Welcome to BITS Pilani, Dubai Campus
What is it that can empower our nation? The most obvious answer is education. Education that enhances livelihoods but also education that is value-based. Education that gives roots and gives wings as well.

Dr. Kumar Mangalam Birla
Chancellor, BITS Pilani

Teaching, student care and industry engagement will remain our core strength areas, even as we lay enhanced emphasis on research to harness its full potential.

Prof. V.S. Rao
Acting Vice Chancellor, BITS Pilani
Birla Institute of Technology and Science at Pilani (BITS, Pilani) is the top private technological Institution in India declared as a deemed to be university since 1964. The great visionary late Mr. G.D. Birla was its Founder Chairman. BITS Pilani is located at Pilani in the state of Rajasthan and offers degree at all levels in Engineering, Sciences, Management and Pharmacy.

Late Dr. K.K. Birla, who took over as the Chairman in 1983, realized the need for providing top class higher education facility to greater number of promising students in science and technology, and under his patronage, BITS Pilani started expanding by establishing three new campuses - BITS Pilani, Dubai Campus in the year 2000, BITS Pilani, K.K. Birla Goa Campus in the year 2004 and BITS Pilani, Hyderabad Campus in the year 2008.

Consequent upon the sad demise of Dr. K.K.Birla in 2008, Dr. Kumar Mangalam Birla was elected as the Chancellor and Smt. Shobhana Bhartia was appointed as the Pro-Chancellor. Under the leadership of a young and dynamic Chancellor, BITS is taking steps to scale greater heights.

BITS Pilani is ranked No.1 among the private engineering institutions in India in several media rankings such as the Higher Education Review (May 2015 issue), Education World (May 2015 issue), The Week (June 2015 issue), Outlook (July 2015 issue) and is ranked among the top three technical universities of India by the 2015 India Today- Nielson Survey. It is also ranked among the Top 100 Universities in the QS University rankings- BRICS 2015 and ranked among the Top 250 Universities in the QS University rankings- Asia 2015. BITS Pilani had been accredited by the National Assessment and Accreditation Council (NAAC), in 2009 and had been awarded the coveted ‘A’ Grade with a CGPA of 3.71 on 4 Scale.

The institute has embarked on a journey to become one of the leading universities in the world by the year 2020 through a new strategic plan entitled "Vision 2020".
Message from the Director

Welcome to Dubai Campus of Birla Institute of Technology and Science, Pilani (BITS Pilani), Rajasthan, India. Established in 2000, with the approval of UGC and Ministry of HRD, Government of India, BITS Pilani, Dubai Campus (BPDC) situated at Dubai International Academic City, Dubai, UAE, has grown into an integrated International Campus offering three tier education - First Degree, Higher Degree and Ph.D. programmes. It has the distinction of being the first offshore campus of any Indian Higher Education Institution. It gives the opportunity to aspiring students to study at a BITS Pilani campus and acquire qualifications and knowledge recognized worldwide with international exposure.

The Dubai Campus carries forward the Charter of the brand “BITS Pilani” and is committed to the highest standards of academic excellence. It provides latest technology and learning tools such as telepresence system classrooms, campus wide Wi-Fi network, modern laboratories and a conducive environment to the students to become top technocrats, professionals, entrepreneurs, leaders or researchers and responsible global citizens.

The unique broad based education system with various flexibilities including dual degree and options like Electives, Open-ended project courses, Practice School Programme etc., gives BITS Pilani a distinct character. In the Practice School Programme students are exposed to the professional work environment and get the hands on experience in solving real life problems.

The academic flexibilities are complemented by a host of opportunities to participate in and contribute to a variety of co-curricular, extra-curricular and professional activities. We lay emphasis on well-rounded personality development of the students and also in inculcating the values, creativity, leadership, teamwork and integrity. We strive to develop each BITSian to work with all vigor and values for the betterment of humanity, to be better persons and leaders of tomorrow. Special emphasis is given for the good placements of the graduates. Students are also motivated and mentored to become entrepreneurs.

The graduates from BITS Pilani, Dubai Campus are very successful and have done exceptionally well in all spheres of life. The strong networks of the BITS Pilani alumni holding leading positions in industry and academia all over the globe, are a testimony to the BITS Pilani’s focus of nurturing individuals in the pursuit of excellence. This worldwide alumni network also provides immense support to the Institute and offers extensive help to its students.

Choosing a university for higher education is one of the most significant decisions to shape your career and life. You will find in this booklet all the essential information on BITS Pilani, Dubai Campus, the programmes offered, admission procedures and other information.

I invite you to visit our website to learn more.

Prof. R.N. Saha
Director & Shri B.K. Birla and Smt. Sarala Birla Chair Professor.
BITS Pilani, Dubai Campus

BITS Pilani Dubai Campus (BPDC) is the branch campus of the internationally reputed Birla Institute of Technology and Science (BITS), Pilani-India and the largest institution exclusively offering Engineering Programmes in Dubai International Academic City. Set-up in the year 2000, we offer quality engineering education to students from across the globe. The campus is approved by Ministry of Human Resource Development, Government of India and University Grants Commission (UGC), India and is permitted by Knowledge & the Human Development Authority (KHDA), Government of Dubai.

BITS Pilani, Dubai Campus carries forward the Charter of the brand BITS Pilani and is committed to the highest standards of academic excellence with continuous innovation in curriculum and pedagogy, pervasive industry engagement through practice school and an enriched campus life. We have 1800 students from over 20 countries world-wide. The vibrant campus has an excellent academically conducive infrastructure along with well-experienced, highly qualified and dedicated faculty who are committed to fulfilling the students’ aspirations and shaping them as competent professionals.

The academic programmes and opportunities transform the students. They acquire learning skills, creativity, teamwork and leadership. The rigorous syllabi not only instill in them, a passion for knowledge but also attempt to teach them how to apply that knowledge to real situations. In the Practice School Programme students are exposed to the work environment and get the hands on experience in solving real life problems during their educational years. We have a collaboration with over 300 reputed companies across UAE to offer practice school (internship) to our students.

Alumni from this campus have done exceptionally well in all spheres of life. They are occupying leading positions in diverse fields across the world. They have been recruited by more than 1000 prestigious companies around the world and several have completed or pursuing Masters and Ph.D. programmes from more than 75 leading universities. Many Alumni are also successful entrepreneurs.

The professional activities at the campus have no parallel and is among the very few institutions in the Middle East to have recognized student chapters of professional societies such as IEEE, ASHRAE, ASME, SAE & ACM.

We also offer exhaustive opportunities to students to participate in and contribute to a variety of co-curricular and extra-curricular activities. We lay emphasis on well-rounded personality development and the several laurels our students have won at the various national and international events are a testimony to this.
The BITS Pilani Advantage

01 World class curriculum and faculty

Our curriculum is constantly updated to reflect the latest in technology and research. Most of our faculty members are Ph.Ds from reputed universities and have vast experience.

02 Stellar Ratings

BITS Pilani is consistently ranked No.1 among the private engineering institutions in many surveys of educational institutes conducted in India. It is also ranked among the top 100 universities in the QS University rankings-BRICS 2015 and among the top 250 in QS University rankings-Asia 2015.

03 Licensure & Accreditation

BITS Pilani, Dubai Campus is approved by Ministry of Human Resource Development, Government of India and University Grants Commission (UGC), India and is permitted by the Knowledge and Human Development Authority, Government of Dubai.

04 Industry Internship

The Practice School (PS) programme ensures that students spend over 7 months working in industry even before graduation. The PS gives students the vital experience needed to adapt quickly to careers in industry.

05 Placement Assistance

We organize Campus Placement Programme every year for our graduates. The Dubai Campus is a preferred recruitment ground for most corporates in Middle East and India including MNCs and large conglomerates.

06 State-of-the-art infrastructure

The vibrant campus offers high-tech laboratories of international standards, well sourced library, modern classrooms, excellent hostel and sports facilities.

07 All-Round Development

We believe wholeheartedly in helping students develop to their full potential in every field of their interest. Soft skills development is made part of the class-room experience through presentation and open ended learning components. Extracurricular activities, student managed clubs and events give them further avenues to express themselves and develop skills beyond academics.

08 Successful Alumni

Renowned scientists, successful entrepreneurs and managers and leaders of society - our alumni have made us proud time and again. Alumni are actively engaged with the institute and with the students, motivating them to perform and excel at whatever they do.

09 International Exposure

Dubai, an international business and education hub is a strategic base to hundreds of global companies and universities and offers plenty of opportunities to students to interact with professors, industry experts and seasoned professionals across the spectrum. It is home to more than 200 nationalities and offers the best healthcare, shopping, sport and entertainment and leisure opportunities in the world.
The truest worth of the institute can only be gauged by the success of its alumni. On this front, our students have made us proud. They are employed in over 1000 globally reputed companies and many are also successful entrepreneurs. Several alumni are also pursuing higher studies in over 75 reputed universities around the world. Our vast alumni network is actively engaged with the institute and with the students, motivating them to perform and excel at whatever they do.

Alumni Network

Rohit Ratnaparkhi
Class of 2012
Engineer
L&T Electrical & Automation
Korea

Saumya Awasthi
Class of 2014
MSc. Advance Software Engineering
Kings College London.

Rohan Maloo
Class of 2014
Graduate Engineer
Petrofac International
Sharjah, U.A.E.

Sahana Vemuri
Class of 2013
Systems Engineer
Johnson Controls Inc.
Dubai, U.A.E

Kartikay Khandelwal
Class of 2009
Applied Data Scientist
Microsoft
California, USA

Aishwarya Nair
Class of 2015
Business Analyst
Dell Intl. Services, India
Bangalore, India

Ankit Patel
Class of 2007
Manager - IS&S Business Operations
Apple Inc., CA, USA

Sanya Ghani
Class of 2014
Engineer
Thyssen Krupp, U.A.E

Annamalai Alagappan
Class of 2008
Controls and Planning Manager
Visionstream
Auckland, New Zealand
The Programmes incorporate up-to-date techniques of analysis and synthesis in the respective discipline
Programmes Offered

First Degree Programmes

- B.E. Chemical Engineering
- B.E. Civil Engineering
- B.E. Electrical & Electronics Engineering
- B.E. Mechanical Engineering
- B.E. Computer Science
- B.E. Electronics & Instrumentation Engineering
- B.E. Biotechnology
- B.E. Electronics & Communication Engineering

Higher Degree Programmes

- M.E. Microelectronics
- M.E. Software Systems
- M.E. Design Engineering
- M.E. Biotechnology
- M.B.A. (Master of Business Administration)

Doctoral Programme

- Ph.D. (Doctor of Philosophy)
  in Engineering & Allied Disciplines
BITS Pilani has been following the semester system with continuous evaluation since its inception. The educational programmes are modular and flexible. The same philosophy is replicated at Dubai Campus.

