UNIVERSITY OF ENGINEERING & TECHNOLOGY, LAHORE

UNDERGRADUATE PROSPECTUS

Fall 2025

CONTENTS

VISION

To generate knowledge for global competitive advantage and become

A leading world class research university.

MISSION

To play a leading role as a university of engineering and technology, in teaching,

Innovation and commercialization that is internationally relevant and has a direct

bearing on national industrial, technological and socio-economic development.

CHANCELLOR'S MESSAGE

The University of Engineering and Technology (UET) Lahore holds a place of eminence among the prestigious engineering universities of the world. Being a pioneering institution of engineering and technology in Pakistan, UET has unlocked all its potential in imparting quality education, enabling the students to display scholarly autonomy in learning and research and contribute to sustainable development. The recent QS ranking of UET Lahore in engineering and technology evidently substantiates the competence, commitment, and efforts of the faculty, administration and students. With the largest number of Outcome Based Education (OBE) accredited programs in Pakistan, UET Lahore is also a flag bearer of quality engineering education. HEC research grants and international funding worth hundreds of million of rupees won by the faculty members of UET collaboration aimed at solving major social, educational and technical problems through research projects. The recent strides and contributions of UET Lahore in digitalizing scientific and technological education in Pakistani universities are highly remarkable. I am confident that UET will keep expanding its horizons through external linkages aimed at improving the quality of research and education at its main campus, sub-campuses and affiliated colleges.

Sardar Salim Haider Khan
Governor Punjab
Chancellor, University of Engineering & Technology, Lahore

VICE CHANCELLOR'S MESSAGE

On behalf of the faculty and staff of the University I welcome you to the University of Engineering and Technology, Lahore.

It is the oldest seat of learning in the country in the discipline of Engineering and Technology.

We feel pride that for the year 2025, UET is ranked at 205th position among all the Engineering and Technology Institutions of the world as per QS World Universities Ranking. Further, the UET is ranked at 205th position in the world for Engineering and Technology.

UET has the best faculty and state-of-the-art laboratories. UET enjoys a strong linkage with its alumni and industry. Here you will enjoy real university culture of discussion, debate, and discourse.

40 students societies are active and engaging students in different activities from sports to debates for personality development of our students. UET has large infrastructure and excellent students' services. I assure you that UET is the best place for your professional and personality progression. At the same time, it is very competitive to secure admission in UET, that is a gateway to academic and research excellence.

Best of luck.

Prof. Dr. Shahid Munir (TI)
Vice Chancellor
University of Engineering and Technology, Lahore

UNIVERSITY OF ENGINEERING AND TECHNOLOGY LAHORE

Chancellor
SARDAR SALIM HAIDER KHAN
Governor of Punjab

Pro Chancellor
RANA SIKANDAR HAYAT
Minister for Education (Higher Education)

Vice Chancellor
PROF. DR. SHAHID MUNIR (TI)

Pro Vice Chancellor
PROF. DR. NASIR HAYAT

Registrar
MUHAMMAD ASIF

Controller of Examinations
MUHAMMAD ZARGHAM NUSRAT

Treasurer
IMRAN BABAR

DEANS OF FACULTIES

Faculty of Electrical Engineering
PROF. DR. MUHAMMAD SHOAIB

Faculty of Mechanical Engineering
PROF. DR. TAUSEEF AIZED

Faculty of Civil Engineering
PROF. DR. KHALID FAROOQ

Faculty of Chemical, Metallurgical & Polymer Engineering
PROF. DR-ING. NAVEED RAMZAN

Faculty of Earth Sciences & Engineering
PROF. DR. TAUSEEF AIZED

Faculty of Architecture & Planning
PROF. DR. RIZWAN HAMEED

Faculty of Natural Sciences, Humanities & Islamic Studies
PROF. DR. MUHAMMAD SHOAIB

CHAIRPERSONS / DIRECTORS OF TEACHING DEPARTMENTS / INSTITUTES

MAIN CAMPUS

Electrical Engineering
PROF. DR. SYED ABDUL REHMAN KASHIF

Computer Science
PROF. DR. MUHAMMAD USMAN GHANI KHAN

Institute of Data Science
PROF. DR. SHAZIA ARSHAD

Computer Engineering
PROF. DR. ALI HAMMAD AKBAR

Mechanical Engineering
PROF. DR. ASAD NAEEM SHAH

Industrial & Manufacturing Engineering
PROF. DR. QAISER SALEEM

Mechatronics & Control Engineering
DR. ALI RAZA

Civil Engineering
PROF. DR. NOOR MUHAMMAD KHAN

Institute of Environmental Engineering & Research
PROF. DR. AMIR IKHLAQ

Architectural Engineering & Design
PROF. DR. KHURRAM RASHID

Transportation Engineering & Management
PROF. DR. ZIA UR REHMAN

Chemical Engineering
PROF. DR. HAFIZ MUHAMMAD ZAHEER ASLAM

Polymer & Process Engineering
PROF. DR. ASIF ALI QAISER

Department of Mining Engineering
DR. SHAHAB SAQIB

Automotive Engineering
DR. ALI HUSSAIN KAZIM

Geological Engineering
PROF. DR. MUHAMMAD FAROOQ AHMED

Petroleum and Gas Engineering
PROF. DR. MUHAMMAD KHURRAM ZAHOOR

Metallurgical & Materials Engineering
PROF. DR. ASIF RAFIQUE

Architecture
DR. MUNAZZA AKHTAR

Product & Industrial Design
DR. ATIF BILAL ASLAM

City & Regional Planning
PROF. DR. SHAKER MAHMOOD MAYO

Physics
PROF. DR. MUHAMMAD SHAHID RAFIQUE

Chemistry
PROF. DR. FARHAT YASMEEN

Mathematics
PROF. DR. MUHAMMAD MUSHTAQ

Humanities & Social Sciences
DR. MEHVISH RAIZ

Islamic Studies
DR. ZAHID LATIF

Institute of Business and Management
PROF. DR. NASIR MALIK

NEW CAMPUS (KSK)

Chemical, Polymer & Process Engineering
PROF. DR. MOHSIN KAZMI

Mechanical, Mechatronics and Manufacturing Engineering
PROF. DR. HASSAN IJAZ

Basic Sciences & Humanities
PROF. DR. KASHIF REHAN

Computer Sciences
PROF. DR. HAFIZ M. SHAHZAD ASIF

Bio-Medical Engineering
DR. NIDA IQBAL

Electrical, Electronics and Telecommunication Engineering
DR. MUHAMMAD ALI

Food Engineering and Bio Technology
PROF. DR. SIKANDAR RAFIQUE

Energy Engineering
DR. HASAN ERTEZA GELANI

Management Sciences
DR. ABDUL AZIZ KHAN NIAZI

FAISALABAD CAMPUS

Chemical, Polymer & Process Engineering
PROF. DR. SYED WAQAS AHMAD

Computer Science
DR. MUHAMMAD YASIR

Mechanical, Mechatronics & Control Engineering.
DR. FARHAN MAQBOOL

Electrical, Electronics and Telecommunication Engineering
PROF. DR. MUHAMMAD AKRAM

Compu
Basic Sciences & Humanities
PROF.DR. SAJJAD AHMAD

Textile Engineering
PROF. DR. MUHAMMAD MOHSIN

RCET, GUJRANWALA

Electrical Engineering
DR. HAROON FAROOQ

Mechanical Engineering
DR. MUHAMMAD SALMAN ABBASI

Basic Sciences and Humanities
DR. ADNAN ASLAM

Industrial and Manufacturing Engineering
DR. MUHAMMAD HARRIS

Computer Sciences
DR. ABDUL JALEEL

NAROWAL CAMPUS

Electrical Engineering
DR. WAQAS TARIQ TOOR

Mechanical Engineering (HOD)
DR. SAQLAIN ABASS

Civil Engineering
PROF. DR. KHAWAJA ADEEL TARIQ

Bio Medical Engineering (HOD)
DR. MUHAMMAD REHAN CH.

