required for admission to the program. Applicants should be aware that the State of Florida Department of Health may prohibit a graduate licensure if there is an arrest record. Criminal background checks and a random drug screening are required for students entering this program.

Prerequisite skills: Medical Laboratory Technicians have certain common characteristics. They are problem solvers, like challenge and responsibility. They are accurate in task performance, are reliable, emotionally stable, work under pressure and stress, able to finish a task and communicate well. They set high standards for themselves and expect quality in the work they do. They are committed to their profession.

Job Opportunities: Students have a number of career choices: private laboratories, hospitals, walk in clinics, public health departments, doctor’s offices and university laboratories. There are opportunities for advancement if you continue your education in this field.

All Medical Laboratory personnel, in order to work in the state of Florida, must be licensed. This is accomplished by taking national certification exams offered by the ASCP (American Society of Clinical Pathologists), AMT (American Medical Technologists) or the AAB (American Association of Bioanalysts).

To qualify for an Applied Technology Diploma, the following courses must be satisfactorily completed with a GPA of 2.0 or greater.

The issuing of a diploma is not contingent upon the student passing an external certification or licensure exam.
HSC0003 – Basic Healthcare Worker (90 clock hours)

A1 - Health Science Core
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content includes communication skills as it applies to the professional medical environment, learning and study strategies, math and computational skills, legal and ethical practices, employability skills, safety and security procedures, medical terminology, scientific principles based on fundamental body structure and function, infection control, HIV/Bloodborne Pathogen awareness, CPR, First Aid, wellness and disease concepts, computer literacy, and representative skills performed by health care workers, such as vital signs and infection control techniques.

MEA0520 – Phlebotomist (75 clock hours)

B1 - Phlebotomy
This course is designed to train the students to perform phlebotomy procedures to obtain blood for laboratory analysis. Instruction is given in anatomy and physiology relative to phlebotomy procedures, blood collection equipment and supplies, venipuncture collection procedures, skin puncture procedures, special collection procedures, nonblood specimens and tests, quality assurance, specimen processing, communications and computers.

MLT0009 – Introduction to Medical Laboratory Technology (90 hours)

C1 - Introduction to Medical Laboratory Technician Theory
This course includes instruction in basic theory and laboratory techniques in microbiology, chemistry, hematology and urinalysis. Urinalysis includes discussion of the anatomy and physiology of the urinary system; specimen collection & preservation; and physical, chemical, and microscopic tests. Microbiology includes discussion of sterilization; disinfection; gram stain; isolation techniques; inoculation and transfer of cultures; and use of the microscope. Chemistry includes discussion of metric measurement; glassware; pipets; reagent preparation; balances; spectrophotometry; calibration; standards; controls; and normal and abnormal physiology. Hematology includes discussion of formed elements of the blood; blood smear preparation/staining; differential counts; microhematocrit; bleeding/clotting times; hemoglobin tests; calculation of red blood cell indices; and normal and abnormal physiology. This course also includes instruction in Laboratory Information Systems (LIS) including accessioning, order entry and result reporting.

C2 - Introduction to Medical Laboratory Technician Lab.
The student will perform basic CLIA “waived” procedures in chemistry, hematology, urinalysis, and microbiology.

MLT0640 – Clinical Chemistry (255 hours)

C3 - Chemistry Theory
Chemistry begins with an introduction to basic chemistry to include periodic table, atoms, molecules, electron configuration, molecular weight, percent composition, formulas, compounds, solutions, dilutions, quality control and instrumentation.

The remaining portion of the course consists of theory of operation of instruments to include physical and chemical principles, application/use of instruments; theory and application of
physiological biochemistry to include normal and abnormal physiology, test procedures, interpretation, and quality control applied to carbohydrates; electrolytes; acid/base balance; proteins; NPN compounds; enzymes; lipids; the cardiac markers; direct and indirect bilirubin; trace elements; toxicology; therapeutic drug monitoring; and endocrinology.

C4 - Chemistry Lab
The student will perform the following tests using the appropriate instrumentation or manual methodology: Glucose, BUN, Creatinine, Sodium, Potassium, Chloride, Calcium, Total Protein, Albumin, AST, ALT, Cholesterol, TBili, T4, TSH, and protein electrophoresis. This course also includes instruction in the Laboratory Information System. (LIS)

MLT0335 – Hematology and Hemostasis (280 hours)
C9 - Hematology Theory
This course includes instruction in cellular morphology and development, blood cell counts, hemoglobin, hematocrit, red blood cell indices, sedimentation rate, differential counts, erythrocyte disorders and anemias, leukocytic disorders, and leukemias, hemostasis, and instrumentation.

C10 - Hematology Lab
Students will perform routine hematological and coagulation procedures using manual procedures and instrumentation achieving results within established quality control procedures.

MLT0220 – Urinalysis and Body Fluids (135 hours)
C7 - Urinalysis Theory
This course includes instruction in: renal physiology, specimen collection and handling, routine urinalysis (physical and chemical testing), microscopic examination, interpretation of results, quality control and principles and procedures of body fluid analysis.

C8 - Urinalysis Lab
This course provides the hands-on laboratory testing of urine to include the following: physical characteristics (color, transparency, specific gravity, and pH), chemical testing for glucose, ketones, protein, bilirubin, blood, urobilinogen, nitrites, leukocyte esterase, and microscopic examination of the urinary sediment. In addition, instruction will be given in the physical, chemical, and microscopic evaluation of common body fluids.

MLT0450 – Microbiology and Parasitology (275 hours)
C5 - Microbiology Theory
Instruction is given in bacteriology including: taxonomy/classification, physiological requirements, asepsis/sterilization, safety, media (classification/preparation/inoculation), staining procedures, biochemical testing and identification, antibiotic susceptibility testing, quality control, microscope, and diseases associated with bacteria. An brief overview of mycology will be included. Instruction will also be given in parasitology including: protozoa, nematoda, and cestoda terminology, common and scientific names, geographical locations where parasites are found, life cycles, specimen requirements, and procedures for identification of the parasites, and major pathology and symptoms.

C6 - Microbiology Lab
Students will perform various laboratory techniques for the identification of normal and pathogenic microorganisms. Special unknowns are given to each student for identification following class identification of microorganisms with the instructor. Microscopic morphology and colony characteristics are described. Specimens are prepared and examined for identification of ova and
parasites. Antimicrobial drug sensitivity testing will also be performed.

**MLT0505 – Immunology (60 hours)**

C11 - Immunology Theory
This course includes instruction in adaptive and natural immunity, the immune system, the immune response, cells of the immune system, antigen and antibody reactions, complement, interleukens, major histocompatibility complex, hypersensitivity reactions, immunoglobulins structure and function, and safety techniques. In addition, instruction is given in disease processes and laboratory tests associated with bacterial, viral, rickettsial, and autoimmune diseases. Syphilis, C-Reactive protein, rheumatoid arthritis, infectious mononucleosis, hepatitis, rubella, cytomegalovirus, HIV, lupus erythematosus, Group A strep, and Lyme disease are discussed. Principles of immunologic methods are discussed including agglutination, precipitation, flocculation, complement fixation, labeled immunoassays, immunolectrophoresis, and molecular techniques.

C12 - Immunology Lab
Students will perform basic agglutination, precipitation, and labeled immunoassay procedures in serology to test for syphilis, rheumatoid arthritis, viral infections, infectious mononucleosis, C-reactive protein, streptococcal infections, influenza, and pregnancy. In addition, students will perform serial dilutions to determine antigen/antibody titers.

**MLT0520 – Immunohematology (255 hours)**

C13 - Blood Bank Theory
This course includes instruction in the inheritance of the ABO blood group, Rh blood group and other blood groups including the Duffy, Lewis, MNSs, Lutheran, Kidd, and Kell group; antigen-antibody reactions due to transfusions, pregnancy or autoimmune disease; and direct/indirect antiglobulin tests to include antibody detection, antibody identification, and compatibility testing. In addition, elution, absorption, enzyme testing and the rationale for each test will be covered.

C14 - Blood Bank Lab
Students will perform routine immunohematological procedures to include antigen and antibody tests to establish ABO group and Rh, routine compatibility test, antibody screening, single and multiple antibody identification tests, direct antiglobulin tests, and direct antigen tests. Students will also prepare a red blood cell suspension, select the proper suspending medium for red blood cells, grade and interpret agglutination reactions, perform manual and automated cell washing procedures, and perform quality control on blood bank reagents.

C15-C19 - Clinical Externships
Urinalysis, Immunology (Serology), Microbiology, Chemistry, Blood Bank, Hematology
Clinical Externship consists of approximately five months in one of the following facilities: Brandon Regional Hospital; Lab Corp; St. Joseph’s Hospital; Florida Hospital Tampa; South Florida Baptist Hospital; Bond Clinic; Watson Clinic; Lakeland Regional Medical Center; Bayfront Health Dade City; and Florida Medical Clinic. Students will be under the supervision of lab personnel and will perform routine lab tests in each of the following areas: Chemistry; Urinalysis; Microbiology; Immunology; Hematology; and Blood Bank. Assignment of clinical internship will be made by and scheduled by the program instructors.
MEDICAL CODER/BILLER - ATD

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>1110 clock hours</td>
<td>H170530</td>
<td>0351070715</td>
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Link: • Medical Coder/Biller (ATD – 0351070713 / H170530)

**Program Information:** The program is 1110 clock hours. This program is taught in English, in a traditional classroom setting, during the day.

**ATD Information:** Students entering an ATD program must have a high school diploma or GED. Through Florida Department of Education policies, graduates of an ATD program at a vocational technical center will be awarded some college credits upon enrollment in a corresponding program at a community college within three years following the date of the award of an ATD.

**Program Costs (2015-16 academic year):** Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
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<th>Florida Resident Tuition (1110 clock hrs)</th>
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<th>Certification Exams</th>
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**Technology Information:** Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments and using the software that comes with the textbook but are not required to do so.

**Course Sequence:** Courses must be successfully completed in the order shown below, according to school policies.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
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<th>Length</th>
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<tr>
<td>A</td>
<td>HIM0009</td>
<td>Introduction to Health Information Technology*</td>
<td>90 hours</td>
<td>29-2099</td>
</tr>
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<td>B</td>
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<td>HIM0093</td>
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<td>320 hours</td>
<td>29-2071</td>
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</table>

* Students who have taken the Health Core (HSC0003) previously as part of this program are not required to take HIM0009 to complete the program. These students should continue on to OCP B. Beginning in 2011-12 new students should be enrolled in HIM0009 as the first course in the program.
**Licensure Information:** Graduates are eligible and highly encouraged to take the CCA, CCS or CPC certifying exam.

**Career Information (SOC Codes):**
http://www.onetonline.org/link/summary/29-2099.00  
http://www.onetonline.org/link/summary/29-2071.00

**Program Description:**
The Medical Billing and Coding Specialist program is designed to prepare students for employment in a variety of health care settings as an entry level coder, medical record coder or medical biller/coder.

The medical coder plays an important role in the collection, storage and retrieval of health data and with much of the billing process involving coded information, the coder’s accuracy affects the financial security of a medical care institution.

The content includes, but not limited to, medical terminology, anatomy and physiology, basic and advanced coding systems (ICD and CPT), fundamentals of disease process including pharmacology, health care delivery systems, basics of medical records services, medical record content, ethical and legal responsibilities, safety and security procedures, basic data processing, knowledge of medical billing including completion of CMS 1500 forms and employability skills.

This program is part of the Health Information Management or Office System Technology AS degree and guarantees transfer of credit of 37 hours toward an AS degree. Minimum entrance requirements for this program include a high school diploma or GED.