The degree programmes are based on the principle that a set of courses make up the structure where each course is self contained, but, nevertheless, acts as a bridge between what precedes and what comes after. Attempt is to awaken curiosity in the minds of the students and train them to think scientifically and to enable them to face the unfamiliar.

Through the Practice School programme, we have established purposeful linkages with the industry and the students with the Practice School option get a flavour of professional world.

The performance of the students in each course is continuously evaluated by the faculty throughout the semesters in terms of tests, quizzes, assignments, projects, laboratory work, etc. followed by a comprehensive examination at the end of the semester.

The continuous evaluation provides a regular feedback to the students to know where they stand, thus, enabling them to improve and to cultivate habits of regular study and face challenges.

The B.E. programmes are based on the modular structure with the academic requirements spelt out in terms of number of courses and units rather than number of years. The courses are structured in such a way that the student will be able to finish the programme in eight semesters.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of units Required</th>
<th>Number of Courses Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(I) General Institutional Requirement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities Electives</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Science Foundation</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics Foundation</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Foundation</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Technical Arts</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>General Awareness/ Professional Courses</td>
<td>3 to 6</td>
<td>1 to 3</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>51 to 54</td>
<td>20 to 22</td>
</tr>
<tr>
<td><strong>(II) Discipline Requirement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core</td>
<td>33 to 48</td>
<td>10 to 16</td>
</tr>
<tr>
<td>Elective</td>
<td>12 to 27</td>
<td>4 to 9</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>57 to 60</td>
<td>15 to 20</td>
</tr>
<tr>
<td><strong>(III) Open Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coursework Sub-Total</td>
<td>126 (min)</td>
<td>40 (min)</td>
</tr>
<tr>
<td><strong>(IV) PS-I and II or Thesis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS-I and II or Thesis</td>
<td>25 or 9 to 16</td>
<td>2 or 1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>141 (min)</td>
<td>41 (min)</td>
</tr>
</tbody>
</table>
2. **Courses under General Institutional Requirement:**

a) General Biology, Biology Laboratory, General Chemistry, Chemistry Laboratory, Mechanics, Oscillations and Waves, and Physics Laboratory under Science Foundation.

b) Mathematics I, II and III under Mathematics Foundation.

c) Electrical Sciences and Thermodynamics under Engineering Foundation.


f) Courses from Languages and Literature, History and Philosophy, Political and Social Sciences, Fine Arts and Professional Arts under Humanities Electives.
Department of Chemical Engineering

Overview

The Department of Chemical Engineering at BITS Pilani, Dubai Campus is one of the premier chemical engineering departments in the gulf region. The department’s goal is to produce students who will become leaders in their areas.

Chemical Engineering is undoubtedly the most versatile of Engineering disciplines. Through a judicious mix of mandatory and elective courses, the students at Dubai campus gain expertise in various areas of chemical engineering such as petroleum and petrochemicals, electro-chemicals, paper, cement, ceramics and glass, polymers and plastics, food processing and products, paints and dyes, textiles and synthetics, fibers, etc. Also, students are enabled to enter interdisciplinary areas like Surface Science, Corrosion Engineering, Combustion Engineering, Polymers, Nano-technology and Environment Engineering.

Programmes Offered

First Degree Programme
B.E. Chemical Engineering

Doctoral Programme
Doctor of Philosophy (Ph.D.)
(For Programme details and research areas, refer page no.31)
### Semester-wise Pattern for B.E. Chemical Engineering*

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Laboratory</td>
<td>Mathematics II</td>
</tr>
<tr>
<td>General Biology</td>
<td>Workshop Practice</td>
</tr>
<tr>
<td>Chemistry Laboratory</td>
<td>Computer Programming</td>
</tr>
<tr>
<td>General Chemistry</td>
<td>Electrical Sciences</td>
</tr>
<tr>
<td>Mathematics 1</td>
<td>Technical Report Writing</td>
</tr>
<tr>
<td>Physics Laboratory</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>Mechanics, Oscillations and Waves</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>Engineering Graphics</td>
<td></td>
</tr>
<tr>
<td>Mathematics III</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>Humanities Electives</td>
<td>or Principles of Management</td>
</tr>
<tr>
<td>Fluid Mechanics</td>
<td>Humanities Electives</td>
</tr>
<tr>
<td>Chemical Process Calculations</td>
<td>Heat Transfer</td>
</tr>
<tr>
<td>Engineering Chemistry</td>
<td>Numerical Methods for Chemical Engineers</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>Material Science &amp; Engineering</td>
</tr>
<tr>
<td>Thermodynamics</td>
<td>Separation Processes I</td>
</tr>
<tr>
<td>Open/Humanities Electives</td>
<td>Open/Humanities Electives</td>
</tr>
<tr>
<td>Chemical Engineering Laboratory I</td>
<td>Chemical Engineering Laboratory II</td>
</tr>
<tr>
<td>Separation Processes II</td>
<td>Process Dynamics &amp; Control</td>
</tr>
<tr>
<td>Kinetics &amp; Reactor Design</td>
<td>Process Design Principle II</td>
</tr>
<tr>
<td>Process Design Principles I</td>
<td>Discipline Electives</td>
</tr>
<tr>
<td>Discipline Electives</td>
<td></td>
</tr>
<tr>
<td>Open Electives</td>
<td>Practice School-II</td>
</tr>
<tr>
<td>Discipline Electives</td>
<td>OR</td>
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<tr>
<td></td>
<td>Thesis or Thesis (9) and</td>
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<tr>
<td></td>
<td>Electives (6 to 9)</td>
</tr>
</tbody>
</table>

* This is an operative pattern for the students as approved by the Senate-appointed committee, subject to change if the situation warrants.

### List of some Discipline Elective Courses:
- Transport Phenomena
- Corrosion Engineering
- Chemical Process Technology
- Process Plant Safety
- Bio-chemical Engineering
- Environmental Pollution Control
- Process Equipment Design
- Advanced Process Control
- Molecular and Statistical Thermodynamics
- Process Plant Design Project I & II
- Modelling and Simulation in Chemical Engg
- Fluidization Engineering
- Petroleum Refining and Petrochemicals
- Environmental Management Systems
- Polymer Technology
- Nuclear Engineering
- Energy Conservation and Management
- Introduction to Nanoscience & Technology
- Paper and Pulp Technology
- Alternate Energy Resources
- Petroleum Reservoir Engineering
- Petroleum Refinery Engineering
- Petroleum Downstream Processing

### Career Options

Our graduates in Chemical Engineering are employed as Chemical Engineers, Process Engineers, Plant Engineers, Managers and Executives in reputed companies, such as Petrofac-UAE, Gulf Petrochem-UAE, Emirates Industrial Gas-UAE, Ducab-UAE, Perfect Polymers-UAE, Caspian Chemicals-UAE, Waterbird Water Treatment-UAE, Cera Decor-UAE, Fernas-India, Lipotech Engineering-Malaysia.

Several graduates are pursuing higher studies in Chemical Engineering, Process Engineering, Petroleum Engineering, Management, Environment Engineering, Materials Engineering etc. at various globally reputed Institutions.
With Dubai slated to host the 2020 World Expo and with the growing opportunities for Civil engineers in the UAE and Gulf countries, BITS Pilani, Dubai Campus now aims to enhance its offerings by introducing the B.E. Civil Engineering programme.

Civil Engineering is instrumental in developing country's infrastructure as it deals with planning, design, construction, sustenance and maintenance of the physical and naturally built environment that improves and increases mobility and convenience for its society.

While the traditional side of civil engineering education focuses on structures, buildings and bridges, foundations, ports and waterways, energy and industrial facilities, and transportation, there is now a growing trend to branch into other areas of critical importance to society like environmental engineering. Construction management, transportation logistics, sustainable development, smart cities, infrastructure management and disaster recovery, which have also become important components of today’s Civil Engineering education. Civil engineers work to protect society from natural catastrophes, such as earthquakes and hurricanes, as well as help manage our water and energy resources. As their work is crucial to the day-to-day lives of most people, civil engineers bear an important responsibility to the public.

Programme Offered
First Degree Programme
B.E. Civil Engineering
### Semester-wise Pattern for B.E. Civil Engineering*

<table>
<thead>
<tr>
<th>First Semester</th>
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<tbody>
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<td>Mathematics 1</td>
<td>Technical Report Writing</td>
</tr>
<tr>
<td>Physics Laboratory</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>Mechanics, Oscillations and Waves</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>Engineering Graphics</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics III</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>Humanities Electives</td>
<td>or Principles of Management</td>
</tr>
<tr>
<td>Mechanics of Solids</td>
<td>Humanities Electives</td>
</tr>
<tr>
<td>Transport Phenomena</td>
<td>Analysis of Structures</td>
</tr>
<tr>
<td>Surveying</td>
<td>Construction Planning &amp; Technology</td>
</tr>
<tr>
<td>Construction Materials</td>
<td>Soil Mechanics</td>
</tr>
<tr>
<td></td>
<td>Highway Engineering</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Open/Humanities Electives</td>
<td>Open/Humanities Electives</td>
</tr>
<tr>
<td>Design of Concrete Structures</td>
<td>Water &amp; Waste Water Treatment</td>
</tr>
<tr>
<td>Hydraulic Engineering</td>
<td>Design of Steel Structures</td>
</tr>
<tr>
<td>Foundation Engineering</td>
<td>Hydrology &amp; Water Resources Engineering</td>
</tr>
<tr>
<td>Disciplinary Electives</td>
<td>Disciplinary Electives</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Electives</td>
<td>Practice School-II</td>
</tr>
<tr>
<td>Disciplinary Electives</td>
<td>OR Thesis</td>
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</tr>
</tbody>
</table>

* This is an operative pattern for the students as approved by the Senate-appointed committee, subject to change if the situation warrants.