Computer Science and Engineering
DR. MUHAMMAD IDREES

Basic Sciences & Humanities
Dr. HABIB HUSSAIN

HEADS OF NON-TEACHING DEPARTMENTS

Director Research, Innovation and Commercialization
PROF. DR. MUHAMMAD ASIF RAFIQ

Director Studies
PROF. DR. AMJAD HUSSAIN

Senior Warden
PROF. DR. MUHAMMAD IJAZ AHMAD

Convener Admission Committee / In-charge Students Section
PROF. DR. MUHAMMAD AWAIS HASSAN

Focal Person Higher Education Commission
PROF. DR. MUHAMMAD ASIF RAFIQ

Chairperson Health Committee
PROF. Dr. KASHIF JAVED

Chairperson Transport Committee
DR. MUHAMMAD ASIM

Chairperson Library Committee
PROF. DR. ASADULLAH QAZI

Chairperson Proctorial Board
PROF. DR. MUHAMMAD SHOAIB

Chairperson Sports Committee
DR. MUHAMMAD BADAR HAYAT

Director Repair and Maintenance Center
PROF. DR. WAQAR MAHMOOD

DISABILITY COORDINATORS
Chairperson Architecture Department
Chairperson City & Regional Planning Department

Director Students Affairs
PROF. DR. ZULFIQAR ALI

Director International Students Office
DR. AMNA NIAZI

Director Students Financial Aid & Career Services
PROF. DR. FARHAN SAEED

Director, Al-Khwarizmi Institute of Computer Sciences
PROF. DR. WAQAR MAHMOOD

Director Planning and Development
PROF. DR. RASHID HAMEED

Project Director Lahore Campus
ENGR. ASAD MASOOD

Project Director University City Campus
ENGR. AWAIS AHMAD MALIK

Project Director Faisalabad Campus
ENGR. AWAIS AHMAD MALIK

Resident Officer
MUHAMMAD ASIF

Resident Auditor
SHAHZAD AKHTAR

Director Quality Enhancement Cell
PROF. DR. AMER AZIZ

Project Director Narowal Campus
ENGR. SARMAD RIAZ

ACADEMIC CALENDAR (2025-2026)

Fall Semester	
Semester Starts	Monday, September 08, 2025
Semester Ends (after 16 weeks)	Friday, December 26, 2025
Examination period	Monday, December 29, 2025 to Friday, January 09, 2026
Semester Break	Monday, January 12, 2026 to Friday, January 16, 2026
Deadline for Submission of Results	Friday, January 16, 2026

Spring Semester	
Semester Starts	Monday, January 19, 2026
Semester Ends (after 16 weeks)	Friday, May 08, 2026
Examination period	Monday, May 11, 2026 to Friday, May 22, 2026
Deadline for Submission of Results	Friday, May 29, 2026

Summer Semester (Optional)	
Semester Starts	Monday, June 29, 2026
Semester Ends (after 8 weeks of study)	Friday, August 21, 2026
Examination Period	Monday, August 24, 2026 to Friday, August 28, 2026
Deadline for Submission of Results	Monday, August 31, 2026

THE UNIVERSITY

Though this institution received its charter as a University in the year 1961, it has a much longer history as a distinguished seat of learning in engineering sciences. The institute started its operation in 1921 as the Mughalpura Technical College, deriving its name from the famous suburb of the old city of Lahore, richly dotted with architectural heritage of the great Mughals including the magnificent Shalimar Gardens. Its more familiar name of the pre-University era, the Maclagan Engineering College, was given to it in 1923 when Sir Edwards Maclagan, the then Governor of the Punjab, laid the foundation stone of the building, now called the Main Block, which still retains its majesty in spite of the wear and tear of almost a century. At that time, the institution offered courses of study in two disciplines, namely Electrical and Mechanical Engineering. The year 1932 is a major milestone in the evolution of this institution when it was affiliated with the University of the Punjab for award of a Bachelor's degree in Engineering. At the time of Independence, i.e., in 1947, it had well-established B.Sc. degree courses in civil, electrical and mechanical engineering, and the quality of its scholastic standards won it a place of prestige throughout the British India.

In 1954, it started a Bachelor's degree course in Mining Engineering, the first-ever of its kind in the country. But its massive expansion and development commenced in 1961 on its transformation into a University. It set for itself a variety of goals, but the first priority was to start teaching of those disciplines, which were crucial for national development but were not catered for by any institution in the country. Accordingly, in the sixties, Bachelor's degree courses were started in Chemical Engineering, Petroleum & Gas Engineering, Metallurgical Engineering, Architecture, and City & Regional Planning.

Later, the University concentrated its energies and resources on developing its postgraduate programs. By 1970's it had established over a score of Master's degree courses in diverse specializations of engineering, architecture, planning and allied disciplines. Ph.D. degree program was also instituted in a number of disciplines. The process of consolidating and strengthening continued to be a major concern of the University, with phenomenal increase in student's enrolment in seventies. Consequently, the University College of Engineering was established in 1975 at Sahiwal. For three years it functioned at Sahiwal and was shifted to its present campus at Taxila in 1978. Subsequently, this college was upgraded to a university and it is currently functioning as University of Engineering and Technology, Taxila.

Establishing traditions of research in the engineering and allied disciplines has been a major goal of the University. With this end in view, the University established a Directorate of Research, Extension and Advisory Services, now called Office of Research, Innovation and Commercialization (ORIC), which strives for the promotion and organization of research activities.

In the recent past, there has been a substantial rise in students' enrolment and the figure has now gone up to 15,000 students. The number of female students enrolling for different disciplines is ever on the increase and is about 3,462 at present. The number of foreign students coming from countries, like Iran, Jordan, Kuwait, Kenya, Nepal, Saudi Arabia, Iraq, Bangladesh, Yemen, Somalia, Nigeria, Ethiopia, Afghanistan and Sri Lanka is over 170 which gives the University Campus a cosmopolitan character.

The teaching departments of the University are grouped into the following seven faculties:
- Faculty of Electrical Engineering
- Faculty of Mechanical Engineering
- Faculty of Civil Engineering
- Faculty of Architecture & Planning
- Faculty of Chemical, Metallurgical and Polymer Engineering
- Faculty of Natural Sciences, Humanities and Islamic Studies
- Faculty of Earth Sciences and Engineering

The university set up a campus at Faisalabad in 2006 and also established a campus at Kala Shah Kaku in 2007, which is known as University's City Campus. Rachna College of Engineering & Technology, Gujranwala is a constituent college and follows the same academic curriculum and policies as the ones followed at the main campus in Lahore. In 2012, the university established a new campus in Narowal with an aim to produce quality technical manpower for the District of Narowal and its surroundings. In addition to managing its own campus, the University controls the academic programs and examinations of numerous institutions, which are affiliated with it for award of degrees.