Criminal background checks and random drug screenings are required for students entering this program.

**Job Opportunities:** Skilled workers are in demand and there are excellent opportunities for career choices. Besides working in a medical records department of acute care hospitals, coders work in ambulatory setting, specialty hospitals, long-term care facilities, rehabilitation centers, insurance companies, review agencies, law firms and contract agencies designed to provide temporary services to the aforementioned facilities.

To qualify for an Applied Technology Diploma, the following courses must be satisfactorily completed:

**MEDICAL CODER/BILLER-ATD**  H170530  1110Hours

**HIM0009 – Introduction to Health Information Technology (90 clock hours)**

**A01 – Introduction to Health Information Technology**
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content provides instruction in the competencies essential to the success in the occupation, including job knowledge, job skills, work habits and attitudes, and job-related health, safety and fire-prevention. The content also includes an understanding of healthcare delivery systems and health occupations as well as professional associations, communication skills as it applies to the professional medical environment, uses of health data and health record, electronic health record medical terminology, legal and ethical practices including HIPAA, computer literacy, and employability skills.
HIM0091 – Medical Coder/Biller 1 (350 clock hours)

B01 - Medical Record Content I
This course is an introduction to health information management including its history, functions and importance in the health area industry. Students will learn to read, interpret and manage the content of medical records in inpatient and outpatient settings. Methods of filing and retention of medical records will also be discussed.

B02 - Anatomy and Physiology I
This course addresses the organization of the body from cells to body systems. It is designed to provide general knowledge of the structure and function of the following: skin, skeletal system, muscular system, nervous system, the brain, sensory organs and endocrine system.

B03 - Medical Terminology I
This course covers medical terminology relevant to the following: prefixes, suffixes, basic body structure, skin, musculoskeletal system, nervous system including the brain, special senses, and endocrine system.

B04 - Disease Process I
This course exposes the student to etiologies, pathologies and treatments associated with common diseases of the skin, musculoskeletal system, nervous system, special senses and endocrine system.

B05 - Medical Record Content II
This course introduces classification systems and their use in medical statistical information and their impact in reimbursement. Computers and other information systems as they pertain to health care will be discussed. An overview of the legal aspects of medical record information will be presented. Students will also learn about quality control of medical care and the organizations that govern it.

B06 - Anatomy and Physiology II
This course is designed to provide general knowledge of the structure and function of the following: blood, cardiovascular system, lymph, immune system, respiratory system, digestive system, metabolism, fluids, urinary system and reproductive system. Development and the hereditary process will also be covered.

B07 - Medical Terminology II
This course covers medical terminology relevant to blood, cardiovascular system, lymph, immune system, respiratory system, digestive system, urinary system, and reproductive system. Oncological medicine is also infused into this course.

B08 - Disease Process II
This course exposes the student to etiologies, pathologies, and treatments associated with common diseases of the blood, cardiovascular system, lymph, immune system, respiratory system, digestive system, urinary system and reproductive system.

B09 - Pharmacology
This course provides an understanding of basic pharmacology concepts such as drug terminology, abbreviations, drug effects and dosages. The student will become familiar with drug reference books.
HIM0092 – Medical Coder/Biller 2 (350 clock hours)

B10 – Medical Legal Aspects
This course provides the student with an understanding of the legal requirements designed to safeguard health care information including specialized areas of concern in health information management.

B11 - Basic ICD Coding
This course introduces the student to the ICD-10 CM and ICD-10 PCS coding book including instructional notations and conventions. The student will locate and assign diagnostic codes and inpatient procedure codes manually to assigned exercises.

B12 - Basic CPT-4 Coding
This course introduces the student to the CPT-4 coding book including instructional notations and conventions. The student will locate and assign evaluation and management codes and outpatient procedure codes manually to assigned exercises.

B13 - Insurance I
This course acquaints the student with the role of the insurance billing specialist and the basics of health insurance including the CMS - 1500 claim form. It also provides an introduction to electronic data interchange and discusses methods for tracing delinquent claims. The computer software, Medisoft, is presented for completion of a project.

B14 - Hospital Billing
This course acquaints the student with the hospital billing process and introduces the UB-04 billing form as it pertains to inpatients and outpatients. Criteria for admission certification are reviewed. The student will become familiar with the role of Diagnostic Related Groups as they relate to hospital billing.

HIM0093 – Medical Coder/Biller 3 (320 clock hours)

B15 - Advanced CPT-4 Coding
This course builds on the Basic CPT-4 Coding course with more complex professional services and outpatient procedures. This course also prepares the student to correlate outpatient procedure codes with appropriate diagnoses. The student will also learn appropriate modifier assignment.

B16 - Insurance II
This course provides an understanding of the history, claim and reimbursement procedures of the following insurance plans: managed care systems, Blue Cross/Blue Shield, Medicaid, Medicare, Tricare and Workers' Compensation. Disability is also discussed. The computer software Medisoft is utilized for completion of a project.

B17 - Advanced ICD Coding
This course builds on the Basic ICD-10 CM and ICD-10 PCS coding courses with more complex diagnoses and inpatient procedures. This course also prepares the student to recognize complications and comorbidities in the medical record to maximize reimbursement. The student will also learn to sequence diagnostic codes and inpatient procedure codes appropriately.

B18 - Computer Coding
This course provides a hands-on opportunity for the student to search software for diagnoses, procedures and their pertinent codes in a timely and accurate manner.
B19 - Externship
The student will spend time in a health care facility, insurance office or billing service to observe and practice learned skills under the direction of that facility’s personnel. Assignment of externship location will be made by the program instructor.
NURSING ASSISTANT (ARTICULATED)

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>165 clock hours</td>
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FLDOE State Curriculum Framework:
http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/2015-16-frameworks/health-science.stml

Link: • Nursing Assistant (Articulated) (H170690)

Program Information: The program is 165 clock hours. This program is taught in English, in a traditional classroom setting, during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

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<th>Certification Exams</th>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in the order shown below, according to school policies.

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<tr>
<td>A</td>
<td>HSC0003</td>
<td>Basic Healthcare Worker</td>
<td>90 hours</td>
<td>31-9099</td>
</tr>
<tr>
<td>B</td>
<td>HCP0121</td>
<td>Nurse Aide and Orderly (Articulated)</td>
<td>75 hours</td>
<td>31-1014</td>
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</table>

Licensure Information: Graduates are eligible and highly encouraged to take the Florida CNA license exam.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/31-9099.00
http://www.onetonline.org/link/summary/31-1014.00

Program Description:
This 165-hour, Florida Board of Nursing Approved Nursing Assistant program, prepares students to pass the Florida Nurse Aide Certification examination and to achieve the entry level skills necessary to be employed as nursing assistants, nurse aides, and orderlies in nursing homes. Students who complete the 165 hours are awarded OCP A and B. If a student has completed OCP A at another institution within the previous two years, transfer credit will be awarded and a student may enter after the first 90 hours of class.
Job Opportunities: Clinics, congregate living facilities, home health care agencies, hospitals, private and governmental industry, private duty, nursing homes. All nursing assistants working in long term care in Florida must be certified by the State of Florida.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**Nursing Assistant**  
H170690  
165 HOURS

**HSC0003 – Basic Healthcare Worker (90 clock hours)**

**A1 - Health Science Core**
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content includes communication skills as it applies to the professional medical environment; learning and study strategies; math and computational skills; legal and ethical practices; employability skills; health, safety, fire prevention, and security procedures; medical terminology; scientific principles based on fundamental body structure and function; infection control; HIV/AIDS; blood borne pathogen awareness; CPR; First Aid; wellness and disease concepts; computer literacy; and representative skills performed by health care workers, such as vital signs.

**HCP0121 – Nursing Aide and Orderly (Articulated) (75 clock hours)**

**B1 - Basic Nursing Skills**
This course provides the student with the theory of basic nursing skills (unsterile) related to the basic needs of well and ill persons. This knowledge in conjunction with the companion clinical course in basic nursing will enable the student to perform as a nursing assistant.

The nursing skills mastered in this course serve as the foundation upon which subsequent knowledge and skills are based. Students are expected to maintain a professional attitude at all times, to practice nursing in a safe and efficient manner, to be properly dressed and groomed at all times, to be punctual and dependable, to display honesty and courtesy, to use time efficiently, and to exhibit initiative.

Laboratory practice of nursing care skills are part of the theory course and must be completed prior to participating in the clinical area. Performance of nursing care is evaluated in the laboratory using a check sheet, which allows for a mark of satisfactory or unsatisfactory in the areas of knowledge of task performed, specified steps of the task, safety, organization, student's appearance, and attitude. A student is required to perform nursing care and procedures under the instructor’s supervision with 100% accuracy.

**B2 - Nursing Assistant Clinical (Geriatric)**
Students will practice basic nursing skills and apply geriatric nursing theoretical and practical concepts germane to the care of the aged in a long-term care facility. Upon completion of this course, the student will be able to provide care for the aged in the long-term care facility.

During this 40 hrs. clinical period, students learn to meet the basic needs of the patients providing basic patient care and diversional activities. Students will write a social history of a patient, recording their life story. The dialogue that develops between the student and patient enriches the experience of the student and creates an atmosphere of mutual respect.
PHLEBOTOMY

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
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</table>

**FLDOE State Curriculum Framework:**
http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/2015-16-frameworks/health-science.stml
  Link: • Phlebotomy (H170302)

**Program Information:** The program is 165 clock hours. This program is taught in English, in a traditional classroom setting, two evenings a week.

**Program Costs (2015-16 academic year):** Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (165 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>458.70</td>
<td>56.00</td>
<td>185.60</td>
<td>105.00</td>
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**Technology Information:** Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

**Course Sequence:** Courses must be successfully completed in the order shown below, according to school policies.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HSC0003</td>
<td>Basic Healthcare Worker</td>
<td>90 hours</td>
<td>31-9099</td>
</tr>
<tr>
<td>B</td>
<td>MEA0520</td>
<td>Phlebotomy</td>
<td>75 hours</td>
<td>31-9097</td>
</tr>
</tbody>
</table>

**Licensure Information:** Graduates are eligible and highly encouraged to take the Certified Phlebotomy Technician (CPT) exam through the National Healthcare Association.

**Career Information (SOC Codes):**
http://www.onetonline.org/link/summary/31-9099.00
http://www.onetonline.org/link/summary/31-9097.00
Program Description:
This program is designed to teach and give hands on training to individuals desiring to enter the field of Phlebotomy: a clinical laboratory science profession that involves working with blood extraction. The primary goal is to instill the latest information of blood collection techniques, skills and equipment for safe effective specimen collection.

During this program, students will study First Aid/CPR, Domestic Violence, Infection Control, Nutrition, Blood Borne Pathogens, Legal Aspects of Phlebotomy and Employability Skills. Upon successful completion of this program, students will have the opportunity to earn Healthcare Provider CPR certification and take the National Healthcareer Association Phlebotomy Certification exam.

If a student has completed OCP A at another institution within the previous two years, transfer credit will be awarded and a student may enter after the first 90 hours of class.

Job Opportunities: Clinics, congregate living facilities, home health care agencies, hospitals, private and governmental industry, private duty, nursing homes. All nursing assistants working in long term care in Florida must be certified by the State of Florida.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

PHLEBOTOMY H170302 165 HOURS

HSC0003 – Basic Healthcare Worker (90 clock hours)

A1 - Health Science Core
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content includes communication skills as it applies to the professional medical environment; learning and study strategies; math and computational skills; legal and ethical practices; employability skills; health, safety, fire prevention, and security procedures; medical terminology; scientific principles based on fundamental body structure and function; infection control; HIV/AIDS; blood borne pathogen awareness; CPR; First Aid; wellness and disease concepts; computer literacy; and representative skills performed by health care workers, such as vital signs. Students may need to complete HealthCenter21 online assignments outside of class, requiring the student to have access to a computer and the Internet.