### List of some Discipline Elective Courses:
- Introduction to Environmental Engineering
- Numerical Analysis
- Operation Research for Engineers
- Disaster Management
- Computer Applications in Civil Engineering
- Introduction to Bridge Engineering
- Green Buildings and Energy Conservation
- Remote Sensing and Image Processing
- Introduction to Finite Element Methods
- Airport, Railways and Waterways

### Career Options

Career options after graduation include:
- Project engineers
- Structural designers
- Transportation planners
- Technical sales engineers
- Engineers at construction site
- Design researcher
- Teaching jobs, and so on.

Civil Engineering graduates are highly sought after by design firms, engineering consultants, materials manufacturers, and government agencies, in addition to contracting and construction companies. The field remains very popular with a number of industries, not only in construction, but also with government agencies such as Roads and Transport Authorities, Electricity and Water Authorities, and Real Estate Development Authorities.
Electrical & Electronics Engineering is a broad field that encompasses many sub-fields including those that deal with electrical power generation and transmission, automatic control system, electronics and telecommunication. Electrical & Electronics Engineers apply the theories of electricity, electronics and electromagnetics to design, develop and operate these systems.

Electronics & Communication Engineering deals with the operating principles and design of devices ranging from mobile phone to wireless networks and satellite communication systems. This programme reflects the wide diversity of Communication and Data Transmission Technologies which is accepted as a vital part of everyday life from traditional radio, microwave systems to state-of-the-art optical, satellite and cellular communication systems.

Electronics & Instrumentation Engineering is the engineering specialization focused on the development and implementation of electrical and electronic instruments for the purpose of measuring, monitoring and recording physical phenomena. Among many other types of instruments, instrumentation engineers develop seismic sensors, blood glucose sensors, Fire detectors and a host of sensors for many applications. Major users of these instruments include industries that rely on automated processes such as Chemical, Petroleum and Manufacturing plants.

Programmes Offered

First Degree Programme
B.E. Electrical and Electronics Engineering (EEE)
B.E. Electronics and Communication Engineering (ECE)
B.E. Electronics and Instrumentation Engineering (EIE)

Higher Degree Programme
M.E. Microelectronics
(For programme details & course structure, refer page no.26)

Doctoral Programme
Doctor of Philosophy (Ph.D.)
(For programme details and research areas, refer page no. 31)
### Semester-wise Pattern for B.E.: EEE, ECE & EIE*

#### First Semester
- Biology Laboratory
- General Biology
- Chemistry Laboratory
- General Chemistry
- Mathematics I
- Physics Laboratory
- Mechanics, Oscillations and Waves
- Engineering Graphics

#### Second Semester
- Mathematics II
- Workshop Practice
- Computer Programming
- Electrical Sciences
- Technical Report Writing
- Probability and Statistics
- Thermodynamics

### Open/Humanities Electives
- Humanities Electives
- Electrical Machines
- Electromagnetic theory
- Digital Design
- Electronic Devices

### Humanities Electives
- Principles of Economics or Principles of Management
- Humanities Electives
- Control Systems
- Signals & Systems
- Microelectronic Circuits
- Microprocessors & Interfacing

### Practice School-II
- OR
- Thesis or Thesis (9) and Electives (6 to 9)

#### List of some Discipline Elective Courses:
- Medical Instrumentation
- Introduction To MEMS
- Satellite Communication
- Mobile Telecommunication Networks
- Power Apparatus & Networks
- Telecommunication Switching Systems & Networks
- Electromagnetic Fields & Waves
- Modern Control Systems
- Data Communication Networks
- Computer Architecture
- Object Oriented Programming
- Operating Systems
- Digital Signal Processing
- Digital Image Processing
- Advanced Process Control
- Digital Control
- Virtual Instrumentation
- Design of Instrumentation Systems
- Instrumentation for Petrochemical Industry
- Modern Communication Technologies
- Electric Power Utilization and Illumination
- Cryptography

### Career Options

Our graduates are employed as Electrical Engineers, Project Engineers, Design Engineers, Instrumentation Engineers, Sales and Service Engineers with reputed companies such as Apple-USA, Siemens-UAE, L&T-UAE and Korea, McDermott-UAE, Bharat Petroleum-India, Det Norske Veritas-Singapore, Honeywell-UAE, Halliburton-KSA, DU Telecom-UAE, Petrofac International-UAE, Unilever-UAE, Johnson Controls-UAE, ABB-UAE etc.

Several graduates have opted for higher education in Electrical Engineering, Aeronautics, Astronautics, Communications, Digital Signal Processing, Wireless Communications, Biomedical Engineering, Computer Control and Automation, Systems Engineering, Business Management etc. with globally reputed universities.

* This is an operative pattern for the students as approved by the Senate-appointed committee, subject to change if the situation warrants.
The Mechanical Engineering Department educates the Engineers of tomorrow by integrating Classroom theory and practical hands-on projects. It emphasizes the process of learning and critical thinking and promotes professional relationships among the university and industry.

Mechanical Engineering is the broadest of the engineering professions. Mechanical Engineers learn to solve Engineering Problems in CAD, Energy Conversion and Energy Management, HVAC, Materials, Design, Mechatronics, Robotics and Automation. Training is provided in Softwares such as AUTOCAD, CATIA, ANSYS, MSC ADAMS and AUTOMATION STUDIO.

Opportunities are available to the students to serve as the members of professional bodies such as ASME, SAE and ASHRAE.

Programmes Offered

First Degree Programme
B.E. Mechanical Engineering

Higher Degree Programme
M.E. Design Engineering
(For programme details & course structure, refer page no.28)

Doctoral Programme
Doctor of Philosophy (Ph.D.)
(For Programme details and research areas, refer page no.31)
Our graduates in Mechanical Engineering are employed as Design Engineers, Production Engineers, Project Engineers, Quality Control Engineers, Estimation Engineers and Sales Engineers and Consultants in reputed companies such as, Baker Hughes-UAE, Thyssen Krupp Elevators-UAE, L &T-UAE, Petrofac-UAE, Siemens-UAE, Lucy Switchgears-UAE, Daikin-McQuay ME-UAE, ETA M&E-UAE, Hindustan Unilever-India, Mott McDonald-UAE, Det Norske Veritas-UAE etc.

Several graduates have gone abroad for doing their masters programme in Mechanical Engineering, Aerospace Engineering, Industrial Engineering, Automotive Engineering, Materials Science, Design Engineering, Robotics and Automation, Manufacturing Engineering, Mechatronics, Energy Management and Business Administration from globally recognized universities.

List of some Discipline Elective Courses:
Fluid Power Systems
Nonlinear Vibrations
Total Product Integration Engineering
Gas Dynamics
Reverse Engineering and Rapid Prototyping
Advanced Metal Forming
Rocket and Spacecraft Propulsion
Power Plant Engineering
Computer Aided manufacturing
Automotive Vehicles
Quality Control, Assurance and Reliability
Mechanical Equipment Design
Composite Materials & Design
Refrigeration and Air conditioning
Precision Engineering
Introduction to MEMS Combustion
Wind Energy
Automotive Technology
Solar Thermal Process Engineering
Numerical Techniques for Fluid Flow and Heat Transfer

Career Options

Our graduates in Mechanical Engineering are employed as Design Engineers, Production Engineers, Project Engineers, Quality Control Engineers, Estimation Engineers and Sales Engineers and Consultants in reputed companies such as, Baker Hughes-UAE, Thyssen Krupp Elevators-UAE, L &T-UAE, Petrofac-UAE, Siemens-UAE, Lucy Switchgears-UAE, Daikin-McQuay ME-UAE, ETA M&E-UAE, Hindustan Unilever-India, Mott McDonald-UAE, Det Norske Veritas-UAE etc.

Several graduates have gone abroad for doing their masters programme in Mechanical Engineering, Aerospace Engineering, Industrial Engineering, Automotive Engineering, Materials Science, Design Engineering, Robotics and Automation, Manufacturing Engineering, Mechatronics, Energy Management and Business Administration from globally recognized universities.
The Department of Computer Science aims at producing world class Computer Engineers. A wide range of courses are offered to the students to help them understand the various intricacies involved in computing. The courses are designed in a way to invoke students’ ability to think originally and creatively. The department offers excellent computing facilities in terms of hardware, software and networking.

Most of the courses have both theoretical and practical sessions which aid to the better understanding of the concepts. The faculty members are trained to produce Computer Science Engineers with the ability to design and develop systems involving the integration of software and hardware devices. The entire gamut of products and services that are being used today from airline reservation to online shopping to office automation systems to rocket launching are all created by Computer Science Engineers. Apart from this, they also focus on improving software reliability, Network Security and Information Retrieval Systems. We also have an academic alliance with Microsoft through which students are provided with latest software tools in cutting edge technologies.

The department offers opportunities for students to enhance their professional skill through professional bodies like ACM, Linux User Group and Microsoft Tech Club.

Programmes Offered

First Degree Programme
B.E. Computer Science

Higher Degree Programme
M.E. Software Systems
(For programme details & course structure, refer page no.27)

Doctoral Programme
Doctor of Philosophy (Ph.D.)
(For Programme details and research areas, refer page no.31)
### Semester-wise Pattern for B.E. Computer Science*

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Laboratory</td>
<td>Mathematics II</td>
</tr>
<tr>
<td>General Biology</td>
<td>Workshop Practice</td>
</tr>
<tr>
<td>Chemistry Laboratory</td>
<td>Computer Programming</td>
</tr>
<tr>
<td>General Chemistry</td>
<td>Electrical Sciences</td>
</tr>
<tr>
<td>Mathematics 1</td>
<td>Technical Report Writing</td>
</tr>
<tr>
<td>Physics Laboratory</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>Mechanics, Oscillations and Waves</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>Engineering Graphics</td>
<td></td>
</tr>
<tr>
<td>Mathematics III</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>Humanities Electives</td>
<td>or Principles of Management</td>
</tr>
<tr>
<td>Logic in Computer Science</td>
<td>Humanities Electives</td>
</tr>
<tr>
<td>Discrete Structures for Comp. Science</td>
<td>Data Structures &amp; Algorithms</td>
</tr>
<tr>
<td>Object Oriented Programming</td>
<td>Microprocessors &amp; Interfacing</td>
</tr>
<tr>
<td>Digital Design</td>
<td>Database Systems</td>
</tr>
<tr>
<td>Open/Humanities Electives</td>
<td>Open/Humanities Electives</td>
</tr>
<tr>
<td>Operating Systems</td>
<td>Compiler Construction</td>
</tr>
<tr>
<td>Principles of Programming Languages</td>
<td>Design &amp; Analysis of Algorithms</td>
</tr>
<tr>
<td>Computer Architecture</td>
<td>Computer Networks</td>
</tr>
<tr>
<td>Discipline Electives</td>
<td></td>
</tr>
<tr>
<td>Discipline Electives</td>
<td></td>
</tr>
<tr>
<td>Open Electives</td>
<td>Practice School-II</td>
</tr>
<tr>
<td>Discipline Electives</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>Thesis or Thesis (9) and</td>
</tr>
<tr>
<td></td>
<td>Electives (6 to 9)</td>
</tr>
</tbody>
</table>

* This is an operative pattern for the students as approved by the Senate-appointed committee, subject to change if the situation warrants.