DEGREE PROGRAMS OFFERED AT UET

1. **Degree Programs at Main Campus**
   i. Bachelor of Science (B.Sc.) degree is offered in the following disciplines:
      a) Architectural Engineering
      b) Artificial Intelligence
      c) Automotive Engineering
      d) Chemical Engineering
      e) Civil Engineering
      f) City and Regional Planning
      g) Computer Engineering
      h) Computer Science
      i) Applied computing
      j) Gaming and Animation
      k) Information Systems Technology
      l) Cyber Security
      m) Data Science
      n) Electrical Engineering
      o) Environmental Engineering
      p) Geological Engineering
      q) Industrial and Manufacturing Engineering
      r) Interior Design
      s) Mechanical Engineering
      t) Mechatronics and Control Engineering
      u) Metallurgical and Materials Engineering
      v) Mining Engineering
      w) Petroleum and Gas Engineering
      x) Polymer Engineering
      y) Robotics and Intelligent Systems
      z) Transportation Engineering
      aa) Software Engineering

   ii. Bachelor's degree is offered in the following disciplines:
      a) Architecture
      b) Business Data Analytics
      c) Business Administration
      d) Business Analytics
      e) Logistics and Supply Chain Management
      f) Business and Information Technology
      g) Environmental Science
      h) Material Sciences
      i) Product and Industrial Design

   iii. Bachelor of Science (B.S.) degree is offered in the following disciplines:
      a) Chemistry
      b) Mathematics
      c) Physics
      d) Islamic Studies (Specialization in computer technology)
      e) English Language and Literature

2. **Degree Programs at New Campus Kala Shah Kaku (KSK)**
   i. Bachelor of Science (B.Sc.) degree is offered in the following disciplines:
      a) Biomedical Engineering
      b) Biomedical Sciences
      c) Artificial Intelligence
      d) Computer Engineering (NCEAC)
      e) Computer Science
      f) Chemical Engineering
      g) Electrical Engineering
      h) Energy Systems Management
      i) Food Science and Bio-Technology
      j) Food Science and Human Nutrition
      k) Mechanical Engineering
      l) Software Engineering

   ii. Bachelor's degree is offered in the following discipline:
      a) Business Administration
      b) Business and Information Technology

   iii. Bachelor of Science (B.S.) degree is offered in the following disciplines:
      a) Chemistry
      b) Mathematics
      c) Physics

3. **Degree Programs at Faisalabad Campus**
   i. Bachelor of Science (B.Sc.) degree is offered in the following disciplines:
      a) Chemical Engineering
      b) Computer Engineering (NCEAC)
      c) Computer Science
      d) Electrical Engineering
      e) Mechatronics & Control Engineering
      f) Textile Engineering

   ii. Bachelor's degree is offered in the following discipline:
      a) Business Administration

   iii. Bachelor of Science (B.S.) degree is offered in the following disciplines:
      a) Chemistry
      b) Mathematics

4. **Degree Programs at Rachna College of Engineering & Technology Gujranwala**
   i. Bachelor of Science (B.Sc.) degree is offered in the following disciplines:
      a) Computer Science
      b) Computer Engineering (NCEAC)
      c) Electrical Engineering
      d) Industrial & Manufacturing Engineering
      e) Mechanical Engineering

   ii. Bachelor's degree is offered in the following discipline:
      a) Business Administration

   iii. Bachelor of Science (B.S.) degree is offered in the following disciplines:
      a) Mathematics

5. **Degree Programs at Narowal Campus**
   i. Bachelor of Science (B.Sc.) degree is offered in the following disciplines:
      a) Architecture
      b) Biomedical Engineering
      c) Civil Engineering
      d) Computer Engineering (NCEAC)
      e) Computer Science
      f) Electrical Engineering
      g) Mechanical Engineering
      h) Biomedical Sciences

   ii. Bachelor's degree is offered in the following discipline:
      a) Business Administration

   iii. Bachelor of Science (B.S.) degree is offered in the following disciplines:
      a) Mathematics
      b) Physics

AFFILIATED INSTITUTIONS AND PROGRAMS OFFERED

1. NFC Institute of Engineering and Fertilizer Research Faisalabad
   a) Bachelor of Business Administration
   b) B.Sc. Civil Engineering
   c) B.Sc. (Hons) Computer Science
   d) B.Sc. Chemical Engineering
   e) B.Sc. Electrical Engineering
   f) B.Sc. Mechanical Engineering
   g) B.Sc. Civil Engineering Technology
   h) B.Sc. Electrical Engineering Technology
   i) B.Sc. Mechanical Engineering Technology
   j) M. Sc Chemical Engineering

2. Government College of Technology, Railway Road, Lahore
   a) B.Sc. Mechanical Engineering Technology

3. Government College of Technology, Faisalabad
   a) B.Sc. Electrical Engineering Technology

4. Sharif College of Engineering & Technology, Raiwind Road, Lahore
   a) B.Sc. Chemical Engineering
   b) B.Sc. (Hons) Computer Science
   c) B.Sc. Electrical Engineering

5. Dr. A. Q. Khan Institute of Technology, Mianwali
   a) B.Sc. Civil Engineering Technology
   b) B.Sc. Electrical Engineering Technology
   c) B.Sc. Mechanical Engineering Technology

6. Quaid-e-Azam College of Engineering and Technology, Sahiwal
   a) B.Sc. Civil Engineering
   b) B.Sc. Electrical Engineering
   c) B.Sc. Mechanical Engineering
   d) B.Sc. Civil Engineering Technology
   e) B.Sc. Electrical Engineering Technology
   f) B.Sc. Mechanical Engineering Technology

7. Swedish College of Engineering & Technology Rahim Yar Khan
   a) B.Sc. Civil Engineering
   b) B.Sc. Mechanical Engineering

8. Sir Syed College of Computer Science, Gulberg, Lahore
   a) B.Sc. (Hons) Computer Science

9. Government Swedish Pakistani College of Technology, Gujrat
   a) B.Sc. Mechanical Engineering Technology

UNDERGRADUATE ADMISSION PROCESS SCHEDULE- 2025 (FALL)

Event	Date	Day
Availability of Undergraduate Prospectus	Available under "Downloads" at: https://admission.uet.edu.pk	
On-line Filling and Submission of Admission Forms Starts	**03-06-2025**	**Tuesday**
Last date of On-Line Submission of Admission Forms	11-07-2025	Friday
Hafiz-e-Quran Test Reporting Time 10:00 am	15-07-2025	Tuesday
Sports Test Reporting Time 10:00 am	17-07-2025	Thursday
Announcement of 1st Merit List (Evening)	**18-07-2025**	**Friday**
Last Date of Depositing Dues and Documents for 1st Merit List	31-07-2025	Thursday
Announcement of 2nd Merit List (Evening)	01-08-2025	Friday
Last Date of Depositing Dues and Documents for 2nd Merit List	07-08-2025	Thursday
Announcement of 3rd Merit List (Evening)	15-08-2025	Friday
Last Date of Depositing Dues and Documents for 3rd Merit List	21-08-2025	Thursday
Announcement of 4th Merit List (Evening)	22-08-2025	Friday
Last Date of Depositing Dues and Documents for 4th Merit List	28-08-2025	Thursday
Down grading option start date	29-08-2025	Friday
Down grading option end date	31-08-2025	Sunday
Announcement of downgrading Merit Lists (Evening)	**01-09-2025**	**Monday**
Announcement of Subsequent Merit Lists (Evening)	Every Friday	
Last Date of Depositing Dues and Documents for Corresponding Merit List	Following Thursday	
Announcement of Last Merit List	**26-09-2025**	**Friday**
Last Date of Depositing Dues and Documents for Last Merit List	02-10-2025	Thursday
Walk in Admissions Start (within the minimum merit on first cum first basis)	**From 29-09-2025 to 01-10-2025**	**Monday to Friday**
Hostel Allotment Starts	07-09-2025	Sunday
Regular Classes Commence / Allocation of Registration Numbers in Respective Departments	**08-09-2025**	**Monday**

ADMISSION ELIGIBILITY AND REGULATIONS

1. **GENERAL INSTRUCTIONS**
   a) Members of the University staff will be available for personal consultation during admission period.
   b) Try to submit the application as early as possible. Do not wait for the last date.
   c) As soon as the process of selection is complete, the merit list shall be notified showing the percentage aggregate marks of the applicants admitted in different disciplines against different categories.