MEA052 – Phlebotomist (75 clock hours)

B1 - Phlebotomy
This course teaches anatomic structure and function of the Circulatory System, and the composition and function of blood, as well as the methods of blood specimen collections.
PLUMBING TECHNOLOGY

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>960 clock hours</td>
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<td>0646050302</td>
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FLDOE State Curriculum Framework:
http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/2015-16-frameworks/architecture-construction.stml

Link: • Plumbing Technology (I460513)

Program Information: The program is 960 clock hours (approximately 12 months). This program is taught in English, in a traditional classroom/shop setting, and is offered during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (960 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,668.80</td>
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<td>1029.64</td>
<td>96.30</td>
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</table>

Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in order, according to school policies. Each course is offered at least once each year.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>BCV0508</td>
<td>Helper, Plumber, Pipefitter</td>
<td>360 Hours</td>
<td>47-3015</td>
</tr>
<tr>
<td>B</td>
<td>BCV0540</td>
<td>Residential Plumber</td>
<td>240 Hours</td>
<td>47-2152</td>
</tr>
<tr>
<td>C</td>
<td>BCV0562</td>
<td>Commercial Plumber</td>
<td>240 Hours</td>
<td>47-2152</td>
</tr>
<tr>
<td>D</td>
<td>BCV0592</td>
<td>Plumber</td>
<td>120 Hours</td>
<td>47-2152</td>
</tr>
</tbody>
</table>

Licensure Information: Students will take coursework and exams to receive OSHA and NCCER Core certifications. Students will also have the opportunity to take NCCER Plumbing 1 – 4 exams.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/47-3015.00
http://www.onetonline.org/link/summary/47-2152.00
Program Description:
The plumbing program is a combination of classroom instruction and shop experiences. The work in the shop closely simulates the job conditions of the Plumber. Most of the emphasis is on the working skills the student must master to become a Plumber. The student will utilize simulated work related modules while learning to install, maintain, and troubleshoot plumbing systems found in residential, commercial, and industrial areas.

Plumbing Technology prepares students to apply a full range of plumbing skills including blueprint reading, estimating, knowledge of plumbing codes, Threading, soldering, gluing, pressing of piping, residential plumbing, commercial plumbing, trim, repair techniques and more.

Job Opportunities: Program completers will enter into residential, commercial, and industrial settings.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**PLUMBING TECHNOLOGY**

**BCV0508 – Helper, Plumber, Pipefitter (360 clock hours)**

A1 - Technical Math Science
This course will explain and put into practice the math and science necessary for the plumbing trade.

A2 - Orientation and Shop Safety
This course will be dealing with health, safety, and fire prevention with in the shop, and construction environment and the standards set forth by the Occupational Safety and Hazard Administration (OSHA). We will also discuss the history and concepts of the plumbing industry.

A3 - Plumbing Tools & Materials
This course is an introduction to the selection and proper use of tools in the plumbing trade.

A4 – Blueprints & Specs
This course will explain and put into practice the use of blueprints and specific instructions about materials and fixtures on plumbing and building plans.

A5 - Plumbing Codes
This course will explain the different plumbing codes and the importance to know both national and local codes.

A6 - Employability Skills
Employment information is presented via ErwinOnline (Moodle). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a “letter perfect” resume and cover letter. Computers are available for student use in the HUB and in classrooms.

A7 - Plumbing Layouts
This course is designed for the student to become familiar with different types of layouts in the plumbing trade
BCV0540 – Residential Plumber (240 clock hours)

B1 - Underground Rough Plumbing
This course is designed to teach the student proper installation methods of drainage and supply piping below the slab. It will also teach proper measuring and positioning techniques for vertical stacks and risers.

B2 - Above Ground Rough Plumbing
This course is designed to help the student to demonstrate and complete the task of above ground rough.

B3 - Trim Out Plumbing
This course is designed to help the student in understanding the installation of plumbing fixtures and putting this knowledge into practice.

BCV0562 – Commercial Plumber (240 clock hours)

C1 - Water Heating and Circulating Systems
This course is designed to help the student understand the proper installation and theories in water heating and circulation.

C2 - Interceptors and Grease Traps
This course is designed to help the student understand the proper installation and theories in Interceptors and grease traps in the plumbing trade.

C3 - Storm Drainage Systems
This course is designed to help the student learn the uses of a storm drainage system.

C4 - Blackflow and Cross Connection
This course is designed to help the student understand water backflow and cross connection and how it affects public health.

C5 - Commercial Waste and Water Distribution
This course is designed to help the student be successful in understanding the layout and installation of commercial waste and water distribution.

BCV0592 – Plumber (120 clock hours)

D1 - Natural and Propane Gas
This course is designed to help the student be successful in understanding the sizing and installation of natural and propane gas piping.

D2 - Services and Repair
This course is designed to help the student be successful in the service and repair side of the plumbing trade.
PRACTICAL NURSING

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
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<tbody>
<tr>
<td>1350 clock hours</td>
<td>H170605</td>
<td>0351390100</td>
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FLDOE State Curriculum Framework:
  Link: • Practical Nursing (H170605)

Program Information: The program is 1350 clock hours. This program is taught in English, in a traditional classroom setting, and offers day and evening cohorts. During clinical portions of the program, student hours and locations will vary.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1350 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
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</thead>
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<td>3,753.00</td>
<td>168.50</td>
<td>1481.39</td>
<td>375.00</td>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments and working with ATI software (NCLEX Exam practice and review) but are not required to do so.

Course Sequence: Courses must be successfully completed in the order shown below, according to school policies.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HSC0003</td>
<td>Basic Healthcare Worker</td>
<td>90 hours</td>
<td>31-9099</td>
</tr>
<tr>
<td>B</td>
<td>HCP0121</td>
<td>Nurse Aide and Orderly (Articulated)</td>
<td>75 hours</td>
<td>31-1014</td>
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<td>C</td>
<td>PRN0091</td>
<td>Practical Nurse 1</td>
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<td>29-2061</td>
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<tr>
<td>C</td>
<td>PRN0092</td>
<td>Practical Nurse 2</td>
<td>450 hours</td>
<td>29-2061</td>
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<tr>
<td>C</td>
<td>PRN0096</td>
<td>Practical Nurse 3</td>
<td>450 hours</td>
<td>29-2061</td>
</tr>
</tbody>
</table>
**Licensure Information:** Graduates are eligible and highly encouraged to take the NCLEX exam and become a licensed practical nurse (LPN) in the state of Florida.

**Career Information (SOC Codes):**
[http://www.onetonline.org/link/summary/31-9099.00](http://www.onetonline.org/link/summary/31-9099.00)  
[http://www.onetonline.org/link/summary/31-1014.00](http://www.onetonline.org/link/summary/31-1014.00)  
[http://www.onetonline.org/link/summary/29-2061.00](http://www.onetonline.org/link/summary/29-2061.00)

**Program Description:**  
The program is approved by the Florida State Board of Nursing and designed to prepare a person for employment as a Licensed Practical Nurse. Instruction is designed to enable the individual to achieve instructional objectives in the following content areas: nursing skills, life span, nutrition, anatomy and physiology, obstetrical nursing, medical nursing, surgical nursing, pediatric nursing, geriatric nursing, personal and community health and pharmacology.

Four classes are scheduled each year. Fifty percent of the training is spent in the clinical areas and include: maternal and newborn, pediatrics, medical and surgical, and experience in extended care facilities. Successful completion of the course prepares the student for the national licensing examination.

A physical examination, criminal background check, random drug screening, immunizations, and medical insurance are required. Each student must purchase his/her uniforms and have a watch with a second hand. Prior to beginning the program, students must have a high school diploma or the equivalent. The daily hours for the clinical portion of the training will vary from the regular school schedule. Restrictions concerning applicants with arrest records may apply. Applicants for licensure who have been convicted of a felony and civil rights have not been restored are not eligible for licensure and are not eligible to take the licensing examination. When documentation of restoration of civil rights is received, the Board will consider the application for licensure. Please contact the Health Occupations Counselor for specific information.

Students completing the course may receive credits toward an A.S. degree at Hillsborough Community College or St. Petersburg Junior College. Please contact the college for additional information.

**Job Opportunities:** Clinics, congregate living facilities, home health care agencies, hospitals, private and governmental industry, private duty, nursing homes, physician office, school health nurse, and military.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**Practical Nursing**  
H170605 1350 HOURS

**HSC0003 – Basic Healthcare Worker (90 clock hours)**

**A1 - Health Science Core**  
This course is an introduction to the health profession. The content includes communication skills and their application to the professional medical environment; math skills; legal and ethical practice; employability skills; safe work practices, including health, safety and fire prevention; and integration of scientific principles based on anatomy and physiology, medical terminology, disease control, conditions of illness, and representative skills performed by health care workers.
HCP0121 – Nursing Aide and Orderly (Articulated) (75 clock hours)

B1 - Basic Nursing Skills
This course provides the student with the theory of basic nursing skills (unsterile) related to the basic needs of well and ill persons. This knowledge in conjunction with the companion clinical course in basic nursing will enable the student to perform as a nursing assistant.

The nursing skills mastered in this course serve as the foundation upon which subsequent knowledge and skills are based. Students are expected to maintain a professional attitude at all times, to practice nursing in a safe and efficient manner, to be properly dressed and groomed at all times, to be punctual and dependable, to display honesty and courtesy, to use time efficiently, and to exhibit initiative.

Laboratory practice of nursing care skills are part of the theory course and must be completed prior to participating in the clinical area. Performance of nursing care is evaluated in the laboratory using a check sheet, which allows for a mark of satisfactory or unsatisfactory in the areas of knowledge of task performed, specified steps of the task, safety, organization, student’s appearance, and attitude. A student is required to perform nursing care and procedures under the instructor’s supervision with 100% accuracy.

B2 - Nursing Assistant Clinical (Geriatric)
Students will practice basic nursing skills and apply geriatric nursing theoretical and practical concepts germane to the care of the aged in a long-term care facility. Upon completion of this course, the student will be able to provide care for the aged in the long-term care facility.

During this 40 hrs. clinical period, students learn to meet the basic needs of the patients providing basic patient care and diversional activities. Students will write a social history of a patient, recording their life story. The dialogue that develops between the student and patient enriches the experience of the student and creates an atmosphere of mutual respect.

PRN0091 – Practical Nurse 1 (285 clock hours)

C1 - Vocational Adjustments I
This course includes the history and development of practical nursing and the current trends in the field of nursing. It covers the role of the practical nurse on today’s health team as well as the social, ethical, and legal obligations of the practical nurse.

C2 - Advanced Nursing Skills
Advanced Nursing skills introduces the student practical nurse to the theory underlying basic sterile nursing skills. This theory, integrated with laboratory practice and clinical experience, allows the student to perform these skills competently and with understanding. All of these procedures must be satisfactorily performed in the clinical setting before graduation.

C3 - Growth and Development
Growth and development includes the basic theories of human behavior to include emotions and motives underlying the manifestations of behaviors of all people, development from conception to old age, and showing the biopsychosocial needs of the individual during each life stage.

C4 - Anatomy and Physiology
Anatomy and Physiology has been designed to provide general knowledge about the normal functions of the human body and the structures related to these functions. It is divided into seven units of study. Each unit will be taught separately, correlating each system’s contributions to the
total function of the body as a unified whole.