### Career Options

Our Computer Science graduates are employed as Software Engineers, Software Design Engineers, Development Engineers and System Engineers in globally reputed companies such as Microsoft-USA, Oracle-USA, Google-USA, Emirates IT-UAE, Al Futtaim Systems-UAE, LG Electronics-UAE, ESRI-UAE and USA, Standard Chartered Bank-UAE, General Electric-India, Dell Int’l Services-India, Wipro-India etc.

Several graduates have joined well-known institutions across the globe for higher studies in Computer Science, Information Technology, Software Systems, Information Security Technology, Multimedia and Animation, Gaming and Web development.

### List of some Discipline Elective Courses:

- Image Processing
- Neural Networks and Fuzzy Logic
- Fuzzy Logic and Applications
- Human Computer Interaction
- Quantum Information and Computation
- Cryptography
- Machine Learning
- Enterprise Computing
- Service Oriented Computing
- Software Development for Portable Devices
- Multimedia Computing
- Artificial Intelligence
- Internetworking Technologies
- Data Mining
- Parallel Computing
- Software for Embedded Systems
- Selected Topics from Computer Science
- Data Storage Technologies and Networks
- Information Security Project
- Computer Graphics
- Software Engineering
- Network Programming
- Combinatorial Mathematics
- Information Retrieval

**Discipline Core Courses - 48 Units (14 Courses)
Discipline Electives - 12 Units (4 Courses)
Humanities Electives - 8 Units (3 Courses)**
Globally, biotechnology represents a high technology professional career. The demands from the biotechnology work force sector for development of knowledge and competencies were a major driving force for setting up the Department of Biotechnology at BITS Pilani in Dubai. The biotechnology department is supported with state-of-the-art laboratories which are active in teaching and research.

The main objectives of the department are:

- Offering world class biotechnology teaching and research.
- Laboratory facilities for taking up R&D projects from various sponsoring agencies / industries.
- Strengthening the University-Industry linkage through sponsored R&D projects.
- To conduct hands on training for the faculty members and students in the field of biotechnology.

Programmes Offered

First Degree Programme
B.E. Biotechnology

Higher Degree Programme
M.E. Biotechnology
(For programme details & course structure, refer page no.29)

Doctoral Programme
Doctor of Philosophy (Ph.D.)
(For Programme details and research areas, refer page no.31)
### Semester-wise Pattern for students admitted to B.E. Biotechnology

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Laboratory</td>
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<td>Thermodynamics</td>
</tr>
<tr>
<td>Engineering Graphics</td>
<td></td>
</tr>
<tr>
<td>Mathematics III</td>
<td>Principles of Economics or Principles of Management</td>
</tr>
<tr>
<td>Humanities Electives</td>
<td>Humanities Electives</td>
</tr>
<tr>
<td>Biology Chemistry</td>
<td>Genetic Engineering Techniques</td>
</tr>
<tr>
<td>Microbiology</td>
<td>Genetics</td>
</tr>
<tr>
<td>Biophysics</td>
<td>Introduction to Environmental Biotechnology</td>
</tr>
<tr>
<td>Cell Biology</td>
<td>Instrumental Methods of Analysis</td>
</tr>
<tr>
<td>Open/Humanities Electives</td>
<td></td>
</tr>
<tr>
<td>Operating Systems</td>
<td></td>
</tr>
<tr>
<td>Industrial Microbiology &amp; Bioprocess Engineering</td>
<td></td>
</tr>
<tr>
<td>Discipline Electives</td>
<td></td>
</tr>
<tr>
<td>Open Electives</td>
<td>Practice School-II</td>
</tr>
<tr>
<td>Discipline Electives</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>Thesis or Thesis (9) and Electives (6 to 9)</td>
</tr>
</tbody>
</table>

* This is an operative pattern for the students as approved by the Senate-appointed committee, subject to change if the situation warrants.

### Career Options

Our Graduates are employed with various Biotech industries, Pharmaceutical Industries, Agricultural & Allied Industries and R&D departments such as ICT Health-UAE., Linaria Chemicals-Thailand, Merck-UAE, Telematics-UAE., Saurav Chemicals-India, Sanbook quality consultants-UAE and Doha, Affluence Commodities pvt ltd-India, Piramal Healthcare-UAE, Medcare hospital etc.

Many of our students have joined reputed universities for their higher studies in Forensic Sciences, Bio-medical Engineering, Genetic Counseling, Bio-pharmaceuticals, Bio-sciences and Biotechnology.

### List of some Discipline Elective Courses:

- Introduction to Bioinformatics
- Proteomics
- Biomolecular Modeling
- Molecular Biology of the Cell
- Cell and Tissue Culture Technology
- Genomics
- Immunotechnology
- Introduction to Pharmaceutical Biotechnology
- Food Biotechnology
- Introduction to Plant Biotechnology
- Nanobiotechnology
- Drug design and delivery
- Bioethics and Biosafety

**Discipline Core Courses - 43 Units (13 Courses)**

**Discipline Electives - 17 Units (5 Courses)**

**Humanities Electives - 8 Units (3 Courses)**
Higher Degree Programmes

The Higher Degree Programmes are designed and structured to meet the learning aspirations of Engineers, entrepreneurs and working professionals, meeting their continuing education pursuits. The classes for these programmes are held normally during evenings and weekend holidays.

M.E. Microelectronics

M.E. Microelectronics programme curriculum lays its focus on training its students in the design and implementation of Integrated Circuits and state of the art systems on chips. Chip Technologies being employed today accommodate analog, digital, and mixed signal circuits on micro-dimensional semiconductor wafers. Thus, the programme provides hands-on experience in a variety of Electronic Design Automation tools, to equip with requisite skill set needed for today's microelectronic circuit designers for use in industry, research and development in the emerging areas namely: Fault-tolerant systems, MEMs, Mobile Communications, Mixed Signal Circuits and VLSI. Further, the programme provides an opportunity to research and carry out in-depth work on focused areas under the guidance of experienced faculty via Dissertation.

Core Courses

- IC Fabrication Technology
- VLSI Design
- Physics and Modeling of Microelectronic Devices
- Analog IC Design
- CAD for IC Design
- Research Practice
- Dissertation

Elective Courses (Any Six)

- Reconfigurable Computing
- Advanced Architecture and Performance Evaluation
- Digital Signal Processing
- RF Microelectronics
- Optoelectronic Devices, Circuits and Systems
- Advanced Digital Signal Processing
- Hardware Software Codesign
- Optoelectronic Devices Circuits and Systems
- Integrated Electronics Design
- Advanced VLSI Design
- Advanced Analog and Mixed Signal Design
- VLSI Test and Testability
- VLSI Architectures
M.E. Software Systems

M.E. Software Systems programme has been specially designed to ensure development of systems theory approaches in software engineering context. It involves a focused study of major components of software and their architecture & interactions in a variety of categories of software systems namely: application software, Advanced Concepts in Database System and system software. These software categories find applications in computer reservation systems, air traffic control, command and control systems, telecommunication networks, web browsers, expert systems, word processors, and so on. The M.E. Software Systems programme aims at offering courses that provide necessary skill sets required by software systems engineers.

Core Courses
- Data Mining
- Object Oriented Analysis and Design
- Software Engineering & Management
- Data Warehouse
- Software Architecture
- Dissertation
- Research Practice

Elective Courses (Any Five)
- Computer Networks
- Real Time Systems
- Parallel Computing
- Pervasive Computing
- Software for Embedded System
- Internetworking Technologies
- Multimedia Computing
- Network Programming
- Advanced Data Mining
- Cloud Computing
- Network Security
- Advance Compilation Techniques
- Software Testing Methodologies
- Distributed Data Systems
- Information Retrieval
- Artificial Intelligence

“I am grateful to receive admission in BITS Pilani, Dubai Campus. I am currently working in GCAA as Sr. Software Engineer since the last one year. This Post Graduation has immensely helped me in my current assignment and hope this will add value in my future career”.

Abhiroop Santra
M.E. Software Systems
Employed as Sr. Software Engineer at UAE General Civil Aviation Authority
M.E. Design Engineering

The curriculum for the M.E. Design Engineering programme has been specially designed to ensure transformation of a Mechanical Engineering graduate into a full-fledged Design Engineer. The students will gain networked knowledge in the core and intersection areas of design, development, simulation and manufacturing. In addition, the student will carry out design projects as well as dissertation which emphasizes on developing a well rounded education through an exposure to academic and professional traits. Students are also exposed to the design engineering software tools such as CATIA, ANSYS, AUTOMATION STUDIO and MSC ADAMS.

Core Courses

- Materials Testing & Technology
- Mechanisms & Robotics
- Finite Element Methods
- Computer Aided Analysis and Design
- Product Design
- Dynamics & Vibrations
- Research Practice
- Dissertation

Elective Courses (Any Five)

- Tribology
- Fracture Mechanics
- Design Projects
- Introduction to MEMS
- Advanced Engineering Mathematics
- Computational Fluid Dynamics
- Mechanical System Design
- Advanced Composites
- Machine Tool Engineering
- Theory of Elasticity and Plasticity
- Mechatronics
- Experimental Stress Analysis Techniques
- Concurrent Engineering
- Nondestructive Testing Techniques
- Experimental Stress Analysis Techniques

“BITS Pilani, Dubai Campus has opened the world of opportunities for me as I have secured my job through Campus Placement in my first year itself. Studying here has not only enriched my skills but also gave me an opportunity to get accustomed to people from different cultural backgrounds. I gained a lot from my highly qualified professors who shared their academic knowledge and industry experience.”