2. **REQUIRED SUBJECT COMBINATIONS AND EQUIVALENCE**
   2.1 Candidates having either one of the following subject combinations in their intermediate or equivalent are eligible to apply for admission in programs listed alongside each combination:

Table 2.1

Programs for which Eligible	Offering Campuses	Subject Combinations in Intermediate / equivalent qualification
Architectural Engineering	**Lahore**	**F.Sc. Pre-Engg, ICS (Mathematics, Physics and Computer or equivalent of stated combinations. Minimum 60% marks in intermediate or equivalent. Appeared in ECAT 2025 First or ECAT 2025 Second is Required.**
Automotive Engineering	**Lahore**	
Chemical Engineering	**Lahore, KSK, FSD**	
Civil Engineering	**Lahore, NWL**	
Computer Engineering	**Lahore**	
Electrical Engineering	**Lahore, KSK, FSD, NWL, RCET Gujranwala**	
Environmental Engineering	**Lahore**	
Geological Engineering (Admission on All Pakistan basis)	**Lahore**	
Industrial & Manufacturing Engineering	**Lahore, RCET Gujranwala**	
Mechanical Engineering	**Lahore, KSK, NWL, RCET Gujranwala**	
Mechatronics & Control Engineering	**Lahore, FSD**	
Metallurgical & Materials Engineering (Admission on All Pakistan basis)	**Lahore**	
Mining Engineering (Admission on All Pakistan basis)	**Lahore**	
Petroleum & Gas Engineering	**Lahore**	
Polymer Engineering	**Lahore**	
Transportation Engineering	**Lahore**	
Textile Engineering	**FSD**	
Biomedical Engineering (Admission on All Pakistan basis)	**KSK, NWL**	**F.Sc. Pre-Engg, Fsc Pre Medical, ICS (Mathematics, Physics and Computer or equivalent of stated combinations. Minimum 60% marks in intermediate or equivalent. Appeared in ECAT 2025 First or ECAT 2025 Second is Required.**
Architecture	**Lahore, NWL**	**F.Sc. Pre-Engg, ICS (Mathematics, Physics and Computer or Mathematics, Physics, Statistics or equivalent of stated combinations. Minimum 60% marks in intermediate or equivalent. Appeared in ECAT 2025 First or ECAT 2025 Second is Required.**
City & Regional Planning (Admission on All Pakistan basis)	**Lahore**	**F.Sc. Pre-Engg, ICS (Mathematics, Physics and Computer or Mathematics, Physics, Statistics or equivalent of stated combinations. Minimum 50% marks in intermediate or equivalent. Appeared in ECAT 2025 First or ECAT 2025 Second is Required.**
Product & Industrial Design (Admission on All Pakistan basis)	**Lahore**	

Program	Campus	Eligibility
Computer Science	**All Campuses**	**F.Sc. Pre-Engg, F.Sc. Pre-Medical, ICS (Mathematics, Statistics and Physics or Mathematics, Statistics and Computer Science) or equivalent of stated combinations. Minimum 50% marks in intermediate or equivalent. Appeared in ECAT 2025 First or ECAT 2025 Second is Required.**
Artificial Intelligence	**Lahore, KSK**	
Cyber Security	**Lahore**	
Data Science	**Lahore**	
Software Engineering	**Lahore, KSK**	
Gaming and Animation	**Lahore**	
Applied Computing	**Lahore**	
Information System Technology	**Lahore**	
Business Data Analytics	**Lahore**	
Robotics and Intelligent Systems	**Lahore**	
Computer Engineering (NCEAC)	**Other than Lahore**	**F.Sc. Pre-Engg, F.Sc. Pre-Medical, ICS (Mathematics, Statistics and Physics or Mathematics, Statistics and Computer Science) or equivalent of stated combinations. Minimum 60% in intermediate or equivalent Appeared in ECAT 2025 First or ECAT 2025 Second is Required.**
Computer Engineering (under PEC)	**Lahore**	**ICS and Pre Engineering. Minimum 60% marks in intermediate or equivalent Appeared in ECAT 2025 First or ECAT 2025 Second is Required.**
Business Administration	**Lahore, KSK**	**Intermediate or Equivalent (with any combination) with minimum 50% Marks in intermediate or equivalent.**
Business Analytics	**Lahore**	
Business Information Technology	**Lahore, KSK**	
Logistics and Supply Chain Management	**Lahore**	
English Language and Literature	**Lahore**	
Islamic Studies (Specialization in Computer Technology)	**Lahore**	
Logistics and Supply Chain Management	**Lahore**	
Industrial Chemistry	**Lahore**	**Pre-Engg, Fsc Pre-Med, or equivalent of stated combinations, with Chemistry as mandatory. Minimum 50% marks in intermediate or equivalent.**
Chemistry	**Lahore, KSK, FSD**	
Food Science & Technology	**KSK**	**Pre-Engg, Fsc Pre-Med, or equivalent of stated combinations. Minimum 50% marks in intermediate or equivalent.**
Food Science & Human Nutrition	**KSK**	
Biomedical Science	**KSK, NWL**	
Environmental Science	**Lahore**	
Interior Design	**Lahore**	**Intermediate or equivalent with any Science Subject. Minimum 50% marks in intermediate or equivalent**
Mathematics	**Lahore, FSD**	**F.Sc. Pre-Engg, ICS (Mathematics, Physics and Computer or Mathematics, Physics, Statistics or equivalent of stated combinations. Minimum 50% marks in intermediate or equivalent.**
Material Sciences	**Lahore**	**Pre-Engg or equivalent of stated combinations. Minimum 50% marks in intermediate or equivalent.**
Physics	**Lahore**	**FSc. Pre-Engg, FSc. Pre-Med , ICS (Mathematics, Physics and Computer or Mathematics, Physics, Statistics or equivalent of stated combinations. Minimum 50% marks in intermediate or equivalent.**
Energy Systems Management	**KSK**	**FSc. Pre-Engg,FSc. Pre-Med , ICS (Mathematics, Physics and Computer or Mathematics, Physics, Statistics or equivalent of stated combinations. Minimum 50% marks in intermediate or equivalent.**

The University recognizes the following examinations as equivalent to the Intermediate in subject combinations listed above:

i.   Intermediate Examination of the Board of Intermediate & Secondary Education, Azad Kashmir.
ii. Intermediate Examination of the Aga Khan University Examination Board.
iii. Intermediate Examination of a Higher Education Commission (HEC) recognized / approved institution.
iv. Equivalent examinations of non-Pakistani Boards.