**C5 - Pharmacology**
Pharmacology is an introduction to the therapeutic use of drugs, drug computations, techniques of drug handling and administration, and the legal implications of drug usage. A simulated drug pour in the laboratory is included.

**C6 - Nutrition**
Nutrition includes the role of proper nutrition in the maintenance of health and the values of nutrients as well as disease entities resulting from a lack of specific nutrients. It is a prerequisite to courses in the Medical/Surgical area where students formulate modified diets for patients.

**C7 - Geriatric Theory**
Upon completion of this course the student will demonstrate knowledge of the concepts of aging and the special needs of geriatric patients. Students will engage in an environmental scan of the aging population and its effects upon the health care delivery system. Social, emotional, physical, psychological, and economic issues will be addressed along with appropriate nursing care interventions.

**C8 - Introduction to Medical Surgical Nursing**
This course discusses the body’s immune mechanism and other responses to illness, current theories on cancer and its causes and latest treatment modalities, and nursing responsibilities when performing a patient data collection, and the care of surgical patients.

**PRN0092 – Practical Nurse 2 (450 clock hours)**

**C9 – Medical Surgical Theory & Pharmacology I**
**C11 – Medical Surgical Clinical I A**
These courses are taken concurrently. The C9 (class/theory) course employs the nursing process in data collection, planning, implementing, and evaluating the care of the patient with respiratory, circulatory, urinary, reproductive and endocrine disorders and diseases. In the C11 (clinical) course, clinical experiences are utilized to implement theoretical knowledge and application of the nursing process in caring for the hospitalized patient. The clinical portion includes administration of medications to patients with direct supervision by the instructor.

**C10 – Medical Surgical Theory & Pharmacology II**
**C12 – Medical Surgical Clinical I B**
These courses are taken concurrently. The C10 (class/theory) builds on knowledge obtained in C9 and employs the nursing process in data collection, planning, implementing, and evaluating the care of the patient with mental health, muscular-skeletal, integumentary, digestive, nervous, and sensory disorders and diseases. The C12 (clinical) course builds on knowledge obtained in the C11 course, where clinical experiences are utilized to implement theoretical knowledge and application of the nursing process in caring for the hospitalized patient. The clinical portion includes administration of medications to patients with direct supervision by the instructor.

**PRN0096 – Practical Nurse 3 (450 clock hours)**

**C13 - Obstetrical Theory**
This course provides theoretical knowledge of the care of mothers and newborns. It includes the nursing management of mothers during the antepartum, labor, delivery, and postpartum periods, and of normal newborns.
C14 - Pediatric Theory
This course will provide the student with theoretical knowledge of children and the treatment of illness. Health maintenance practices will be stressed.

C15 - Obstetrical Clinical
Clinical experiences are utilized to implement theoretical knowledge and application of the nursing process in caring for the obstetrical patient and the newborn. Simulation is used.

C16 - Pediatric Clinical
Clinical experiences are utilized to implement theoretical knowledge and application of the nursing process in caring for the pediatric patient. Simulation is used.

C17 - Community Health
This course emphasizes good health habits and how poor health habits can hinder the individual physically and emotionally; familiarizes the student with federal, national, state, and local health organizations; and relates the practical nurse’s role in prevention of disease and maintenance of health.

C18 - C19 - Medical/Surgical Clinical II A & B
Clinical experiences are utilized to implement theoretical knowledge and application of the nursing process in caring for the hospitalized patient. The clinical portion includes administration of medications to patients with direct supervision by the instructor.

C20 - Vocational Adjustments II
Obtaining and maintaining licensure, career opportunities, seeking and maintaining employment, trends in nursing and leadership skills are emphasized.
SOLAR PHOTOVOLTAIC

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
</tr>
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<tbody>
<tr>
<td>600 clock hours</td>
<td>X600400</td>
<td>0615050502</td>
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FLDOE State Curriculum Framework:
Link: • Solar Photovoltaic System Design, Installation and Maintenance – Entry Level (X600400)

Program Information: The program is 600 clock hours. This program is taught in English, in a traditional classroom setting, and offered during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (600 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
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</thead>
<tbody>
<tr>
<td>1668.00</td>
<td>29.00</td>
<td>937.81</td>
<td>128.40</td>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed in the order shown below, according to school policies.

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<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>EEV0205</td>
<td>Solar Photovoltaic Design Installation and Maintenance Helper</td>
<td>150 hours</td>
<td>49-9099</td>
</tr>
<tr>
<td>B</td>
<td>EEV0206</td>
<td>Solar Photovoltaic Design, Installation and Maintenance Technician</td>
<td>450 hours</td>
<td>47-2231</td>
</tr>
</tbody>
</table>

Licensure Information: Students study applicable coursework to become eligible to take the NABCEP Solar PV Installer industry certification exam prior to graduation. Students also take the OSHA certification exam.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/49-9099.00
http://www.onetonline.org/link/summary/47-2231.00
Program Description:
The Solar Photo Voltaic industry is a rapidly growing field that is expected to help reduce human dependence on fossil fuels. The need for solar photovoltaic installers has increased and is projected to grow with increasing demands for solar installations. This Course covers specific information, equipment, and installation techniques that are valuable to PV system installers. The curriculum is designed to assist trainees in obtaining the North American Board of Certified Energy Practitioners (NABCEP) Entry Level Certification.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

Solar Photovoltaic System Design, Installation and Maintenance
X600400  600 HOURS

EEV0205 – Solar Photovoltaic Design, Installation and Maintenance Helper (150 clock hours)

A1 – Software Applications
Employ information technology tools to expedite workflow. Students apply technology, reading, writing, and thinking skills as they relate to the solar business environment. Become familiar with file management, file naming conventions, file formatting tools, operating systems, software applications, and will get hand-on experience troubleshooting hardware peripherals. Employ collaborative applications to facilitate group work.

A2 - Mathematics Knowledge & Skills
This course is divided into two sections. The basic math class for students needing a review in fractions, decimals, and percentages and the advanced math class for students needing instruction in algebra, geometry, and trigonometry. The skills mastered will have direct, practical application to the Solar PV program.

A3 - Employability & Entrepreneurship Skills
Employability/Communication Skills is presented via Erwin Online with computer and Internet activities and videos. This course will assist all Erwin program students in the preparation for job placement. It will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist in finding the right job for each person.
Students will produce a notebook/portfolio including documents to reference during any future job search. Interviewing skills are taught with emphasis on creating a professional image, making a positive first impression, dressing properly, and developing positive body language.

The Photovoltaic industry has seen explosive growth in recent years allowing new businesses to form and new products to enter the market. In this context students will discuss the benefits and risks of Entrepreneurship to the individual and the US economy as a whole. Further students will gain understanding of the Industry Value Chain, effects of solar policy drivers and business trends on the PV Industry. Entrepreneurship may be seen as an optional career planning tool the right individual therefore business models, marketing strategies as well as licensing and certification requirements will be identified. As for any other industry, economic feasibility is essential to the success of businesses in this industry. Students will gather and research information on electricity rates, savings and incentive structures to understand the interdependency of cost and financial benefit of PV systems. As a result students will perform a residential cost/value analysis.
A4 – CAD – Photovoltaic Design
Every Photovoltaic Project starts with a site analysis, Computer Aided Drafting software is the essential tool to provide precise and predictable schematics to all parties involved with the design process. The student will gain basic understanding of CAD software and will be able to provide a CAD generated PV layout. Electrical Schematic Wire Diagrams are part of every PV Project; therefore, the student will be able to draw a simple electric PV System with CAD.

A5 - PV Markets & Applications
This course provides an overview of the many arguments that make the Case for Renewable Energy. In this this course students discusses the effects of Greenhouse gas emissions and its role in climate change. The concept of carbon footprints and the benefits of conserving natural resources and energy efficiency will be discussed while the student develops an overview of various renewable energies. Students will learn about PV technologies, contributions to their development in in historic context and identify common types of PV systems. Existing kinds of environmental pollution will be identified together with the advantages and disadvantages of PV systems compared to traditional electricity generation sources.

A6 - Safety Basics
Understand the important of health, safety and fire prevention requirements as they apply to the workplace in the general construction and solar industry. Identify personal and public safety hazards; implement appropriate codes and standards concerning the installation and operation of PV systems and equipment. Demonstrate proper use of tools and accepted practices; identify hazardous materials with PV installations. An emergency response plan explaining procedures in a workplace accident will be created by students.

EEV0206 – Solar Photovoltaic Design, Installation and Maintenance Technician (450 clock hours)

B1 - Electrical Basics
Read, interpret and draw basic blueprints, job specifications and relate to all applicable codes. Understand the meaning of basic electrical parameters including electrical charge, current, voltage, power and resistance, and relate these parameters to their hydraulic analogies. Demonstrate the ability to apply Ohm's Law. Describe the function and purpose of common electrical system components. Identify basic electrical test equipment and its purpose.

B2 - Solar Energy Fundamentals
Define basic solar energy related terminology and diagram the solar window by predicting the sun’s path for given times dates and locations. Differentiate between solar irradiance (power), solar irradiation (energy) and understand the meaning of the terms peak sun, peak sun hours, and insolation. The student will use computer software and solar surveying equipment to quantify realistic site specific energy potential, predict the effects of shading on performance outcomes and identify constrains restricted by local and state authorities.

B3 - PV Module Fundamentals
Explain the photovoltaic effect. Distinguish between PV cells, modules, panels and arrays. Identify key electrical output parameters for PV modules using manufacturers’ literature and read, develop and understand current-voltage (I-V) curves. Understand the effects of varying incident solar irradiance and cell temperature. Illustrate the effects of connecting similar and dissimilar PV modules in series and in parallel on electrical output and diagram the resulting I-V curves. Define various performance rating and measurement conditions for PV modules and arrays. Describe various solar cells and their manufacturing processes; calculate efficiencies and power output per unit.
B4 - System Components
Understand the basic types of PV systems, their major subsystems and Components and the electrical and mechanical BOS components required. Describe the purpose and principles of operation for major PV system components, including PV modules and arrays, inverters and chargers, charge controllers, energy storage and other sources.

B5 - PV System Sizing Principles
Differentiate between the approaches and methodologies for sizing different types of PV systems. Calculate, using simplified calculations, software tools, critical design parameter, system size, configure and determine system components locations. Estimate time, materials and labor required for installation and identify critical data to apply for permitting with Authorities having Jurisdiction.

B6 - PV System Electrical Design
Design and Install PV Arrays configured in series and parallel. Identify basic properties of electrical conductors and understand how conditions of use, affect their ampacity, resistance and corresponding overcurrent protection requirements. Understand the importance of nameplate specifications on PV modules, inverters and other equipment on determining allowable system limits. Select and size conductors, overcurrent protection devices, wiring methods and establish appropriate and safe interfaces with other equipment and electrical systems. Identify the labeling requirements for electrical equipment in PV systems and understand the basic principles of PV system grounding. Apply Ohm’s Law and conductor properties to calculate voltage drop for simple PV source circuits. Identify the requirements for plan review, permitting, inspections, construction contracts and other matters associated with approvals and code-compliance for PV systems. Demonstrate knowledge of key articles of the National Electrical Code.