Tanmay Bohra
M.E Design Engineering
Employed as Engineer at Al Shirawi Enterprises LLC, UAE
M.E. Biotechnology

M.E. Biotechnology program offers a blend of specialized courses in the area of genetics, molecular biology, cell biology & applied microbial biotechnology to ensure that the student acquires a well-rounded academic qualification with core competency to handle the current and forthcoming challenges in biotechnology.

Core Courses
- Molecular Mechanism of Gene Expression
- Advanced Cell and Molecular Biology
- Environmental Biotechnology and Waste Management
- Research Practice
- Animal Cell Technology
- Plant Biotechnology
- Advanced and Applied Microbiology
- Dissertation

Elective Courses (Any Seven)
- Biomolecular Modeling
- Enzymology
- Biochemical Engineering
- Recombinant DNA Technology
- Microbial and Fermentation Technology
- Molecular Immunology
- Stem Cell and Regenerative Biology
- Interferon Technology
- Cancer Biology
- Biostatistics and Biomodelling
- Bioremediation and bio-metallurgy
- Molecular Parasitology & Vector Biology
- Human Genetics
- Membrane and Liposome Technology
- Transgenic Technology
- Experimental Techniques
- Protein and Enzyme Bioengineering
- Gene Toxicology
- Bioconversion Technology
- Bioethics and Biosafety
- Introduction to Bioinformatics
Master of Business Administration (M.B.A.)

The M.B.A. programme endeavors to create manpower who have scientific and engineering approach to business administration. The programme equips you with the necessary business and management skills required to run an organization successfully. As the world of technology continues to change relentlessly spiraling upwards, rapid changes in various pioneering areas concerning Engineering & Technology are inevitable and are being observed by one and all. Career (advancement) opportunities are awaiting those who are successful in managing the changes applicable to their typical business/organizational set-up.

M.B.A. programme is specifically designed for working professionals who are associated with Engineering industries pertaining to core areas in Civil, Mechanical, Chemical, Petroleum, Biotechnology, Electrical, Electronics, Instrumentation and also service and trading industries etc. The curriculum for the M.B.A. programme comprises of a set of about 15 to 20 core courses which are fundamental to a general management programme along with elective courses related to two streams (i.e. Engineering and Technology Management and IT Enabled Services Management). The courses in the M.B.A. programme are taught by both regular and visiting faculty. Our visiting faculty are identified from reputed Business schools, viz: IIMB, IIMA etc.

Core Courses
- Managerial Economics
- Business Structure & Processes
- Managerial Skills
- Legal and Economic Environment of Business
- Management Framework and Functions
- Organizational Behavior
- Quantitative Methods
- Financial & Management Accounting
- Managerial Communication
- Negotiation Skills & Techniques
- Human Resource Management

Elective Courses (Any Seven)
- New Venture Creation
- Enterprise Resource Planning
- Business Analysis and Valuation
- Financial Engineering
- Risk Management and Insurance
- Technology Management
- R&D Management
- Recent Advances in ETM
- Internetworking Technologies
- Project Appraisal
- Entrepreneurship
- Marketing Research
- Manufacturing Strategy
- Total Quality Management
- Project Management
- Corporate Finance and Taxation
- Marketing
- Production & Operations Management
- Supply Chain Management
- Management Information Systems
- Business & Society
- Business Policy & Strategic Management
- International Business
- Dissertation
- Total Productive Maintenance
- Software Project Management
- Retail Management Systems
- Database Management Systems
- e-Business and Internet Marketing
- Internet Security and Cyber-laws
- Advertising and Sales Promotion
- Strategic Financial Management
- Expert Systems
- Services Management System
- Security Analysis and Portfolio Management
Doctor of Philosophy (Ph.D.)

Research is an important academic activity at BITS Pilani and students at all levels of educational programmes are involved in research. Strong emphasis is laid on inter-disciplinary, mission oriented and relevant research. Topics of Research can be chosen from any of the disciplines in which the Institute offers the First and Higher Degree Programmes or any Interdisciplinary or allied areas.

The required components for doctoral programme are: Qualifying Examination, Course Work, Teaching Practice, Seminar/Independent Study & Doctoral Thesis.

On-Campus Programme

Candidates registered for the On-Campus programme will undergo the entire pursuit of their thesis on the campus. Registration in prescribed minimum number of units and components normally requires 4-6 semesters depending on the time of approval of topic/supervisor and locale of research work by the Research Board. It is expected that the Ph.D. Scholar submits his/her Ph.D. thesis within an upper limit of ten semesters subsequent to passing the Qualifying examination.

Part-time and Off-Campus Programme

The Institute offers a unique opportunity for employed professionals working in Industries, Academic Institutes and R&D organizations and having long experience and proven competence in various fields to work towards the Ph.D. degree. Candidates meeting the input qualifications and working in an organization, which encourages and facilitates research and situated preferably in the close vicinity of the BITS Pilani campus are eligible to apply for admission in “Part-Time” Ph.D. programme. Candidates meeting the input qualification and working in an organization collaborating with BITS Pilani will normally be considered for admission to “Off-Campus” programme, also known as Ph.D. Aspirant Scheme. Such candidates will be allowed to pursue their research at their own locations of work.

On-Campus Programme

Chemical: Process systems engineering, catalysis and reactor design, adsorption, water quality management, nanofluidics.


Computer Science: Web Services and Security, cloud computing, Software Engineering and Component based modeling, Computer Networks protocol verification, Data Mining and mobile computing.


Biotechnology: Molecular biology, Microbial biotechnology, Environmental biotechnology, Biosensor technology, Plant biotechnology, Computational biology and Water Quality Modeling and Simulation.

Management: Entrepreneurship, Negotiation Skills, Managerial Skills, Project Management, Production Management, Technology Management, R&D Management, Supply Chain Management, Quantitative Methods, MIS, E-business, Organizational Behavior.

Interdisciplinary Research: Nanotechnology and Nanoscience, Nano-robotics, Micro-electromechanical systems (MEMS), Nanomaterials, Mechatronics.
BITS Pilani is a pioneer in the field of university-industry linkage and its bold and radical innovation in this regard has no parallel. The Practice School (PS) programme is a controlled simulation of real life where the student relates and applies his classroom knowledge and skills to the real issues faced by the industry. PS is a part of the total programme and takes the classroom to a professional location for a period of 7½ months, where the students under the supervision of faculty get involved in a real life situation.

The students undergo internship and work as the employees of the organization, participate in day-to-day activities of the workplace and work on specific projects assigned, in a problem solving mode, under the professional experts of the host organization. As with all other courses, a process of continuous evaluation is also followed for PS. Students are evaluated for interdisciplinary approach, decision making, written and oral presentation, leadership, team work etc. apart from the technical work, by the faculty and experts from the host organization. The PS programme will have two components, PS I of two months duration during the summer following the second year and PS II of 5½ months duration during one of the semesters of final year.

The contribution of the students is highly appreciated by us and has been of value to our operations. The conduct of your students while with our company has been exemplary and they have maintained high standards of professionalism.

Ravi Kashyap  
General Manager, Steinweg-Sharaf FZE, Dubai

The students were dynamic, enthusiastic and worked with dedication in the allotted projects. They came out with brilliant ideas related to their project. The PS Programme bridges the gap between the university education system and the industry and gives ample opportunity to students to understand expectations of the industry.

Sumit Kumar Chordia  
General Manager BOSCH (Central Motors), AbuDhabi

The students have positively added to the projects that we are working on by taking active development, testing and QA roles. They exhibited good sense of teamwork, academic acumen and were eager to learn and assimilate new technologies.

Satish Kumar Menon  
Chief Operations Manager, ESRI Global Inc, Sharjah
Student Activities

Cultural, Social and Sports Activities

Extracurricular activities are like a refreshing symphony in the academic atmosphere of our campus. We provide facilities and services that encourage the holistic development of every student in the social, cultural and interpersonal domains. These are in direct support to our mission to produce self-reliant young professionals.

There are ample opportunities for students to showcase their talents through various extra-curricular activities such as painting, sketching, singing, dancing, drama etc. Every year Intra-university and Inter-university festivals are organized. Cultural festivals namely Sparks & Jashn where numerous competitions related to dance, drama, music and fashion show are held, Technical festivals such as Technofest & Enginuity which include model making, paper presentation, workshops etc. are organized to promote innovation and research.

BITS Sports Festival (BSF), an inter-university sports festival is organized every year in which more than 27 colleges and universities from across the U.A.E. participate in 14 sporting events which include Cricket, Football, Basketball, Badminton and so on. Students and faculty are encouraged to be involved in recreational sports through intramural and extramural competitions and tournaments. An indoor sports complex provides for badminton, table tennis, carrom, chess etc., in addition to the outdoor sports facility for basketball, volleyball, throwball, football, handball and nets for cricket practice. The facilities are supervised and maintained by a separate instructor who is also responsible for training the students and supervising their activities.

The faculty and students actively promote and participate in several socially relevant activities such as fund raising events for charity, blood donation camps, city clean-up drives, environment protection related activities etc. That contribute to the service of the society and help create awareness on social issues.

Student Clubs

Student Clubs add to the rich mosaic of student life. There are active student clubs like: Dance, Astronomy, Music, Art, Sports, Photography, Drama, Public Speaking, Fashion Design, Literary, Social and Environment Clubs. The aim of each club is to enrich the social and cultural life on the Institute campus.

Discipline Association and Professional Bodies

We are among the very few institutions in the Middle East to have recognized student chapters of professional bodies such as IEEE, ASHRAE, ASME, SAE, ACM etc. Associations of students of specific academic disciplines and student branch chapters of professional bodies organize distinguished lectures, seminars and other activities throughout the semester and during technical festivals.
Facilities & Support Services

Library

The library located in a separate building has a great ambience and facilities for internet browsing, large reading area on the ground and first floors, and stack area for library resources. The Library currently holds around 21,000 volumes. There are reference sections, periodical section for current magazines and journals, digital library which has books, CD-Roms, Reports and Back Volumes.