2.2   Equivalence Certificates for Examinations Conducted by Non-Pakistani Boards

The determination of equivalence and issuance of equivalent marks certificate up to HSSC level for certificates other than those issued by Pakistan's Boards is the jurisdiction of the Inter Board Committee of Chairmen (IBCC) as per decision of the Supreme Court of Pakistan. Such applicants are required to attach an equivalence certificate showing marks with the application for admission issued by the IBCC. The following are the addresses of the IBCC offices:

i.   IBCC at FBISE Building, H-8/4, Islamabad
ii. IBCC Regional Office at BISE Building, 86 Mozang Road, Lahore

3.   ELIGIBILITY FOR ADMISSION

3.1   General Eligibility Requirements

An applicant for admission to any of the bachelor's degree course offered by the University must fulfill the following requirements:

i.   He should have earned the marks according to the program mentioned in Table 2.1 in Intermediate / DAE or equivalent foreign qualification examination excluding sports and Hafiz-e-Quran marks.
ii. With some exceptions (see 2.0 in Determination of Merit), he should have appeared in the Entrance Test arranged by this University for that academic session in which he seeks admission. His subject combination in the Entrance Test must be same as his intermediate (or equivalent) subject combination because he will be considered for admission in the prescribed disciplines relevant to his subject combination only. This restriction does not apply to DAE qualified candidates.
iii. In case the candidate seeks admission based on B.Sc. Engineering Technology or equivalent degree, he should have obtained (or expect to obtain) marks required to be enrolled in relevant discipline, in case of annual system, or a CGPA of 2.5 out of 4.0, in case of semester system.
iv. He should be a bonafide resident of the area from where he seeks admission.
v.   He should meet standards of physique and eyesight laid down in the medical certificate.

3.2   Diploma Holders

i.   Candidates with a Diploma of Associate Engineer should have passed diploma examination of a Board of Technical Education in the relevant technology.
ii. Candidates with a Diploma of Associate Engineer shall not be eligible unless their diplomas are in the relevant technology as specified against each degree course given below (the following list may be amended from time to time depending on notifications of Pakistan Engineering Council (PEC)):

i. **B.Sc. Electrical Engineering**
   a) Diploma in Electrical Technology
   b) Diploma in Telecommunication Technology
   c) Diploma in Electronics Technology
   d) Diploma in Avionics Technology
   e) Diploma in Instrumentation Technology
   f) Diploma in Information Technology
   g) Diploma in Precision Mechanical & Instrument Technology
   h) Diploma in Radar Technology
   i) Diploma in Automation Technology
   j) Diploma in Radio Technology
   k) Diploma in Instrumentation & Process Control Technology
   l) Diploma in Mechatronics
   m) Diploma in Computer/ Computer Information Technology

ii. **B.Sc. Computer Engineering (PEC)**
   a) Diploma in Computer Information Technology
   b) Diploma in Computer Technology
   c) Diploma in Telecommunication Technology
   d) Diploma in Electrical Technology
   e) Diploma in Electronics Technology
   f) Diploma in Software Technology
   g) Diploma in Radar Technology
   h) Diploma in Automation Technology
   i) Diploma in Radio Technology
   j) Diploma in Instrumentation Technology
   k) Diploma in Instrumentation & Process Control Technology

iii. **B.Sc. Computer Science / Computing Disciplines**
   a) **Diploma in Computer Information Technology**
   b) **Diploma in Computer Technology**
   c) **Diploma in Information Technology**
   d) **Diploma in Software Technology**
   e) **Diploma in Electrical Technology**
   f) **Diploma in Mechanical Technology**
   g) **Diploma in Civil Technology**
   h) **Diploma in Electronics Technology**
   i) **Diploma in Biomedical Technology**
   j) **Diploma in Automation Technology**
   k) **Diploma in Radio Technology**
   l) **Diploma in Radar Technology**
   m) **Diploma in Instruments Technology**
   n) **Diploma in Instrumentation & Process Control Technology**
   o) **Diploma in Telecommunication Technology**

iv. **B.Sc. Biomedical Engineering**
   a) Diploma in Biomedical Technology
   b) Diploma in Electrical Technology
   c) Diploma in Electronics Technology

   d) Diploma in Instrumentation Technology
   e) Diploma in Radar Technology
   f) Diploma in Automation Technology
   g) Diploma in Radio Technology
   h) Diploma in Instrumentation & Process Control Technology
   i) Diploma in Healthcare Technology
   j) Diploma in Mechatronics

v. **B.Sc. Mechanical Engineering**
   a) Diploma in Mechanical Technology
   b) Diploma in Precision Mechanical &Instruments Technology
   c) Diploma in Auto & Diesel Technology
   d) Diploma in Bio-Medical Technology
   e) Diploma in Dies & Mould Technology
   f) Diploma in Automation Technology
   g) Diploma in Refrigeration & Air Conditioning Technology
   h) Diploma in Aerospace Technology
   i) Diploma in Mechatronics Technology
   j) Diploma in Mechanical Technology with any specialization
   k) Diploma in Vacuum Technology

vi. **B.Sc. Industrial and Manufacturing Engineering**
   a) Diploma in Mechanical Technology
   b) Diploma in Cast Metal & Foundry Technology
   c) Diploma in Mechanical (Production) Technology
   d) Diploma in Auto & Diesel Technology.
   e) Diploma in Automation Technology
   f) Diploma in Mechanical (Construction Machinery) Technology
   g) Diploma in Chemical Technology
   h) Diploma in Dies and Mold Technology
   i) Diploma in Glass, Ceramics and Pottery Development Technology
   j) Diploma in Vacuum Technology
   k) Diploma in Mechatronics Technology
   l) Diploma in Mechanical Technology with any specialization

vii. **B.Sc. Mechatronics and Control Engineering**
   a) Diploma in Instruments Technology
   b) Diploma in Electrical Technology
   c) Diploma in Electronics Technology
   d) Diploma in Mechanical Technology
   e) Diploma in Radar Technology
   f) Diploma in Automation Technology
   g) Diploma in Radio Technology
   h) Diploma in Instrumentation & Process Control Technology
   i) Diploma in Mechatronics Technology
   j) Diploma in Mechanical Technology with any specialization

viii. B.Sc. Textile Engineering
   a) Diploma in Textile Technology
   b) Diploma in Spinning Technology
   c) Diploma in Textile Weaving Technology
   d) Diploma in Textile Dying and Printing Technology
   e) Diploma in Garments Technology
   f) Diploma in Dress Designing & Making / Fashion Design
   g) Diploma in Automation Technology
   h) Diploma in Printing and Graphics Arts
   i) Diploma in Chemical Technology
   j) Diploma in Leather Technology

ix. B.Sc. Civil Engineering
   a) Diploma in Civil Technology
   b) Diploma in Land & Mine Surveying Technology
   c) Diploma in Architecture Technology
   d) Diploma in Environmental Technology
   e) Diploma in Civil Technology with any Specialization

x. B.Sc. Architectural Engineering
   a) Diploma in Civil Technology
   b) Diploma in Architecture Technology
   c) Diploma in Construction Technology