B7 - PV System Mechanical Design
Identify the common ways PV arrays are mechanically secured and installed on the ground, to building rooftops or other structures. Compare and contrast the features and benefits of different PV array mounting systems. Identify desirable material properties for weather sealing, UV, sunlight and corrosion resistance, wet/outdoor approvals and other service ratings appropriate for the intended application, environment and conditions of use. Assure structural integrity and suitability of collector sites to install arrays affixed to different types of roof. Describe and perform basic calculations of mechanical loads experienced by PV modules according to ASCE 7-10 Minimum Design Loads for Buildings and other Structures. Review and recognize the importance of PV equipment manufacturers’ instructions with regard to mounting and installation procedures, the skills and competencies required of installers, and the implications on product safety, performance, code-compliance and warranties.

B8 - Performance Analysis, Maintenance & Troubleshooting
Understand the safety requirements for operating and maintaining different types of PV systems and related equipment. Identify and describe the use and meaning of typical performance parameters monitored in PV systems. Describe typical maintenance requirements for PV arrays and other system components, including inverters and batteries. Identify the most common types of reliability failures in PV systems. Review component manufacturers’ instructions and understand basic troubleshooting principles and progression, including recognizing a problem, observing the symptoms, diagnosing the cause and taking corrective actions. Demonstrate the functionality, start-up and shut-down procedures and over all operation of the system.
**SURGICAL TECHNOLOGY**

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330 clock hours</td>
<td>H170211</td>
<td>0351090905</td>
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</table>

**FLDOE State Curriculum Framework:**
http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/2015-16-frameworks/health-science.stml

- Link: • Surgical Technology (H170211)

**Program Information:** The program is 1330 clock hours. This program is taught in English, in a traditional classroom setting, during the day. During clinical portions of the program, student hours and locations of instruction will vary.

**Program Costs (2015-16 academic year):** Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1330 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
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**Technology Information:** Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

**Course Sequence:** Courses must be successfully completed in the order shown below, according to school policies.

<table>
<thead>
<tr>
<th>OCP</th>
<th>Course #</th>
<th>Course Title</th>
<th>Length</th>
<th>SOC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HSC0003</td>
<td>Basic Healthcare Worker</td>
<td>90 hours</td>
<td>31-9099</td>
</tr>
<tr>
<td>B</td>
<td>STS0015</td>
<td>Central Supply Technician</td>
<td>210 hours</td>
<td>31-9099</td>
</tr>
<tr>
<td>C</td>
<td>STS0010</td>
<td>Surgical Technologist 1</td>
<td>343 hours</td>
<td>29-2055</td>
</tr>
<tr>
<td>C</td>
<td>STS0011</td>
<td>Surgical Technologist 2</td>
<td>343 hours</td>
<td>29-2055</td>
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<tr>
<td>C</td>
<td>STS0012</td>
<td>Surgical Technologist 3</td>
<td>344 hours</td>
<td>29-2055</td>
</tr>
</tbody>
</table>

**Licensure Information:** Students will take the CST certification exam on campus prior to graduation. Students do not have to receive a passing score on the CST certification exam in order to graduate from the program and receive a vocational certificate.

**Career Information (SOC Codes):**
http://www.onetonline.org/link/summary/31-9099.00
http://www.onetonline.org/link/summary/29-2055.00
**Program Entrance Requirements:** A criminal background check, drug screening and a physical examination are required prior to acceptance in the course. Students must purchase their own uniforms. Prior to beginning the program, students must have a high school diploma or the equivalent. The daily hours for the clinical portion of the training will vary from the regular school schedule. You may call the school for specifics. Restrictions concerning applicants with arrest records and treatment of emotional illness or substance abuse may apply. Please contact the Health Occupations Counselor for specific information.

**Program Accreditation:** The Erwin Technical College Surgical Technology program is accredited by the Accrediting Bureau of Health Education Schools, 777 Leesburg Pike, Suite 314 – N, Falls Church, VA 22043. Phone: (703) 917-9503.

**Job Opportunities:** The Surgical Technology graduates from this program are hired as technologists in the hospitals as team members of the operating room and as assistants to the surgeons. Also, they are hired as central service instrument technologists. Surgeons hire them as private assistants in the operating room. Ambulatory outpatient centers and transplant units are also areas of employment.

**Program Description:**
This program is designed to prepare a person to function as a member of the surgical team under the supervision and responsibility of the operating room supervisor. Surgical Technologists function as a member of the surgical team by preparing supplies and equipment for use in surgery and by assisting the surgeon and nurses with the use of these supplies/equipment at the operating table. Practical experience, which requires an earlier reporting time than the classroom portion of school, is provided in local hospitals. Graduates are eligible to take the national certification examination. The program is accredited by ABHES accrediting agency.

A criminal background check, drug screening and a physical examination are required prior to acceptance in the course. Students must purchase their own uniforms. Prior to beginning the program, students must have a high school diploma or the equivalent. The daily hours for the clinical portion of the training will vary from the regular school schedule. You may call the school for specifics. Restrictions concerning applicants with arrest records and treatment of emotional illness or substance abuse may apply. Please contact the Health Occupations Counselor for specific information.

**Job Opportunities:** The Surgical Technology graduates from this program are hired as technologists in the hospitals as team members of the operating room and as assistants to the surgeons. Also, they are hired as central service instrument technologists. Surgeons hire them as private assistants in the operating room. Ambulatory outpatient centers and transplant units are also areas of employment.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

**SURGICAL TECHNOLOGY H170211 1330 HOURS**

**HSC0003 – Basic Healthcare Worker (90 clock hours)**

**A - Health Science Core**
This course has been designed to introduce the Allied Health student to the health care profession and satisfies prerequisite competencies for all Health Occupation Programs in the state of Florida. The content includes communication skills as it applies to the professional medical environment; learning and study strategies; math and computational skills; legal and ethical practices;
employability skills; health, safety, fire prevention, and security procedures; medical terminology; scientific principles based on fundamental body structure and function; infection control; HIV/AIDS; blood borne pathogen awareness; CPR; First Aid; wellness and disease concepts; computer literacy; and representative skills performed by health care workers, such as vital signs. Students may need to complete HealthCenter21 online assignments outside of class, requiring the student to have access to a computer and the Internet.

STS0015 – Central Supply Technician (210 clock hours)

B1 - Anatomy & Physiology I
This course has been designed to provide general knowledge about the healthy functions of the human body and the structures related to these functions. It is divided into six units of study. Each unit will be taught separately, correlating each system’s contributions to the total function of the body, as a synergistic and unified whole. Instruction will also include anatomical positions, planes of the body, systems of the body and their inter-relationships, body chemistry, and introduction to physics.

B2 - Anatomy & Physiology II
This course has been designed to provide general knowledge about the healthy functions of the human body and the structures related to these functions. It is divided into six units of study. Each unit will be taught separately, correlating each system’s contributions to the total function of the body, as a synergistic and unified whole. Instruction will also include anatomical positions, planes of the body, systems of the body and their inter-relationships, body chemistry, and introduction to physics.

B3 - Introduction to Surgical Technology
The student will be introduced to the school's program, philosophy, and requirements. Interpersonal relationships, OR techniques, electrical safety, medical terminology and weights and measures are stressed.

An understanding and appreciation for the role of a surgical technologist in the operating room, delivery room, emergency room, and related areas will be obtained as well as an orientation to the environment of these areas.

The history of surgical practice and the ethical, moral, and legal responsibilities of the employer and employee are discussed. Laboratory experience is an integral part of this course.

B4 - Microbiology
Principles of pathology and the reaction of injury and pathogenesis of disease are discussed. Basic concepts of microbiology are studied. Micro-organisms as agents of disease and host-parasite relationships are studied as they apply to the practice of surgery. Maintenance of health and prevention of disease are emphasized.

STS0010 – Surgical Technologist 1 (343 clock hours)

C1 - Operating Room Technique
This unit is designed to help the Surgical Technology student to understand and use skills in the operating room, including principles of aseptic technique correct procedure for scrubbing, gowning and gloving; draping, handling of specimens; care and counting of sponges and instruments. Also, the student will obtain experience in handling drains and dressing; duties of scrub and circulator; surgical preps, positions, incisions and needles and suture. Clinical practice is coordinated with didactic content.
C2 - Operating Room Technique Lab I
This unit is designed to help the Surgical Technology student to understand and use skills in the operating room, including principles of aseptic technique, correct procedure for scrubbing, gowning and gloving; draping, handling of specimens; care and counting of sponges and instruments. Also, the student will obtain experience in handling drains and dressing; duties of scrub and circulator; surgical preps, positions, incisions and needles and suture. Clinical practice is coordinated with didactic content.

C3 - Operating Room Technique Lab II
This unit is a continuation of Operating Room Technique Lab I to help the Surgical Technology student understand and use skills in the operating room, including principles of aseptic technique, correct procedure for scrubbing, gowning and gloving; draping, handling of specimens; care and counting of sponges and instruments. Also, the student will obtain experience in handling drains and dressing; duties of scrub and circulator; surgical preps, positions, incisions and needles and suture. Clinical practice is coordinated with didactic content.

C4 - Safe Patient Care
The student will become aware of the surgery patient's total needs during surgery: physical, social, psychological, and spiritual. This course includes the study of peri-operative care. Routine laboratory and x-ray reports are covered and the student learns to interpret these reports. Pharmacology and anesthesia are stressed with emphasis on side effects and drug reactions and emergency measures used to counteract these reactions. The individuality and uniqueness of each patient is discussed. Clinical practice is coordinated with didactic content.

C5 - Safe Patient Care Lab
This student will become aware of the surgery patient's total needs during surgery: physical, social, psychological, and spiritual. This course includes the study of peri-operative care. Routine laboratory and x-ray reports are covered and the student learns to interpret these reports. Pharmacology and anesthesia are stressed with emphasis on side effects and drug reactions and emergency measures used to counteract these reactions. The individuality and uniqueness of each patient is discussed. Clinical practice is coordinated with didactic content. Students must pass lab performance checkouts for Scrub Tech Role and Circulating Role in order to remain in the program and proceed to Course C6. If both lab performance checkouts are not passed, the student will be withdrawn from the program. The student may apply to re-enter the next time Course C1 is offered and space is available.

C6 - Fundamentals of Surgery I
Information is obtained on operative procedures, the different types of incisions, special equipment, instruments, and supplies. The history, diagnosis and complications of each surgical procedure are also covered. This course is designed to provide the student with necessary skills needed to function under supervision with minimum level of competence in surgery and related areas; i.e., lasers, endoscopy, and robotics.

The student will demonstrate learned skills and practice safety in the operating room while circulating and scrubbing in the following areas: general surgery, obstetrics, gynecology, and urology surgery. Clinical practice is coordinated with didactic content.
STS0011 – Surgical Technologist 2 (343 clock hours)

C7 - Fundamentals of Surgery II
Information is obtained on operative procedures, the different types of incisions, special equipment, instruments, and supplies. The history, diagnosis and complications of each surgical procedure are also covered. This course is designed to provide the student with necessary skills needed to function under supervision with minimum level of competence in surgery and related areas in the intermediate phase.

C8 – C9 General Surgery I & II
During the first phase of clinical practice the students must demonstrate a safe level of practice and knowledge. It is not necessary for the student to be competent in the more difficult procedures but should be able to perform the basic skills that were learned in the pre-clinical area.

C10 - General Surgery III
As the student advances into more difficult procedures, better organization and control should be demonstrated. At this point in the student’s practice there should be no breaks in technique that are not corrected. Problem solving should be mastered and the student should show steady progress.