The Library provides:

- Information and reference services on a wide variety of subjects through books, periodicals, back volumes, CD-ROMs, reports, videos and audio materials along with internet to provide maximum opportunities for learning and access to information in different formats.
- Good collection of reputed journals and magazines.
- Access to various open source electronic journals, databases and other reading materials through the library website.
- Automated library operations with web enabled OPAC (Online Public Access Catalogue).
- Access to IEEE, ASME, ACM and EBSCO Engineering and Humanities databases with back volumes.
- Access to more than 4000 electronic books on various subjects.
- Access to educational sites for obtaining worldwide information.
- High speed Wi-Fi facility.
- Network printing, photocopying and scanning facilities for students.
- Study carrels for students.
- New discussion rooms for students.
- Exclusive reading rooms for faculty & Staff.

Library services are closely monitored by a competent committee and its steady growth in holdings and services are given utmost priority. The working hours of the library are from 7.30 AM to 10.00 PM on all working days and 10.00 AM to 10.00 PM on Saturdays. During comprehensive examinations, it is open till midnight. Library is closed on Fridays & national holidays.
The Campus and the hostels are covered with the latest Cisco Network Infrastructure of both wired and wireless hotspot environment which provides the internal and external connectivity to fulfill the computing needs of the students.

We have Cisco sponsored Networking research lab equipped with the required network components such as routers, switches, firewall, wireless controllers and access points to build the network from the base to high level of networking. The Cisco lab has all the paper and soft copy material to help the students to learn and start the practical training on Cisco which will lead the students to achieve the Cisco Certifications and do software defined Network projects. Our data centre is equipped with IBM Server, HP multiple series servers and SAN storage facility.

We have Cisco Telepresence System (under BITS Connect 2.0 project) implemented in our campus which is interconnected to all our campuses in India. The Cisco Telepresence classroom seating capacity of 160 will help the students to participate in the online classroom sessions. The software tools like AUTOCAD, MATLAB, CATIA, SYNOPSYS, ANSYS, SPSS and ASPEN are available to the students along with a variety of compilers and operating systems.

Laboratories

We have well-equipped laboratories of international standards for different lab-based courses. These include:

- Manufacturing Process Lab
- Engineering Graphics & CAD Lab
- Production Techniques Lab
- Transport Phenomena Lab
- Prime Movers and Fluid Machinery Lab
- Chemical Engineering Lab I
- Chemical Engineering Lab II
- Computer Programming Lab
- Software Systems Lab
- Microprocessor Programming & Interfacing Lab
- Analog Electronics Lab
- Communication Lab
- Digital Design Lab
- Instrumentation Lab
- Electrical Machines Lab
- MEMS Lab
- Power Electronics Lab
- Digital Signal Processing Lab
- Biology Lab
- Microbiology Lab
- Instrumental Methods of Analysis Lab
- Advanced Molecular Biology Lab
- Genetic Engineering Lab
- Industrial Microbiology & Bioprocess Engineering Lab
- Physics Lab
- Chemistry Lab
- Process Control Lab

Information Technology Services

The Campus and the hostels are covered with the latest Cisco Network Infrastructure of both wired and wireless hotspot environment which provides the internal and external connectivity to fulfill the computing needs of the students.
Facilities & Support Services

Academic Advising

Academic Advising is available to assist students in understanding and resolving their educational and vocational related issues. Academic Advising is carried out by faculty members as Academic Advisors to students. The Academic Advisors interact periodically with their Advisees and discuss their performance and progress in the registered academic programme.

The goal is to help students reduce programme related stress and maximize opportunities for academic performance improvements leading to a high quality professional life. Students can also meet their respective course faculty during the prescribed time slot (known as Chamber Consultation Hour) for clarifying doubts or seeking help.

Earn-while-you-learn

We enable students to earn while learning under the Earn-while-you-learn Scheme. The students of second, third and fourth years are given the opportunity to be Professional Assistants for assisting in laboratories and other academic / administrative activities. Professional Assistants help junior students and assist the faculty in conducting / understanding experiments. They are paid an honorarium based on the work done along with a certificate. Students are also encouraged to contribute to activities like software development; creation, updation and maintenance of the website, feedback monitoring and so on.

Student Housing

Separate hostel facilities are available for boys and girls. The accommodation is suitably equipped to provide a safe and secure living environment. Each hostel has a resident warden and other essential staff. The rooms are fully air-conditioned and furnished with a bed, cupboard and study table. Hostels are also Wi-Fi enabled and provided with Laundromat, Gymnasium, Firstaid and Sports facilities. Both vegetarian and non-vegetarian food is provided in the hostel mess.

Health Services

The Institute provides an ambulatory clinic in the campus with a doctor and nurse available for first aid and emergency care. The students are transported to the hospital in cases of emergency.
Cafeteria & Mini Mart

There is a full-fledged cafeteria within the campus for students and faculty to have snacks, meals, soft drinks and beverages. There is a Mini Mart within the premises which sells several items including food and stationery. Vending machines for snacks and hot / cold beverages are provided across the campus at various locations.

Student Visa

It is mandatory for all students to have a valid UAE residence visa for admission. If the UAE resident parents cannot sponsor the visa for their ward or if the student is a non-resident of UAE then Institute can facilitate UAE’s student residence visa through Dubai International Academic City (DIAC) subject to the submission and approval of necessary documents as per the rules & regulations of the Institute and Government of UAE.

Health Insurance

It is mandatory for every student to have health insurance valid in UAE. Students already insured must submit proof of valid health insurance which can be used in U.A.E. at the time of admission. The Institute has made arrangements with a leading insurance company to facilitate health insurance for students at a reduced cost.

Transport Services

Transport facility for day scholars is arranged through a leading transport agency in air-conditioned buses for students from different points in Dubai, Sharjah and Ajman. The transportation fee is set as per the destination category, the details of which are available on the fee structure page. Transportation is also facilitated through professional contractors for students residing in Abu Dhabi.
In keeping with our tradition and recognizing the importance of career counseling and services as an integral part of an Engineering Institution, we organize Campus Placement Programme (CPP) for Graduates every year and invite local and international companies to recruit the graduating students. All facilities for conducting pre-placement presentations, interviews and screening tests are provided to the visiting companies and the students are given an opportunity to interact with the organization officials.

Graduates of BITS Pilani, Dubai Campus have been recruited by more than 1000 companies across the globe both through Campus Placement Programme and through their own initiative.

Some reputed companies where our students are employed are:

- ABB, U.A.E.
- Clipsal Middle East, U.A.E.
- Dell International Services, India
- Emirates Industrial Gases Co., U.A.E.
- ESRI, Sharjah, U.A.E.
- Etisalat, U.A.E.
- Halliburton, K.S.A.
- Honeywell Middle East, U.A.E.
- Infosys Technologies Ltd, India
- Johnson Controls, U.A.E.
- J Ray Mc Dermott, Middle East, U.A.E.
- L&T, U.A.E.
- Maersk, U.A.E.
- Microsoft, U.S.A.
- Oracle, U.S.A.
- Panasonic – Middle East, U.A.E.
- Petrofac International, U.A.E.
- Procter and Gamble Gulf FZE, U.A.E.
- Proserv Middle East, U.A.E.
- Protiviti, U.A.E.
- RTA Dubai, U.A.E.
- Schlumberger, U.A.E.
- Siemens LLC, U.A.E.
- Sony Ericsson, NC, U.S.A.
- Standard Chartered Bank, U.A.E.
- Tata Consultancy Services, India
- Wipro, India
- Worley Parsons, U.A.E.
- W.S. Atkins, U.A.E.

Several Graduates have opted for further studies and have completed or pursuing Masters and Ph.D. from more than 75 reputed universities across the world. Some of the reputed Universities are:

- Carnegie Mellon University, U.S.A.
- Cornell University, U.S.A.
- Duke University, Durham, U.S.A.
- ESSEC Business School, Paris
- Harvard University, U.S.A.
- IIM Calcutta, India
- IIM, Bangalore, India
- Illinois Institute of Technology, U.S.A.
- McMaster University, Canada
- MIT Sloan School of Management, U.S.A.
- New Jersey Institute of Technology, U.S.A.
- Rutgers - State University of New Jersey, U.S.A.
- Stanford University, U.S.A.
- Texas A&M University, U.S.A.
- University at Buffalo, New York, U.S.A.
- University of Cambridge, UK
- University of Leicester, UK
- University of Manchester, UK
- University of Pennsylvania, U.S.A.
- University of Texas, Dallas & Austin, U.S.A.
- University of Toronto, Canada
Admissions

First Degree Programme

Admission to BITS Pilani, Dubai Campus (BPDC) is based entirely on the candidate’s merit, facilities available and availability of seats in the discipline preferred.

Eligibility Criteria

1. For admission to any of the first degree programmes, candidates must have passed the requisite qualifying examination, which is the General Secondary Education Certificate Examination of Ministry of Education, U.A.E. or Senior School Certificate Examination of the Central Board of Secondary Education (CBSE-12th grade), New Delhi, India or Advanced Levels from Cambridge International examinations/Edexcel or its equivalent from any recognized State, National or International board with Physics, Chemistry and Mathematics.

2. The candidates must have obtained a minimum 60% overall aggregate of marks in the qualifying examination and must have a minimum aggregate of 60% in Physics, Chemistry & Mathematics subjects with at least 50% marks in each subject. However, for admission to B.E. Biotechnology, Candidates with Physics, Chemistry and Biology will also be accepted with a minimum aggregate of 60% in Physics, Chemistry & Biology subjects with at least 50% marks in each subject. If a Candidate has secured less than 50% marks in any one of these subjects - Physics, Chemistry, Mathematics / Biology but has passed in the subjects and meets the aggregate criteria mentioned above, he/she may be considered for provisional admission. The admission will be confirmed only upon the successful completion of a remedial course in that subject with a minimum grade of ‘C’, offered by the institute preferably before the commencement of the first semester. If instead of marks any letter grades or GPA are awarded (or any other system of evaluation), their equivalences in marks will be decided by the Admissions Committee.

3. English is the medium of instruction and a good proficiency in English is essential for admission. Hence, candidates who have completed their qualifying examination from a Non-English medium school must have a TOEFL Score of 500 in paper based test or 61 in internet based test or have an IELTS Score of 5. If required, they may also be assessed by the Admission committee for English comprehension.

Application Procedure

The Applications are available under the link www.bits-dubai.ac.ae/admission and are also available at the Admissions Office of Dubai Campus. You can apply through any of the following methods:

(i) Apply Online
(ii) Print or Collect the Application form and fill it

If you are not opting for online application submission and payment, you must submit the filled-in application forms in person or by courier with the requisite documents and application fee by cash/ demand draft.