xi. B.Sc. Transportation Engineering
   a) Diploma in Civil Technology

xii. B.Sc. Chemical Engineering
   a) Diploma in Chemical Technology
   b) Diploma in Chemical Processing Technology
   c) Diploma in Chemical Technology (specialization in Sugar Technology)
   d) Diploma in Petro Chemical Technology
   e) Diploma in Petroleum Technology
   f) Diploma in Leather Technology
   g) Diploma in Footwear Technology
   h) Diploma in Glass, Ceramics and Pottery Development
   i) Diploma in Chemical Technology with any specialization

xiii. B.Sc. Metallurgical and Materials Engineering
   a) Diploma in Metallurgy & Welding Technology
   b) Diploma in Foundry and Pattern Making Technology
   c) Diploma in Mechanical Technology
   d) Diploma in Cast Metal & Foundry Technology
   e) Diploma in Mechanical Technology with any specialization
   f) Diploma in Glass, Ceramics and Pottery Development

xiv. B.Sc. Materials Science
   a) Diploma in Metallurgy & Welding Technology
   b) Diploma in Foundry and Pattern Making Technology
   c) Diploma in Mechanical Technology
   d) Diploma in Cast Metal & Foundry Technology
   e) Diploma in Mechanical Technology with any specialization
   f) Diploma in Glass, Ceramics and Pottery Development

xv. B.Sc. Polymer and Process Engineering
   a) Diploma in Chemical Technology
   b) Diploma in Chemical Processing Technology
   c) Diploma in Chemical Technology with any specialization
   d) Diploma in Petro Chemical Technology
   e) Diploma in Petroleum Technology

xvi. B.Sc. Petroleum & Gas Engineering
   a) Diploma in Petroleum Technology
   b) Diploma in Chemical Technology
   c) Diploma in Petrochemical Technology

xvii. B.Sc. Mining Engineering
   a) Diploma in Land and Mine Surveying Technology
   b) Diploma in Mining Technology

xviii. B. Architecture
   a) Diploma in Architecture
   b) Diploma in Civil Technology
   c) Diploma in Land and Mine Surveying Technology

xix. B. Product and Industrial Design
   All Technologies are eligible to apply

xx. BS Chemistry, Industrial Chemistry, Mathematics and Physics,
   All Technologies are eligible to apply

xxi. B. Sc. Energy Systems Management
   All relevant Technologies are eligible to apply

xxii. Business Administration, Business Information Technology, Business Analatics
   All Technologies are eligible to apply

3.3   Seats for B.Sc. Engineering Technology or Equivalent Degree Holders
   Applicants seeking admission against seats reserved for the holders of B.Sc. Engineering Technology or equivalent degrees shall be eligible if their degrees are in the relevant technology as specified against each degree course given below. Relevancy of the technology, with changed nomenclature, will be acceptable subject to the approval of the concerned Dean:

a. **Electrical Engineering**
Electrical Technology, Electrical Engineering Technology, Electronics Technology

b. **Biomedical Engineering**
Biomedical Technology, Biomedical Engineering Technology

c. **Civil Engineering**
Civil Technology, Civil Engineering Technology

d. **Textile Engineering**
Textile Technology, Textile Engineering Technology

e. **Mechanical Engineering**
Mechanical Technology, Mechanical Engineering Technology, Industrial Technology, Industrial Engineering Technology, Mechatronics Technology, Mechatronics Engineering Technology

f. **Industrial and Manufacturing Engineering**
Mechanical Technology, Mechanical Engineering Technology, Industrial Technology, Industrial Engineering Technology, Mechatronics Technology, Mechatronics Engineering Technology

g. **Chemical Engineering**
Chemical Technology, Chemical Engineering Technology, Polymer Technology, Polymer Engineering Technology, Material Technology, Material Engineering Technology

4. **CONDITIONAL ADMISSION TO CANDIDATES**
Since admission will be offered before declaration of the Intermediate Examination Part-II (or Equivalent) result, the following condition will apply:

- Admission of candidates, who are unable to earn the required marks mentioned in the Table 2.1 or above in their B.Sc. Engineering Technology degree or Intermediate and equivalent qualification (such as A-level equivalence by IBCC) or DAE, will be cancelled and their dues will be reimbursed in full without deduction as per university refund policy.

5. **AGE LIMIT AND GENDER**
There is no age restriction for seeking admission to any bachelor's degree course at the University. Male, female and transgender persons are eligible to apply for all seats.

DETERMINATION OF MERIT

1. **MERIT DETERMINATION**

The comparative merit of applicants in programs that require ECAT will be determined on the basis of overall adjusted admission marks obtained by them in the examinations stated above. For ECAT-based programs:

- In case of Intermediate stream:
  a) Entrance Test (ET) Percentage Marks: 33% weight in merit aggregate.
  b) First Year Percentage Marks: 50% weight in merit aggregate.
  c) Matric Percentage Marks: 17% weight in merit aggregate.
- In case of foreign qualification:
  a) ET Percentage Marks: 33% weight in merit aggregate.
  b) Marks earned in 11th Class ("O" level or equivalent):   67% weight in merit aggregate.
- In case of diploma holders:
  a) ET Percentage Marks: 33% weight in merit aggregate.
  b) Sum of First- and Second-Years Percentage Marks: 67% weight in merit aggregate.
- In case of B.Sc. Engineering Technology or equivalent degree holders:
  a) ET Percentage Marks: 33% weight in merit aggregate.
  b) 7 semesters CGPA if degree is not yet complete: 67% weight in merit aggregate.

- For non-ECAT programs:
  a) The merit will be determined by the results in the matric and first-year intermediate (or equivalent) examinations with 25% and 75% weights, respectively. For the cases in which the applicant has not appeared in the matric examination, the weight of the intermediate or equivalent examination, defined above in (b), will be 100%.

Notes:

a) *In case the candidate has already completed his/her intermediate or equivalent qualification, their Part-I result would be used in computation of Aggregate.*
b) *In case of foreign qualification, letter grade will be converted to marks by IBCC formula. IBCC equivalent certificate is required to be submitted after admission.*
c) *In case of B.Sc. Engineering. Technology degree holders, CGPA of 2.5 out of 4.0 would be treated as 60% and CGPA of 4.0 out of 4.0 would be treated as 90%. Other CGPAs would be interpolated accordingly.*
d) *All candidates, with the exception of DAE qualified candidates, who have appeared in a particular subject combination in the Entrance test will only be considered for admission in the prescribed disciplines relevant to the subject combination.*

2. **MERIT OF INTERMEDIATE (PRE-MEDICAL) WITH MATHEMATICS**

In determining the merit of an applicant having Intermediate (Pre-Medical) with mathematics as an additional subject, the marks obtained in first year biology course will be used as long as the applicant gets a passing grade in the mathematics subject.

3. **CREDIT FOR HAFIZ-E-QURAN**

A Hafiz -e-Quran is given additional marks in determination of merit. He will get the benefit only if he has:

a) Checked the box provided in the on-line application form and
b) Appeared before the "verification committee", appointed by the Vice Chancellor for oral test, which can award marks, between zero to twenty, according to the degree of his proficiency.

The "Verification Committee" will hold oral test at 10:00 am in UET Lahore on **Tuesday, July 15, 2025**. It may be noted that no separate call letters will be issued to the concerned applicants in this condition.