STS0012 – Surgical Technologist 3 (344 clock hours)

C11 - C12 - C13 Specialty Surgery I, II, III
The student should demonstrate the ability to take over the procedure. Knowledge of supplies and instruments needed for the variety of surgeries will be apparent. The more complicated procedures are mastered, there should be no hesitation on going in on a procedure, checking for the correct instrument and supplies and carrying through with the procedure. A basic knowledge of the more complex surgeries is demonstrated. In addition to all other program requirements, students are required to have completed a minimum of 120 documented scrubbed cases in order to graduate from the program. A minimum of 65% (90 cases) must be scrubbed in the solo - 1st scrub role, and up to 35% (30 cases) may be scrubbed with assistance from the preceptor.
WELDING TECHNOLOGY

<table>
<thead>
<tr>
<th>Program Length</th>
<th>State Program Number</th>
<th>CIP Code</th>
</tr>
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<tbody>
<tr>
<td>1050 clock hours</td>
<td>J400400</td>
<td>0648050805</td>
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</table>

FLDOE State Curriculum Framework:  
Link: • Welding Technology (J400400)

Program Information: The program is 1050 clock hours (approximately 12 months). This program is taught in English, in a traditional classroom/shop setting, and is offered during the day.

Program Costs (2015-16 academic year): Tuition fees are $2.78 per clock hour, for Florida residents, for classes scheduled from 7/1/15 to 6/30/16. Tuition, fees, books, supplies, and certification exam amounts are approximate and subject to slight changes.

<table>
<thead>
<tr>
<th>Florida Resident Tuition (1050 clock hrs)</th>
<th>Fees</th>
<th>Estimated Tools/Books/Supplies</th>
<th>Certification Exams</th>
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Technology Information: Open-access Wi-Fi is available on the campus. Computers and all software required for this program are available in the program classroom and/or computer labs on campus. Students may wish to have a computer with Internet connectivity and word processing software at home for completing assignments but are not required to do so.

Course Sequence: Courses must be successfully completed, according to school policies, in the following order. Each course is offered at least once per academic year.

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<tr>
<th>OCP</th>
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<tr>
<td>A</td>
<td>PMT0070</td>
<td>Welder Assistant 1</td>
<td>150 hrs</td>
<td>51-9198</td>
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<td>A</td>
<td>PMT0071</td>
<td>Welder Assistant 2</td>
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<tr>
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<tr>
<td>B</td>
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<td>Welder, SMAW 2</td>
<td>150 hrs</td>
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<tr>
<td>C</td>
<td>PMT0074</td>
<td>Welder</td>
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<td>51-4121</td>
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Licensure Information: Students will take exams to receive the following certifications: OSHA, and NCCER Core & Welding Level 1.

Career Information (SOC Codes):
http://www.onetonline.org/link/summary/51-9198.00
http://www.onetonline.org/link/summary/51-4121.00

The objective of the Welding Technologies course is to develop the manipulative skills and to learn the technical knowledge required to pass entry-level employment qualifications or certification tests.

The course includes instruction and practice in Oxy-Acetylene, Plasma Arc and Carbon Arc cutting, washing and gouging, manual Shielded Metal Arc, Gas Metal Arc and Gas Tungsten Arc welding processes.

Job Opportunities: Fabrication shops, power plants, plant maintenance, shipyards, trailer shops and building construction.

To qualify for a Vocational Certificate, the following courses must be satisfactorily completed:

WELDING TECHNOLOGY J400400 1050 Hours

PMT0070 – Welder Assistant 1 (150 clock hours)

A01 – Basic Shop Skills
This module explains the role of safety in the construction crafts. Trainees will learn about health and safety, including how to identify and follow safe work practices and procedures as well as how to properly inspect and use safety equipment. Trainees will be able to describe safe work procedures for lifting heavy objects, fire prevention and fighting fires, and working around electrical hazards. The components of this course are Basic Safety, Construction Math, Hand Tools, Power Tools and Material Handling.

A02 – Blueprints and Symbols
This module provides a basic understanding of blue reading for welders. Students will design and fabricate a project by creating a working drawing with welding symbols.

A03 - Oxy-Fuel 1
This module provides a basic understanding of blue reading for welders. Students will design and fabricate a project by creating a working drawing with welding symbols.

PMT0071 – Welder Assistant 2 (150 clock hours)

A04 - Oxy-fuel 2
This module continues the principles and science of safe oxy-fuel cutting. Setup, care, and maintenance are covered, as well as procedures and methods for performing various types of oxy-fuel cuts on carbon steel.

A05 - Plasma Arc Cutting
This module teaches principles and science of safe plasma cutting operation. Setup, care, and maintenance are covered, as well as procedures and methods for performing on carbon steel.
A06 - Introduction to Shielded Metal Arc Welding
This module provides an overview of Shielded Metal Arc (SMAW). It covers arc welding safety practices, how to set up different types of welding power sources, electrode holders, and ground clamps. The trainee will learn electrode/wire identification, classification, selection, storage, and motor skills needed for welding. The trainee will learn surfacing in all positions steel using E6010 and E7018 in all positions with the SMAW process.

PMT0072 – Welder, Shielded Metal Arc 1 (150 clock hours)

B01 – Shielded Metal Arc Welding 1
This module continues to develop the welding skills started in the previous course Introduction to SMAW. The trainee will learn how to make fillet welds on plain carbon steel using E6010 and E7018 in all positions with the SMAW process.

B02 – Carbon Arc Cutting/Gouging
This module teaches principles and science of safe carbon arc cutting/ gouging (CAC/G). Setup, care, safety and maintenance are covered, as well as procedures and methods for performing on carbon steel. Students will learn to identify and repair unacceptable weld profiles using the Carbon Arc Gouging process.

PMT0073 – Welder, Shielded Metal Arc 2 (150 clock hours)

B03 – Shielded Metal Arc Welding 2
This module continues to develop the welding skills started in the previous course SMAW 1. The trainee will learn how to make and test single “V” groove welds with and without backing in all positions using the SMAW processes. Students will design a project and fabricate it using the SMAW and CAC/G processes.

B04 – Employability Skills
Employment information is presented via ErwinOnline (EOL). This course will include job search methods, applying for a job, resume writing, interviewing skills and other information to assist students as they prepare for future employment. Included in the assignments for this course, students will be required to produce a resume and cover letter. Computers are available for student use in the Welding classroom and or The HUB.

PMT0074 – Welder (450 clock hours)

C01 – Gas Metal Arc Welding 1
This module provides an introduction to Gas Metal Arc Welding (GMAW). The trainee will learn arc welding safety practices, how to set up different types of welding power sources and wire feed controllers. The trainee will learn wire identification, classification, selection and develop motor skills needed for GMAW. The trainee will learn surfacing, fillet welds and groove welds in all positions on plain carbon steel.

C02 – Gas Metal Arc Welding 2
This module continues to develop the welding skills started in the previous course GMAW1. The trainee will learn arc welding safety practices, how to set up different types of welding power sources and wire feed controllers. The trainee will learn wire identification, classification, selection and develop motor skills needed for GMAW. The trainee will learn surfacing, and fillet welds in all positions and groove welds the flat position on aluminum and stainless steel.
C03 – Flux Core Arc Welding 1
The trainee will learn arc welding safety practices, how to set up different types of welding power sources and wire feed controllers. The trainee will learn wire identification, classification, selection and develop motor skills needed for FCAW. The trainee will learn surfacing and fillet welds in all positions on plain carbon steel.

C04 – Flux Core Arc Welding 2
This module continues to develop the welding skills started in the previous course FCAW 1. The trainee will learn how to make and test single “V” groove welds with and without backing in all positions using the FCAW processes.

C05 – Gas Tungsten Arc Welding 1
This module provides an introduction to Gas Tungsten Arc Welding (GTAW) topics, including welding safety, GTAW torches, filler metals, and equipment setup. The trainee will learn surfacing and how to make fillet welds in all positions and groove welds in the flat and horizontal positions on plain carbon steel.

C06 – Gas Tungsten Arc Welding 2
This module continues to develop the welding skills started in the previous course GTAW 1. It includes welding safety, GTAW torches, filler metals, and equipment setup. The trainee will learn how to make fillet welds in the flat, horizontal and vertical positions and groove welds the flat and horizontal positions on stainless steel.

C07 – Gas Tungsten Arc Welding 3
This module continues to develop the welding skills started in the previous course GTAW 1 and 2. It includes welding safety, GTAW torches, filler metals, and equipment setup. The trainee will learn how to make fillet welds in the flat, horizontal and vertical positions and groove welds the flat positions on aluminum using the GTAW process.

C08 – Pipe Welding
This module explains how to cut, bevel, prepare and tack pipe using the SMAW process. How to set up the pipe beveler and SMAW equipment for open-root V-groove pipe welds. It also covers how to make open-root V-groove pipe welds in all positions using SMAW equipment.
Administration

Principal

Rich, James
Master’s Degree - Educational Leadership, Nova Southeastern University, Florida
Bachelor’s Degree – Science Education – Biology, University of South Florida, Florida
Administrator and teacher certifications issued by State of Florida

Assistant Principal – Curriculum

Brooks, Donna
Doctorate Degree – Educational Leadership, Argosy University, Florida
Educational Specialist Degree – Educational Leadership, Nova Southeastern, Florida
Master’s Degree – Business Education, University of South Florida, Florida
Bachelor’s Degree – Business Education, University of South Florida
Administrator and teacher certifications issued by State of Florida

Assistant Principal – Administration

Wade, Donald
Educational Specialist Degree – Ed. Leadership, Nova Southeastern University, Florida
Master’s Degree – Education, Nova Southeastern University, Florida
Bachelor’s Degree – English, University of South Florida, Florida
Administrator and teacher certifications issued by State of Florida
Faculty

ACCOUNTING OPERATIONS

*Full-time Faculty:*

**Moody-Paige, Cynthia**
Educational Specialist’s degree – Educational Leadership, Argosy University, Florida  
Master’s degree – Curriculum & Instruction, Pace University, New York  
Bachelor’s degree – Business Education Technology – Pace University, New York  
Teacher certification issued by State of Florida

AIR CONDITIONING, REFRIGERATION & HEATING TECHNOLOGY

*Full-time Faculty:*

**Ehrman, Jonathan**
Vocational Certificate – A/C Technology, Erwin Technical Center, Florida  
Teacher certification issued by Hillsborough County Public Schools

**Gonzalez, Raul**
Vocational Certificate – A/C Technology, Erwin Technical Center, Florida  
Certificate: Certified A/C Contractor, State of Florida  
Teacher certification issued by Hillsborough County Public Schools

**Marshall, Gary**
Master’s degree – Business Administration, University of Arkansas, Arkansas  
Bachelor’s degree – Business Administration, University of Arkansas, Arkansas  
Vocational Certificate – HVAC, Erwin Technical Center, Florida  
Certificate: Certified A/C Contractor, State of Florida  
Teacher certification issued by Hillsborough County Public Schools

*Part-time Faculty:*

**Deathe, Richard**
Certificate – Air Conditioning, Ryder Tech Institute, Florida  
Certification: Certified Mechanical Contractor, State of Florida (Inactive)  
Teacher certification issued by Hillsborough County Public Schools
AUTOMOTIVE SERVICE TECHNOLOGY

Full-time Faculty:

Mitchell, John
Advanced Vocational Certificate – University of South Florida, Florida
Certifications:  ASE (Automotive Technology Excellence) Master Automobile Technician, Advanced Engine Performance Specialist, Auto Maintenance and Light Repair
Teacher certification issued by Hillsborough County Public Schools

Perez, III, Edward
Advanced Vocational Certificate – University of South Florida, Florida
Certification:  ASE (Automotive Technology Excellence) Master Automobile Technician
Teacher certification issued by Hillsborough County Public Schools