Read Admission Bulletin 2016-17 carefully for detailed instructions on the application procedure, documents to be enclosed/uploaded with the application form and application fee amount with payment instructions.
Higher Degree Programme

Eligibility Criteria for M.E. / M.B.A. programmes

A minimum aggregate of 60% in the qualifying degree as indicated below for each programme.

• M.E. Design : B.E. / B.Tech. in Mechanical Engineering or equivalent.
• M.E. Microelectronics : B.E. / B.Tech. in EEE / E&I / ECE / CS or M.Sc. Physics or equivalent.
• M.E. Software Systems : B.E. / B.Tech. / M.Sc. / M.C.A or equivalent.
• M.E. Biotechnology : B.E. / B.Tech. / M.Sc. with adequate preparation in Microbiology and Biochemistry or equivalent.
• M.B.A. Programmes : B.E. / B.Tech. / M.Sc. or its equivalent.

The admission will be based on the performance in the qualifying degree and admission test / interview.

Doctoral Programme

Eligibility Criteria

M.E./ M.S./ M.B.A./ M.Phil. of BITS Pilani or its equivalent with a minimum of 60% aggregate. The admission will be based on the performance in the qualifying degree, experience, admission test and interview.

Application Procedure for Higher Degree and Doctoral Programmes

The Applications are available under the link www.bits-dubai.ac.ae/admission and are also available at the Admissions Office of Dubai Campus. You can apply through any of the following methods:

(i) Apply Online
(ii) Print or Collect the Application form and fill it

If you are not opting for online application submission and payment, you must submit the filled-in application forms in person or by courier with the requisite documents and application fee by cash/ demand draft.

Read Admission Bulletin 2016-17 carefully for detailed instructions on the application procedure, documents to be enclosed/uploaded with the application form and application fee amount with payment instructions.
Flexibilities in First Degree Programme

Dual Degree

One of the most popular flexibilities provided in the BITS Pilani’s educational structure is the Dual Degree Scheme. Under this scheme, it is possible for a student to work for and complete two Degrees within a reasonable period of time. All the admitted students are given an opportunity to take up a Dual Degree. This assignment is made by competition based on the performance of the student in the first year of the programme. In such a case, the student will take a minimum of one additional year and pay an additional Admission/Tuition fee to complete both the degree programmes and receive the Degree in respective disciplines.

For example: A Student who has been allotted Chemical Engineering or any other discipline can choose to take Computer Science or any other discipline as his/her Dual Degree.

Transfer

It is possible for a student to seek transfer from one programme to another in the middle of a programme without starting from the beginning. This is possible because he/she is given credit for what he/she has done till then towards the requirements of the programme to which he/she seeks the transfer.

Since admission to a programme is done on assigned and competitive basis, there cannot be any scope of undoing the fact of an assigned admission through transfer. Thus only exceptionally meritorious students in a limited number of cases can expect to compete for transfer to a more sought-after programme. On the other hand, transfer to a less sought-after programme for a student who is unable to cope with the rigours of the programme in which he/she has been admitted would be readily used to rehabilitate him/her without much loss of time. In any event, transfer must be treated as an admission process.

Second Semester Admission

The structural flexibilities available in the Institute make it possible to admit students in both the semesters. The few admissions made for the second semester (February 2017) are essentially to meet the depletion during the first semester and also to get the most outstanding students who could not apply in time for the first semester admissions. The second semester admissions of the students are merged with the students admitted in the first semester. They may be doing courses with the students admitted in the same academic year or in the next semester (academic year). The total normal duration of programme will be 4 years (Eight semesters). These students also get the option of Practice School.

The Admission Notification for second semester admissions will be issued in October 2016.
Admission with Advanced Standing

Candidates seeking admission to any First Degree programme of BITS Pilani, Dubai Campus with a preparation higher than the minimum entrance qualification (12th Grade) will be considered for admission at some intermediate stage in a programme under the provisions “Admission with Advanced Standing”, wherein candidate will be given credit for the courses cleared with good academic performance matching with the course requirements of the programme, to which the candidate seeks admission. Here the guiding principle is two-fold: The courses the candidate has already done before entering the institute cannot be repeated and also that the time spent elsewhere is not wasted.

Eligibility Criteria for Admission with Advanced Standing:

In order to be considered for Admission with Advanced Standing, a candidate is required to meet the below criteria.

1. Satisfy the basic eligibility criteria mentioned under Section 2 of the Admission Bulletin 2016-17.
2. The academic programme pursued after Grade 12 must be in a recognized and accredited University.
3. Must have completed a minimum of 30 credit hours or 10 courses at university level.
4. The latest/last semester studied at the university, the minimum overall aggregate must be 70% or a CGPA of 7 on a 10 scale.

Admission will be offered in one of the programmes offered from the campus, clearly indicating the courses which are exempted and expected normal time the student will take to complete the degree. Courses with a performance of 60% or above (or equivalent Grade) will only be considered for evaluation. The exemption for a course will be based on an individual evaluation of course studied to determine whether the course is equivalent to the corresponding course offered by BITS Pilani. A candidate can get a transfer of a maximum of 70 credit hours only. The discipline allotment will be done based on the student’s latest performance, Grade 12 percentage and availability of seats in the discipline of student’s preferences.

Application Procedure:

In addition to filling up the Application for admission, Candidates applying for Advanced Standing admission must fill up the supplementary information form for advanced standing (available on the website or can be collected from the admissions office), and submit it with the below mentioned additional documents:

a) Official College Transcript / Mark Sheets for the semesters / years completed
b) Syllabus of courses cleared
c) Question Papers of the Examinations for the courses cleared

Casual Student

Candidates other than regular students of BITS Pilani who desire to register for some courses to update their knowledge are designated as casual students. Casual students can register for courses on audit only and cannot enroll for a degree. The facility of taking a course on audit is principally conceived to give an opportunity to a candidate to update his/her knowledge. Such a course will not be accepted for the fulfillment of requirements of any program, current or future in BITS Pilani.

This scheme has been devised to take care of students and professionals from various institutions and organizations who express a desire to update their knowledge, although they ipso-facto, have no desire to work for a degree. Persons desiring to register as casual students should apply on the prescribed form within the last date.
## Important Dates in the Admission Process

### Important Dates in the First Degree Admission Process

<table>
<thead>
<tr>
<th>Event</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last date for receipt of Application</td>
<td>14 June 2016</td>
<td>15 December 2016</td>
</tr>
<tr>
<td>Announcement of Admission list and dispatch of Admission offer letters</td>
<td>16 June 2016</td>
<td>18 December 2016</td>
</tr>
<tr>
<td>Last date for receipt of acceptance of Admission offer along with required documents and Fee</td>
<td>5 July 2016</td>
<td>2 January 2017</td>
</tr>
<tr>
<td>Reporting for Admission</td>
<td>17 August 2016</td>
<td>22 January 2017</td>
</tr>
<tr>
<td>Orientation</td>
<td>17 August 2016</td>
<td>22 January 2017</td>
</tr>
<tr>
<td>Registration</td>
<td>18 August 2016</td>
<td>22 January 2017</td>
</tr>
<tr>
<td>Classwork begins</td>
<td>21 August 2016</td>
<td>23 January 2017</td>
</tr>
</tbody>
</table>

### Important Dates in the Higher Degree Admission Process

<table>
<thead>
<tr>
<th>Event</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last date for receipt of Applications</td>
<td>9 June 2016</td>
<td>15 December 2016</td>
</tr>
<tr>
<td>Admission Test/ Interview Dates</td>
<td>22 &amp; 23 June 2016</td>
<td>21 &amp; 22 December 2016</td>
</tr>
<tr>
<td>Orientation</td>
<td>17 August 2016</td>
<td>22 January 2017</td>
</tr>
<tr>
<td>Registration</td>
<td>18 August 2016</td>
<td>22 January 2017</td>
</tr>
<tr>
<td>Commencement of Classes</td>
<td>21 August 2016</td>
<td>23 January 2017</td>
</tr>
</tbody>
</table>

### Important Dates in the Ph.D. Admission Process

<table>
<thead>
<tr>
<th>Event</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last date for receipt of Applications</td>
<td>9 June 2016</td>
<td>15 December 2016</td>
</tr>
<tr>
<td>Admission Test/ Interview Dates</td>
<td>22 &amp; 23 June 2016</td>
<td>29 December 2016</td>
</tr>
<tr>
<td>Orientation</td>
<td>17 August 2016</td>
<td>22 January 2017</td>
</tr>
<tr>
<td>Registration</td>
<td>18 August 2016</td>
<td>22 January 2017</td>
</tr>
<tr>
<td>Commencement of Classes</td>
<td>21 August 2016</td>
<td>23 January 2017</td>
</tr>
</tbody>
</table>
Fee Structure

Each Academic Year consists of two semesters. First Semester: August-December and Second Semester: January-May

A. One-Time Fee (Payable at the time of Admission)

<table>
<thead>
<tr>
<th>Fee</th>
<th>First Degree</th>
<th>Higher Degree</th>
<th>Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee</td>
<td>AED. 220/-</td>
<td>AED. 220/-</td>
<td>AED. 220/-</td>
</tr>
<tr>
<td>Admission Fee</td>
<td>AED. 1,600/-</td>
<td>AED. 1,600/-</td>
<td>AED. 1,600/-</td>
</tr>
<tr>
<td>Activity Fee</td>
<td>AED. 1,000/-</td>
<td>AED. 1,000/-</td>
<td>AED. 1,000/-</td>
</tr>
<tr>
<td>Caution Deposit*</td>
<td>AED. 5,000/-</td>
<td>AED. 2,000/-</td>
<td>AED. 2,000/-</td>
</tr>
<tr>
<td>Hostel Caution Deposit*</td>
<td>AED. 2,000/-</td>
<td>AED. 2,000/-</td>
<td>AED. 2,000/-</td>
</tr>
</tbody>
</table>

B. Tuition Fee

<table>
<thead>
<tr>
<th>Semester</th>
<th>First Degree (Payable in 2 installments)</th>
<th>Higher Degree (Payable in 2 installments)</th>
<th>Ph.D. **</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>AED. 20,000/-</td>
<td>AED. 15,000/-</td>
<td>AED. 12,000/- **</td>
</tr>
<tr>
<td>Second Semester</td>
<td>AED. 20,000/-</td>
<td>AED. 15,000/-</td>
<td>AED. 12,000/- **</td>
</tr>
<tr>
<td>Summer Semester</td>
<td>AED. 5,000/- (Payable for PS1 after 2nd year)</td>
<td>AED. 5,000/- (Payable for PS1 after 2nd year)</td>
<td>AED. 5,000/- (Payable for PS1 after 2nd year)</td>
</tr>
</tbody>
</table>

C. Visa / Insurance Fee (Payable for each Academic Year)

Visa Fee (For Students on Visa provided by the Institute)
- Fresh Visa Fee : AED. 2,700/-
- Visa Renewal Fee : AED. 2,100/-
- Medical Insurance Fee : AED. 1,550/-

(Currently prevailing Visa Fee, subject to change by Govt of U.A.E.)