4. **CREDIT FOR SPORTS**
   a) A maximum of ten marks will be added to the academic marks in Intermediate or equivalent examination of an applicant who is a sportsman. He will get the benefit only if he has:
   a) Checked the box provided in the on-line application form; and
   b) Appeared before the "verification committee", appointed by the Vice–Chancellor, which will determine his proficiency as a Sportsman according to the following criteria:
   - "05 Marks for Physical Test showing actual performance and endurance"
   - "01 Marks for Inter College Champion"
   - "02 Marks for District Level Champion"
   - "03 Marks for Divisional Level"
   - "04 Marks for Provincial Level"
   - "05 Marks for National Level or under 18 representation abroad"

The "Verification Committee" will hold sports test at 10:00 am in UET Lahore on **Thursday, July 17, 2025**. It may be noted that no separate call letters will be issued to the concerned applicants in this condition.

5. **DETERMINATION OF MERIT IN CASE OF EQUAL PERCENTAGE OF ADMISSION MARKS**
   If two or more applicants have equal percentage of admission marks (up to four places of decimal after truncation), they shall be treated at par for the purpose of admission.
   Explanation
   In case there is a tie for the last seat in a particular discipline/category, then all the candidates who have secured equal percentage of admission marks (up to four places of decimal) shall be admitted. No transfer or new entry into that discipline/category shall, however, be considered unless the actual number of candidates already admitted falls below the number of allocated seats for that discipline/category.

6. **MERIT DETERMINED CATEGORY WISE**
   The seats for admission to the bachelor's degree courses at the University are distributed over various categories. The details of the distribution of seats are available in the Seats Allocation Chart. The applicants for each category are grouped separately. Then on the basis of the percentage admission marks, comparative merit of the applicants in the group is prepared. The applicants belonging to a category thus compete for admission amongst themselves for the seats allocated to it.

7. **TRANSFER ON THE BASIS OF GIVEN PREFERENCES AND MERIT**
   In case a seat in any discipline/category of applicant's higher preference falls vacant and he is eligible for transfer to that discipline/category on the basis of his merit, he shall be automatically transferred to the discipline/category.

8. **VARIATION IN SEATS**
   The University authorities may exercise their right at any time to increase or decrease the number of seats allocated to any category and there shall be no appeal against such a decision.

9. **UN-UTILIZED SEATS**
   If some seats allocated to any category (other than Open Merit) remain un-utilized for lack of adequate applicants, then the un-utilized seats are transferred to Punjab domiciled Open Merit category and are filled under the same terms and conditions as applicable to the former.

APPLICATION CATEGORIES AND SYMBOLS

Category	Description	How to Apply?
A1 *[Open Merit Seats (subsidized)]*	Only Punjab domiciled candidates, having requisite qualification (including DAE), can apply for open merit seats under 'A1' category. ***Tuition fee is subsidized.***	Submit application to UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the UET according to merit.
A1-Med *[Open Merit Seats (subsidized)]*	Only Punjab domiciled candidates, having Intermediate (Pre-Medical) qualification can apply for open merit seats under 'A1-Med' category. ***Tuition fee is subsidized***.	Submit application to UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the UET according to merit.
A2 *[Open Merit Seats (partially-subsidized)]*	Only Punjab domiciled candidates, having requisite qualification (including DAE), can apply for open merit seats under 'A2' category. ***Tuition fee is partially subsidized and there is no provision for financial assistance***.	Submit application to UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the UET according to merit.
A2-Med *[Open Merit Seats (partially-subsidized)]*	Only Punjab domiciled candidates, having Intermediate (Pre-Medical) qualification can apply for open merit seats under 'A1-Med' category. ***Tuition fee is partially subsidized and there is no provision for financial assistance***.	Submit application to UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the UET according to merit.
AP All Pakistan	Pakistani Nationals, having requisite qualification (including DAE), can apply for open merit seats under 'AP' category.	Submit application to UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the UET according to merit.
B *[Sindh]*	The candidate should be a bonafide resident of the Sindh province. Diploma holders are also eligible to apply. ***Tuition fee is subsidized***.	Applications are to be submitted to the Registrar of the Mehran University of Engineering and Technology or the Registrar of the N.E.D. University of Engineering and Technology, Karachi. Nominations and allocation of disciplines are sent by the Section Officer (ACD-III) Department of Education, Government of Sindh.
C *[Baluchistan]*	The candidate should be a bonafide resident of the Baluchistan province. Diploma holders are also eligible to apply.	Applications are to be submitted to the Secretary, Department of Education, Government of Baluchistan. Nominations and allocation of disciplines are made by said Department.
D *[KPK]*	The candidate should be a bonafide resident of the Khyber Pakhtunkhwa (KPK) province. Diploma holders may also apply. ***Tuition fee is subsidized***.	Applications are to be submitted to the Registrar, University of Engineering & Technology, Peshawar. Nominations and allocations of disciplines are made by the Department of Higher Education, Government of Khyber Pakhtunkhwa.
E1 *[Azad Kashmir]*	The candidate should be a national of Azad Kashmir. ***Tuition fee is subsidized***.	The applications are to be submitted to the Secretary Nomination Board, Azad Government of the State Jamu & Kashmir, Education Secretariat (Colleges), New Secretariat Chatter, Muzaffarabad Azad Kashmir.
E1 *[Azad Kashmir (Lipa Valley)]*	The candidate should be a national of Lipa Valley, Azad Kashmir. ***Tuition fee is subsidized***.	The applications are to be submitted to the Secretary Nomination Board, Government of the State of Azad Jamu & Kashmir, Education Secretariat (Colleges), New Secretariat, Chatter, Muzaffarabad, Azad Kashmir.

E2 *[Northern Areas]*	The candidate should be a bonafide resident of Northern Areas (Gilgit-Baltistan) ***Tuition fee is subsidized***.	The applications are to be submitted to the Secretary Nomination Board/Director of Education, Gilgit-Baltistan. Diploma holders are also eligible to apply.
H1 *[Foreign Countries]*	The candidates having a foreign nationality can apply under 'H' Category. The applicant is required to get his application sponsored by his own government. Diploma holders may also apply. ***Tuition fee is subsidized***.	The application is sent in triplicate to the Ministry of Finance, Revenue, Economic Affairs, Statistics & Privatization (Economic Affairs Division) Government of Pakistan, Islamabad, through Pakistan's representative accredited to his country. The nominations are sent by the Section Officer Finance, Revenue, Economic Affairs, Statistics & Privatization (Economic Affairs Division) Government of Pakistan, Islamabad.
H2 *[Afghan Nationals]*	The candidates should be an Afghan national. The applicant is required to get his application sponsored by his government. ***Tuition fee is paid by the sponsor***.	The application is sent in triplicate to the Ministry of Inter Provincial Co-ordination, Government of Pakistan, through Pakistan's representative accredited to Afghanistan. The nominations are sent by the Assistant Educational Advisor, Ministry of Inter Provincial Co-ordination, Government of Pakistan, Islamabad.
H3 *[Indian Held Kashmir]*	The candidates from Indian Held Kashmir can also apply under 'H' Category. ***Tuition fee is paid by the sponsor.***	The application is sent in triplicate to the Ministry of Finance, Revenue, Economic Affairs, Statistics & Privatization (Economic Affairs Division) Government of Pakistan, Islamabad through Pakistan's representative accredited to his country. The nominations are sent by the Section Officer Finance, Revenue, Economic Affairs, Statistics & Privatization (Economic Affairs Division) Government of Pakistan, Islamabad.
H4 *[Cultural Exchange]*	The candidates having a foreign nationality can apply under 'H' Category. The applicant is required to get his application sponsored by his own government. Diploma holders may also apply. ***Tuition fee is subsidized***.	The application is sent in triplicate to the Ministry of Inter Provincial Coordination Government of Pakistan through Pakistan's representative accredited to his country. The nominations are sent by the Assistant Educational Advisor, Ministry of Inter Provincial Coordination, Government of Pakistan, Islamabad.
H5 *[Sri Lanka Nationals]*	The candidates from Sri Lanka can also apply under this Category. ***Tuition fee is paid by the sponsor.***	Applications are received by Project Director (Sri Lanka-Afghanistan Project), Higher Education Commission, H-9, Islamabad. Selected candidates are nominated by the Higher Education Commission of Pakistan.