Ruman, Timothy
High School Diploma – Burlington Township High School, New Jersey
Certification:  ASE (Automotive Technology Excellence) Master Automobile Technician
Teacher certification issued by Hillsborough County Public Schools

BARBERING

Full-time Faculty:

Troupe, Larry
Vocational Certificate – Barbering, Erwin Technical Center, Florida
License:  Licensed Cosmetologist, Florida Board of Barbers
Teacher certification issued by Hillsborough County Public Schools

Valdez-Morales, Francisco
Vocational Diploma – Cosmetology, International Junior College, Puerto Rico, PR
License:  Licensed Barber, Florida Board of Barbers
Teacher certification issued by Hillsborough County Public Schools

BUILDING CONSTRUCTION TECHNOLOGIES and CARPENTRY

Full-time Faculty:

Giovenco, Carl
Bachelor's Degree – Natural Science, University of South Florida, Florida
Certification:  CAM Tech School of Construction, Florida
Certificate:  Building Construction Instructor, National Center for Construction Education and Research
Teacher certification issued by Hillsborough County Public Schools
COMMERCIAL FOODS & CULINARY ARTS

Full-time Faculty:

Petras, Joseph
Associate’s Degree – Culinary Arts, The Culinary Institute of America, New York
Teacher certification issued by Hillsborough County Public Schools

COMPUTER SYSTEMS & INFORMATION TECHNOLOGY

Full-time Faculty:

Beasley, Clifton
Master’s Degree – M.Ed., Educational Leadership, American College of Ed., Indiana
Bachelor’s Degree – Business Management, University of Phoenix, Florida
Credentials: CompTIA A+, CompTIA Network+, Microsoft Certified Professional, CISCO Certified Network Association - CCNA
Teacher certification issued by Hillsborough County Public Schools

Isaac, Eric
Master’s Degree – Education Leadership, University, Florida
Master’s Degree – Telecommunications, Bonch-Bruyevich Institute, Russia
Credentials: CompTIA A+, CompTIA Network+
Teacher certification issued by Hillsborough County Public Schools

COSMETOLOGY

Full-time Faculty:

DiRisio, Mary
Vocational Certificate – Cosmetology, Sheridan Vocational Center, Florida
License: Licensed Cosmetologist, State of Florida Board of Cosmetology
Teacher certification issued by Hillsborough County Public Schools

Whitehead, Sherocka
Vocational Certificate – Cosmetology, Erwin Technical Center, Florida
License: Licensed Cosmetologist, State of Florida Board of Cosmetology
Teacher certification issued by Hillsborough County Public Schools

Part-time Faculty:

Garrett, Traci
Vocational Certificate – Cosmetology, Erwin Technical Center, Florida
License: Licensed Cosmetologist, State of Florida Board of Cosmetology
Teacher certification issued by Hillsborough County Public Schools
DENTAL ASSISTING TECHNOLOGY & MANAGEMENT – ATD

Full-time Faculty:

Hunter, Darcy
Master's Degree – Education, Texas A & M University, Texas
Bachelor's Degree – Vocational Education, University of Central Florida
License: Dental Hygienist license, State of Florida Department of Health,
Division of Medical Quality Assurance
Teacher certification issued by State of Florida

Vilaret (DMD), Manuel
Doctor of Dental Medicine, University of Florida, Florida
Bachelor's Degree – Psychology, University of Florida, Florida
License: Doctor of Dental Medicine, State of Florida Department of Health,
Division of Medical Quality Assurance
Teacher certification issued by Hillsborough County Public Schools

Part-time Faculty:

Robinson, Gwendolyn
Vocational Certificate – Dental Assisting, Erwin Technical Center, Florida
Certificates: Dental Radiology, Florida Board of Dentistry - Dental Practice Act
Teacher certification issued by Hillsborough County Public Schools

DRAFTING

Full-time Faculty:

Lane, Marcus
Associate’s Degree – Drafting & Computer-Aided Design, United Electronics Inst., FL
Certificate: Autodesk Certified User, AutoCAD
Certificate: Building Construction Instructor, National Center for Construction Education
and Research
Teacher certification issued by Hillsborough County Public Schools

ELECTRICITY

Full-time Faculty:

Wilson, Harold
Training: IBEW Electrical, Florida
Certification: Electrician – IBEW
Certificate: Electricity Instructor, National Center for Construction Education & Research
Teacher certification issued by Hillsborough County Public Schools
ELECTRONEURODIAGNOSTIC TECHNOLOGY

Full-time Faculty:

Coet, Henry III
Bachelor’s degree – Psychology, University of Phoenix, Arizona
Credential: Electroneurodiagnostic Technology, R.EEG T.
Teacher certification issued by Hillsborough County Public Schools

Part-time Faculty:

Hanes, Dana
Associate’s Degree – Health Science for Electroencephalography, California College for Health Sciences, CA
Credentials: R.EEG T., RST, RPSGT
Teacher certification issued by Hillsborough County Public Schools

Sanchez-Buchmann, Lynda
Bachelor’s Degree – Elementary Education, University of South Florida, Florida
Associate’s Degree – Associate in Arts, St. Petersburg College, Florida
Vocational Certificate – Electroneurodiagnostic Technology, Erwin Tech, Florida
Credentials: R.EEG T., R.PSG T.
Teacher certification issued by Hillsborough County Public Schools

MASSAGE THERAPY

Full-time Faculty:

Harrison, Karen
Associate’s Degree – Associate in Arts, Santa Fe Junior College, Florida
License: Licensed Massage Therapist - Florida
Teacher certification issued by Hillsborough County Public Schools

Part-time Faculty:

Dill-Peterson, Diane
Training: Massage Therapy, Suncoast Center for Natural Health, Florida
License: Licensed Massage Therapist - Florida
Teacher certification issued by Hillsborough County Public Schools

MEDICAL ASSISTING

Full-time Faculty:

Fritcher, Tandy
Vocational Certificate – Practical Nursing, Erwin Technical Center, Florida
Vocational Certificate – Medical Assisting, Erwin Technical Center, Florida
Credentials: Licensed Practical Nurse; Certified Medical Assistant (AAMA)
Teacher certification issued by Hillsborough County Public Schools
Murphy, Alice
    Associate’s Degree – Medical Assistant, Tampa College, Florida
    Credential: Certified Medical Assistant (AAMA)
    Teacher certification issued by Hillsborough County Public Schools

MEDICAL CLINICAL LABORATORY TECHNICIAN – ATD

Full-time Faculty:

Dickson, Linda
    Master’s Degree – Public Health, Univ. of South Florida, Florida
    Bachelor’s Degree – Medical Technology, Olivet Nazarene University, Illinois
    Credential: Florida License – Laboratory Supervisor
    Certification: ASCP – Medical Technologist
    Teacher certification issued by Hillsborough County Public Schools

Part-time Faculty:

Cantelmo, Anna
    Vocational Certificate – Med Lab Tech, Erwin Technical Center, Florida
    Credential: Clinical Lab Technician
    Certification: AAB Certification – MLT, Generalist
    Teacher certification issued by Hillsborough County Public Schools

MEDICAL CODER/BILLER – ATD

Full-time Faculty:

Allen, Tamara
    Liberal Arts studies, Hillsborough Community College, Florida
    Teacher certification issued by Hillsborough County Public Schools

Warren, Mary
    Associate’s Degree – Medical Record Technology, Hillsborough Com. College, Florida
    Credential: Registered Health Information Technician
    Teacher certification issued by Hillsborough County Public Schools

Part-time Faculty:

Sullivan, Marcia
    Master’s Degree – Health Care (MBA), Loyola College, Maryland
    Bachelor’s Degree – Health Records Administration, University of Pittsburgh, PA
    Credentials: Registered Health Information Administrator, Certified Healthcare Executive
    Teacher certification issued by Hillsborough County Public Schools
NURSING ASSISTANT (ARTICULATED)

Full-time Faculty:

Pothen, Shibu
Bachelor’s Degree – Nursing (BSN), Barry University, Florida
Degree – Doctor of Philosophy, Vikram University, India
License: Registered Nurse, State of Florida Department of Health
Teacher certification issued by Hillsborough County Public Schools

PHLEBOTOMY

Part-time Faculty:

Fritcher, Tandy
Vocational Certificate – Practical Nursing, Erwin Technical Center, Florida
Vocational Certificate – Medical Assisting, Erwin Technical Center, Florida
Credentials: Licensed Practical Nurse; Certified Medical Assistant (AAMA)
Teacher certification issued by Hillsborough County Public Schools

PLUMBING TECHNOLOGY

Full-time Faculty:

Vidal, John
High School Diploma – Christopher Columbus High School, New York
Credentials – 2 Certified Plumbing Contractors Licenses
Certificate: Plumbing Instructor, National Center for Construction Education & Research
Teacher certification issued by Hillsborough County Public Schools

PRACTICAL NURSING

Full-time Faculty:

Baker, Kelli
Associate of Science - Nursing (ASN), St. Petersburg College, Florida
License: Registered Nurse, State of Florida Department of Health
Teacher certification issued by Hillsborough County Public Schools

Bazile, Edliv
Associate of Science - Nursing (ASN), St. Petersburg College, Florida
License: Registered Nurse, State of Florida Department of Health
Teacher certification issued by Hillsborough County Public Schools

Brown, Evelyn
Bachelor’s Degree - Nursing (BSN), Chamberlain College of Nursing, Illinois
License: Registered Nurse, State of Florida Department of Health
Teacher certification issued by Hillsborough County Public Schools
Collins, Cheryl  
Master’s Degree - Psychology, Russell Sage College, New York  
Bachelor’s Degree – Biology, Salem State College, Massachusetts  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Eckermann, Janet  
Bachelor’s Degree – Nursing (BSN), Bishop Clarkson College of Nursing, Nebraska  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Fox, Diane  
Bachelor’s Degree – Nursing (BSN), Bishop Clarkson College of Nursing, Nebraska  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Godwin, Cynthia  
Bachelor’s Degree – Nursing (BSN), University of Phoenix, Arizona  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Johnson, Michael  
Bachelor’s Degree – Social Science, Towson University, Maryland  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

King, Denice  
Master’s Degree – Nursing Education (MSN Ed), University of South Florida, Florida  
Bachelor’s Degree – Nursing (BSN), University of South Florida, Florida  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Knowles-Coet, Antoinette  
Associate’s Degree – (ASN), Hillsborough Community College, Florida  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Matthias, Sheila  
Doctorate Degree, Educational Leadership, University of Phoenix, Arizona  
Master’s Degree – Nursing (MSN), University of Tampa, Florida  
Bachelor’s Degree – Nursing (BSN), University of Tampa, Florida  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Mehranipornejad, Carol  
Bachelor’s Degree - Nursing (BSN), University of Phoenix, Arizona  
License:  Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools
Trinidad, Chantal  
Associate’s Degree – Nursing (ASN), Hillsborough Community College, Florida  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Wiesen, Sr. Ann  
Master’s Degree – Rehabilitation Administration & Services, Southern Illinois Univ., IL  
Bachelor’s Degree – Nursing (BSN), Marillac College, Missouri  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Part-time Faculty:

Brogan, Sara  
Bachelor’s Degree - Nursing, Florida State University, Florida  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Contos, Judith  
Associate Degree – Nursing, Hillsborough Community College, Florida  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Fischer, Ruth  
Master’s Degree – Adult Education, University of South Florida, Florida  
Bachelor’s Degree – Nursing (BSN), Florida Southern College, Florida  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Maihack, Barbara  
Bachelor’s Degree - Nursing (BSN), Kent State University, Ohio  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Mitchell, Dawn  
Bachelor’s Degree - Nursing (BSN), Nevada State University, Nevada  
Bachelor’s Degree – Education, Nova Southeastern University, Florida  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Ojeda, Johanna  
Bachelor’s Degree – Nursing (BSN), University of Tampa, Florida  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