D. Hostel Fee (Only for Hostel Residents)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fee</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>AED. 15,000/-</td>
<td></td>
</tr>
<tr>
<td>Second Semester</td>
<td>AED. 15,000/-</td>
<td></td>
</tr>
<tr>
<td>Summer Term</td>
<td>AED. 5,200/-</td>
<td></td>
</tr>
<tr>
<td>Facility Fee</td>
<td>AED. 750/- per annum</td>
<td></td>
</tr>
</tbody>
</table>

Laundry charges and service charge for using refrigerator in the room are additional and information on the same is available on the website.

E. Transport Fee (Only for Day Scholars availing transport)

- For Dubai : AED. 1,750/- per semester
- For Sharjah & Ajman : AED. 2,000/- per semester

(Currently prevailing Transport Fee, subject to change)

Note: A fee of AED. 3000 per course is applicable for casual students registering for any course on audit only during any semester apart from a one-time Admission fee.

*Refundable on graduation or on leaving the Institute, after due adjustment for damages, breakages caused by the student, if any.
**1. Full-time On-Campus Ph.D. Scholars will be considered for 80% Tuition Fee waiver and Part-time Ph.D. Scholars will be considered for 70% Tuition Fee waiver for the normal duration of the Programme subject to terms and conditions.
2. On-Campus and Part-time Ph.D. scholars who are UAE/GCC Nationals may be considered for 100% Tuition Fee waiver subject to terms & conditions.
Scholarships & Concessions

First Degree Programmes

1. Merit Scholarships

1.1 Board Toppers
Students who have secured top three positions (First, Second and Third position) in 12th standard in their respective boards (General Secondary Education Certificate Examination of Ministry of Education, UAE or CBSE-India or any other State, National or International Board) are given a merit scholarship of 100%, 75% and 50% of the first semester tuition fee respectively for the first semester.

1.2 Merit in Qualifying Examination

a) Tuition Fee Scholarship
i. Students who have obtained 90% or above in the aggregate of the Qualifying Examination are given a merit scholarship of 20% of first semester tuition fee.

ii. Students who have obtained 80% or above but less than 90% in the aggregate of the Qualifying Examination are given a merit scholarship of 15% of the first semester tuition fee.

b) Hostel Fee Concession
Admitted Candidates who have obtained 90% or above in the aggregate of the Qualifying Examination will be offered a 25% concession in the Hostel fee for the normal duration of the programme (four years).

1.3 Merit in BITSAT 2016 (BITS Online Admission Test)

a) Tuition Fee Scholarship:
Admitted candidates with BITSAT 2016 (or BITSAT 2015) score of 200 or above will be eligible for the following merit scholarship for first semester of Academic Year 2016 - 17, depending on the score secured in BITSAT.

<table>
<thead>
<tr>
<th>S.No</th>
<th>BITSAT Score</th>
<th>Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt;300</td>
<td>75% of Tuition Fee*</td>
</tr>
<tr>
<td>2</td>
<td>250 to 299</td>
<td>50% of Tuition Fee*</td>
</tr>
<tr>
<td>3</td>
<td>200 to 249</td>
<td>25% of Tuition Fee</td>
</tr>
</tbody>
</table>

The above scholarship is applicable for first semester only of Academic year 2016-17 and subsequently, the students will be eligible for the merit scholarship of the institute as mentioned under 1.4 below.

*Students availing this scholarship will not be eligible for any other Scholarship/Concession in the first semester.

b) Hostel Fee Concession
Admitted Candidates with BITSAT 2016 (or BITSAT 2015) score of 150 or above will be offered a 25% concession in the Hostel fee for the normal duration of the programme (four years).

1.4 Merit Scholarship for continuing students
Students with a CGPA of 9.00 or above on a 10.00 scale at the end of previous semester will be given a merit scholarship of 20% of tuition fee for the current semester for the normal duration of the programme.
2. Fee Concessions

2.1 For GCC / Arab Nationals
Meritorious GCC / Arab Nationals will be offered a scholarship of 50% to 100% on the tuition fee for the normal duration of the programme based on their performance in the qualifying examination (Grade 12 or equivalent) and continuity of certain minimum performance during the programme. These scholarships will be restricted to specific number of students under each of the above mentioned scholarship category.

2.2 For sudden bereavement of earning member of the family
The Institute helps such students by waiving off 100% tuition fee for a semester for those students who face financial hardships due to the sudden and untimely demise of the sole earning member of their family in that semester. A scholarship of upto 75% can be offered in the subsequent semesters, on a case to case basis, depending on means and need and the overall performance / discipline of the student.

2.3 For physically challenged Students
All physically challenged students satisfying the conditions laid out are given a 15% concession on the tuition fee throughout the programme subject to satisfactory academic performance in each semester.

2.4 For Sibling
For families that have more than one child enrolled concurrently, a concession of 25% on the tuition fee is offered to the second child until the first child graduates.

Higher Degree Programme

1. For New Admissions
   a) Merit in Qualifying Examination (B.E./ B.Tech. or its equivalent)
      (i) Tuition Fee Scholarship: Students who have obtained 80% or above in the aggregate of the qualifying examination are given a merit scholarship of 20% of first semester tuition fee.
      (ii) Hostel Fee Concession: Admitted Candidates who have obtained 80% or above in the aggregate of the qualifying examination will be offered a 25% concession in the Hostel fee for the normal duration of the programme (two years).
   b) Students who are UAE Nationals will be offered 50% tuition fee scholarship based on their performance in the qualifying examination and continuity of certain minimum performance during the programme.
   c) BITS Alumni, Candidates from Collaborative Organizations / Companies and Siblings / Parents of continuing students will be offered a 10% concession on the tuition fee, during the normal duration of the programme.

2. Merit Scholarship for continuing students:
Students with a CGPA of 9.00 or above on a 10.00 scale at the end of previous semester will be given a merit scholarship of 20% of tuition fee for the current semester for the normal duration of the programme.

Please note:
- All students must pay their specified fee at the time of Admission and any amount awarded as scholarship will be adjusted in the subsequent fee payment.
- At any given time, a student can avail more than one scholarship / concession unless otherwise mentioned, provided the total scholarship/concession amount does not exceed more than 50% of the tuition fee amount of that semester including all or any scholarship/concession availed by the student.
- The decision of the institute shall be final and cannot be contested on all matters of scholarships and concessions at BITS Pilani, Dubai Campus. The institute has the right to discontinue the scholarship/concession at any time in case the student is found guilty in any disciplinary case.
- While Scholarship based on "Merit in Qualifying Examination" will be given automatically based on the Grade 12 / B.E. marks of the student, application for scholarship under all other categories must be submitted within one month from the date of registration to the Admissions Office. Any application received after one month will not be considered.
Some Achievements

Engineering marvel designed by our students to represent UAE at the Society of Automobile Engineering events (SAE) at Michigan, USA in May 2014.

ANOMITRA BANERJEE, a third-year Mechanical Engineering student from Dubai Campus has become the first Indian UAE resident to win the “The Old Guard Oral Presentation Competition” in Nov 2014.

Winners at the inaugural Drones for Good University Challenge held in UAE from a pool of over 50 other teams from various other universities in 2015.

Ranked 5th all over the world in International Autonomous Robotics Challenge (IARC) held at IIT Kanpur, India in 2014.

Our Students’ Team “Gear Shifters” has won the people’s choice awards at the Innovator Show, an annual show organized by Abu Dhabi government’s education council held in Abu Dhabi in March, 2016. The team secured first position out of a total of 120 teams.

Winners at the Regional Finals of the prestigious CFA Institute Research Challenge, a competition in which student teams prepare an Equity Research Report on an assigned company and present their findings to a panel of investment industry CFA experts. The team will be flying to Chicago, USA to participate in the Global challenge.

First All Terrain Vehicle to ever represent U.A.E. in the SAE BAJA competition held at Tennessee Tech University in April 2013.

Bits Pilani is honored to be the First Indian Institute to win at the Global Competition of the American Society of Mechanical Engineers (ASME) since 1956.

赢得了由阿布扎比政府教育委员会每年举办的创新者秀的人民选择奖。该团队在120支队伍中获得第一名。

在著名的CFA研究所研究挑战赛的区域决赛中获胜，学生团队准备了一份企业股票研究报告，并向投资行业的CFA专家小组展示他们的研究结果。该团队将前往美国芝加哥参加全球挑战。

这是第一辆代表阿联酋的全地形车辆在SAE BAJA比赛在田纳西州立大学举办，于2013年4月。

Bitsu Pilani被评为自1956年以来第一个在ASME全球比赛中获胜的印度学院。

Winners at the inaugural Drones for Good University Challenge held in UAE from a pool of over 50 other teams from various other universities in 2015.

Ranked 5th all over the world in International Autonomous Robotics Challenge (IARC) held at IIT Kanpur, India in 2014.

Our Students’ Team “Gear Shifters” has won the people’s choice awards at the Innovator Show, an annual show organized by Abu Dhabi government’s education council held in Abu Dhabi in March, 2016. The team secured first position out of a total of 120 teams.

Winners at the Regional Finals of the prestigious CFA Institute Research Challenge, a competition in which student teams prepare an Equity Research Report on an assigned company and present their findings to a panel of investment industry CFA experts. The team will be flying to Chicago, USA to participate in the Global challenge.

First All Terrain Vehicle to ever represent U.A.E. in the SAE BAJA competition held at Tennessee Tech University in April 2013.

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