Sabando, Tamara  
Associate’s Degree – Nursing, Hillsborough Community College, Florida  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools
Vaz-Baker, Lori  
Associate’s Degree – Nursing, Kingsborough Community College, New York  
License: Registered Nurse, State of Florida Department of Health  
Teacher certification issued by Hillsborough County Public Schools

SOLAR PHOTOVOLTAIC SYSTEM DESIGN, INSTALLATION AND MAINTENANCE

Full-time Faculty:

Brocks, Sigurd  
Bachelor’s Degree – Architecture, University of Applied Science Dortmund, Germany  
Certificate: Building Construction Instructor, National Center for Construction Education and Research  
Teacher certification issued by Hillsborough County Public Schools

SURGICAL TECHNOLOGY

Full-time Faculty:

Antala, Kirsten  
Associate’s Degree – Associate of Arts, Hillsborough Community College, Florida  
Vocational Certificate – Surgical Technology, Erwin Technical Center, Florida  
Credential: Certified Surgical Technologist (AST)  
Teacher certification issued by Hillsborough County Public Schools

Mattson, Rita  
Vocational Certification – Surgical Tech, Metropolitan Community College, Nebraska  
Credential: Certified Surgical Technologist (AST)  
Teacher certification issued by Hillsborough County Public Schools

Part-time Faculty:

Belvin-Thomas, LaQuina  
Associate’s Degree – Surgical Technology, Midlands Technical College, South Carolina  
Credential: Certified Surgical Technologist (AST)  
Teacher certification issued by Hillsborough County Public Schools

Davis, Graham  
Associate’s Degree – General Studies, Central Texas College, Missouri  
Credential: Certified Surgical Technologist (AST)  
Teacher certification issued by Hillsborough County Public Schools
WELDING TECHNOLOGY

Full-time Faculty:

LaFerriere, Raymond
High School Diploma (Welding major) - Jefferson High School, Florida
Certificate: Welding Instructor, National Center for Construction Education & Research
Teacher certification issued by Hillsborough County Public Schools

WIRELESS TELECOMMUNICATIONS

Full-time Faculty:

VanPelt, William
Vocational Certificate – Electronics Technology, Eatontown Institute of Electronics, NJ
Credentials: Cisco Networking Academy Advanced Level Instructor Excellence,
Microsoft Certified Professional Systems Engineer
Teacher certification issued by Hillsborough County Public Schools

FINANCIAL ASSISTANCE DEPARTMENT FACULTY

Full-time Faculty:

Diaz, Georgene Johnson
Master’s Degree – Educational Leadership, Nova Southeastern University, Florida
Bachelor's Degree – Sociology, University of South Florida, Florida
Teacher certification issued by State of Florida

Hayes, Mikesha
Bachelor’s Degree – Liberals Arts, University of Tampa, Florida
Teacher certification issued by Hillsborough County Public Schools

STUDENT SERVICES DEPARTMENT FACULTY

Full-time Faculty:

Herce, Deborah
Advanced Vocational Degree – University of South Florida, Florida
Bachelor’s Degree – Industrial & Technical Education, University of South Florida, FL
Teacher certification issued by State of Florida

Hollingsworth, Shelly
Master’s Degree – Education, University of South Florida, Florida
Bachelor’s Degree – Social & Behavioral Sciences, University of South Florida, Florida
License: Licensed Mental Health Counselor, Dept. of Health, State of Florida
Teacher certification issued by State of Florida
Hoy, Deborah  
Educational Specialist Degree – Guidance & Counseling, Argosy Univ.–Sarasota, FL  
Master’s Degree – Educational Leadership, Nova Southeastern University, Florida  
Bachelor’s Degree – Physical Education, University of Tampa, Florida  
Teacher certification issued by State of Florida

LoBalbo, Judith  
Bachelor’s Degree – Social & Behavioral Sci - Sociology, Univ. of South Florida, FL  
Teacher certification issued by Hillsborough County Public Schools

Matassini, Donna  
Master’s Degree – Career & Technical Education, University of South Florida, Florida  
Bachelor’s Degree – Finance, University of South Florida, Florida  
Teacher certification issued by Hillsborough County Public Schools

Meadows, Mary Katherine  
Master’s Degree – Counselor Education, University of South Florida, Florida  
Bachelor’s Degree – Business Administration, University of Florida, Florida  
Teacher certification issued by State of Florida

Part-time Faculty:

Moore, Marilyn (Social Worker)  
Master’s Degree – Social Work, Florida State University  
Bachelor’s Degree – Social Work, Florida State University  
Teacher Certification issued by State of Florida

Ricciardi, Vito (School Psychologist)  
Master’s Degree – School Psychology, Eastern Illinois University, Illinois  
Bachelor’s Degree – Psychology, Eastern Illinois University, Illinois  
Teacher Certification issued by State of Florida

THE LEARNING CENTER FACULTY

Part-time Faculty:

Acosta, Irene  
Master’s Degree – Education, University of South Florida, Florida  
Bachelor’s Degree – Health Education, University of South Florida, Florida  
Teacher certification issued by State of Florida

Freyre, Ada  
Master’s Degree – Business Administration (MBA), Nova Southeastern University, FL  
Bachelor’s Degree – Business, Nova Southeastern University, Florida  
Teacher certification issued by State of Florida

Johnson, Phyllis  
Bachelor’s Degree – English Education, University of South Florida, Florida  
Teacher certification issued by State of Florida
Johnston, Carla  
Bachelor’s Degree – Elementary Education, University of South Florida, Florida  
Teacher certification issued by State of Florida

Sizemore, Christina  
Bachelor’s Degree – Art Education, English, Bob Jones University, South Carolina  
Specialized Training – American Sign Language  
Teacher certification issued by State of Florida

Ziegler, Shirley  
Master’s Degree – Business Education, University of South Florida, Florida  
Bachelor’s Degree – Business Education, University of South Florida, Florida  
Teacher certification issued by State of Florida

Part-Time Faculty
Continuing Ed

Farr, Timothy  
Applied Welding Technology  
Vocational Certificate  
School District Hillsborough County  
Florida

Foerstner, Dana  
I.V. Skills  
Bachelor’s Degree, RN  
National-Louis University  
Florida

Guzman, Lupe  
Health Science  
Vocational Certificate  
School District Hillsborough County  
Florida

Lutz, Barbara  
Business Education  
Vocational Certificate  
School District Hillsborough County  
Florida

Mobley, Essie  
IV Skills  
Bachelor’s Degree (BSN), RN  
Florida A&M University  
Florida
APPENDIX

ARTICULATION AGREEMENTS CHART………………………………… 69

TABE EXIT REQUIREMENTS CHART ................................. 70

2015 – 2016 STUDENT CALENDAR ................................. 71
# Erwin Technical College
## Programs with Articulation Agreements

<table>
<thead>
<tr>
<th>Erwin Program</th>
<th>A.S. or A.A.S. Degree Program</th>
<th>College</th>
<th>Credits</th>
<th>Time Factor*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Operations</td>
<td>Office Administration</td>
<td>Statewide Community Colleges (FL)</td>
<td>6</td>
<td>3 years</td>
</tr>
<tr>
<td>Automotive Service Technology</td>
<td>Automotive Service Management Technology</td>
<td>Statewide Community Colleges (FL)</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Building Construction Technologies</td>
<td>Building Construction Technology</td>
<td>Statewide Community Colleges (FL)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Carpentry</td>
<td>Building Construction Technology</td>
<td>Statewide Community Colleges (FL)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Medical Coder/Biller – ATD**</td>
<td>Health Information Management or Office Administration – Medical Office Specialization</td>
<td>Statewide Community Colleges (FL)</td>
<td>26</td>
<td>3 years</td>
</tr>
<tr>
<td>Medical Clinical Laboratory Technician – ATD**</td>
<td>Medical Laboratory Technology</td>
<td>Statewide Community Colleges (FL)</td>
<td>40</td>
<td>3 years</td>
</tr>
<tr>
<td>Plumbing Technology</td>
<td>Building Construction Technology</td>
<td>Statewide Community Colleges (FL)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Practical Nursing</td>
<td>Registered Nursing</td>
<td>Statewide Community Colleges (FL)</td>
<td>10</td>
<td>5 years</td>
</tr>
<tr>
<td>Wireless Telecommunications</td>
<td>Networking Services Technology or Computer Engineering Technology</td>
<td>Statewide Community Colleges (FL)</td>
<td>9 – 15</td>
<td>3 years</td>
</tr>
</tbody>
</table>

*Community Colleges and/or Universities have additional admission requirements prior to the awarding of credits. Please contact the institution of interest for their specific requirements.

*If a number of years is indicated in the “Time Factor” column above, the Erwin graduate must enter the designated Associate Degree program within the specified number of years of his/her Erwin completion date. Students are encouraged to contact the institution of interest at the point of Erwin program completion to obtain specific articulation requirements including, but not limited to, time factors.

**ATD (applied Technology Diploma) guarantees transfer of credit statewide to any community or junior college offering the same program, pursuant to conditions of the Florida Department of Education Articulation Agreements.
# Test of Adult Basic Education (TABE) Scores

## 2015 – 2016

<table>
<thead>
<tr>
<th>Programs</th>
<th>State Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Operations</td>
<td>10 10 10</td>
</tr>
<tr>
<td>Air Conditioning, Refrigeration &amp; Heating Tech.</td>
<td>9 9 10</td>
</tr>
<tr>
<td>Automotive Services Technology</td>
<td>9 9 10</td>
</tr>
<tr>
<td>Barbering</td>
<td>9 9 9</td>
</tr>
<tr>
<td>Barbering II (must hold Cosmetology license)</td>
<td>9 9 9</td>
</tr>
<tr>
<td>Building Construction Technologies</td>
<td>9 9 9</td>
</tr>
<tr>
<td>Carpentry</td>
<td>9 9 9</td>
</tr>
<tr>
<td>Commercial Foods &amp; Culinary Arts</td>
<td>9 9 9</td>
</tr>
<tr>
<td>Computer Systems &amp; Information Technology</td>
<td>9 9 10</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>9 8 8</td>
</tr>
<tr>
<td>Dental Assisting Tech &amp; Management – ATD</td>
<td>10 10 10</td>
</tr>
<tr>
<td>Drafting</td>
<td>9 9 10</td>
</tr>
<tr>
<td>Electricity</td>
<td>9 9 9</td>
</tr>
<tr>
<td>Electroneurodiagnostic Technician</td>
<td>11 11 10</td>
</tr>
<tr>
<td>Massage Therapy</td>
<td>10 10 9</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>10 10 10</td>
</tr>
<tr>
<td>Medical Clinical Laboratory Technician – ATD</td>
<td>11 11 10</td>
</tr>
<tr>
<td>Medical Coder/Biller - ATD</td>
<td>11 11 10</td>
</tr>
<tr>
<td>Nursing Assistant (Articulated)</td>
<td>- - -</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>- - -</td>
</tr>
<tr>
<td>Plumbing Technology</td>
<td>9 9 9</td>
</tr>
<tr>
<td>Practical Nursing</td>
<td>11 11 11</td>
</tr>
<tr>
<td>Solar Photovoltaic System Design</td>
<td>9 9 9</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>11 11 10</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>9 9 9</td>
</tr>
</tbody>
</table>

R = Reading  
L = Language  
M = Mathematics