J1
[Armed Forces]
	The children of non-commissioned and junior commissioned officers / non-gazetted officials belonging to Army, Air Force or Navy can apply under this category. Diploma holders are also eligible to apply.
	
	Tuition fee is subsidized.
		Applications are submitted to the Headquarters of either the Army, Air Force, or the Navy (depending upon the service to which the parent belongs to) in accordance with the procedure notified by them. Nominations and allocations of disciplines are made by:
		• **For Army Seats**
		  The Adjutant General, AG'S Branch (W & R Directorate), General Headquarter, Rawalpindi
		• **For Air Force Seats**
		  The Deputy Director Education (TRG), Air Headquarter, Peshawar
		• **For Navy Seats**
		
		The Director, Directorate of Naval Educational Services, Naval Headquarter, Islamabad

J2
[Armed Forces]
	The children of commissioned officers/ gazette officials belonging to Army, Air Force or Navy can apply under this category. Diploma holders are also eligible to apply.
	
	Tuition fee is partially subsidized.
		Applications are submitted to the Headquarters of either the Army, Air Force, or the Navy (depending upon the service to which the parent belongs to) in accordance with the procedure notified by them. Nominations and allocations of disciplines are made by:
		• **For Army Seats**
		  The Adjutant General, AG'S Branch (W & R Directorate), General Headquarter, Rawalpindi
		• **For Air Force Seats**
		  The Deputy Director Education (TRG), Air Headquarter, Peshawar
		• **For Navy Seats**
		The Director, Directorate of Naval Educational Services, Naval Headquarter, Islamabad

K *[FATA]*	The applicant should be a bonafide resident of the erstwhile Federally Administered Tribal Areas (FATA). Diploma holders are also eligible to apply.	The applications are submitted to the Secretary, State and Frontier Regions Divisions, Government of Pakistan, Islamabad. Nominations and allocation of disciplines are also made by him.
L *[South, Central and North Punjab]*	The applicant should be a bonafide resident of any of the following districts: Bahawalnagar, Bahawalpur, Rahim Yar Khan, Rajanpur, Muzaffargarh, Jhang, Attock, Chakwal, Mianwali, Dera Ghazi Khan and Jhelum. *Tuition fee is subsidized.*	Applications are to be submitted to the UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit.
M *[UET Employees]*	The un-married children of employees of UET Lahore can apply under this category. Diploma holders are also eligible to apply. However, in order to determine relevant merit, Diploma holders will be placed below applicants possessing Intermediate. (Pre-Engineering). For inclusion in this category the applicant's parent has to fulfill the conditions regarding University service given in Form F-V. *Tuition fee is subsidized*.	Applications are to be submitted to the UET Lahore according to the procedure and requirements laid down in this prospectus. Application should accompany with certificate from the Registrar of the University on Form F-V and a certificate of being unmarried by a class-I gazetted officer or a University class-A officer on Form F-VI. The selection and allocation of disciplines are made by the University according to merit. **Note:** Children of employees whose services have been transferred to the University of Engineering & Technology Taxila are not eligible to apply under the category as their quota of seats has also been transferred to the University of Engineering & Technology Taxila.
N *[Engineers]*	The Punjab domiciled children of Engineers, Architects and Town Planners can apply under this category. Diploma holders cannot apply. *Tuition fee is partially subsidized*.	Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit. The applicants should furnish with their applications an attested photocopy of their parent's bachelor's degree in Engineering, Architecture or City & Regional Planning from a recognized University along with PEC/PCATP registration. Other qualifications such as AMIE (Pak) are not recognized for inclusion in this category.

NM [*Non-Muslims*]	Only Punjab domiciled candidates, having requisite qualification (including DAE), can apply for seats for religious minorities under 'NM' category. ***Tuition fee is partially subsidized.***	Submit application to UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the UET according to merit.
O [*Alumni*]	The Punjab domiciled children of Alumni of UET Lahore can apply under this category. Diploma holders cannot apply. ***Tuition fee is partially subsidized***.	Applications are submitted to the University according to the procedure and requirements. The selection and allocation of discipline is made by the University according to merit. The applicant should furnish with his application an attested photocopy of the PEC/PCATP registration and degree of his parent as an evidence of the fact that he (the parent) is a graduate of this University or its parent institution, that is, the former College of Engineering.
P [*B.Tech.*]	The applicant should be a bonafide resident of Punjab and should have passed B.Sc. Engineering Technology or equivalent degree from an HEC recognized university of Pakistan. ***Tuition Fee is subsidized.***	Applications are to be submitted to the University according to the procedure and requirements. Selection and allocation of disciplines are made by the University according to merit.
Q [*DGK and Rajanpur*]	The applicant should be a bonafide resident of the Tribal Areas of D.G. Khan and Rajanpur. Diploma holders are not eligible to apply. ***Tuition fee is subsidized.***	Applications are submitted to the DCO of respective district. Nominations are made by the DCOs on merit.
R [*Layyah and Bhakkar*]	The applicant should be a bonafide resident of Layyah and Bhakkar districts. ***Tuition fee is subsidized.***	Applications are submitted to the University according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit.
S [*Overseas*]	The children of overseas Pakistanis, having requisite qualification can apply under 'S' category. Orphan candidates meeting eligibility requirements may be sponsored by their real brother, real maternal or real paternal uncle. ***Tuition fee is partially subsidized and there is no provision for financial assistance in this category.***	Applications are submitted to the University according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit. The applicant is required to submit along with his application: i. A certificate on Form F-VIII regarding his parent's employment in a foreign country issued by the Pakistani embassy in that country ii. A photocopy of his parent's resident visa for that country attested by the Pakistani Embassy in that country In case of an orphan applicant applying under this category, following additional documents are required: (1) Father's death certificate Issued by NADRA; (2) Proof of relationship with the guardian in the form of CNIC of all family members and NADRA Family Registration Certificate (FRC) highlighting the Family Tree structure of the applicant; (3) Copy of Nikah Nama in case the guardian is the maternal uncle (Mamoo) of the applicant. *Scanned / faxed copy of employment certificate and visa shall not be entertained*.
SF [*Self Finance for Foreign and Dual Nationals*]	Foreigners and Dual Nationals, having requisite qualification, can apply under this category. ***Tuition Fee is subsidized.***	Submit application to UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the UET according to merit.

T *[Disabled]*	Punjab domiciled disabled candidates, excluding the disability of deafness, dumbness and blindness, can apply under this category.	Applications, along with a medical certificate mentioning the disability, are submitted to the UET Lahore according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit.
U1 *[Bal-FATA]*	These seats are for students of Baluchistan, under project provision of "Higher Education Opportunities for Students of FATA and Baluchistan".	Applications are received by Project Director (BAL-FATA Project), Higher Education Commission, H-9, Islamabad. Selected candidates are nominated by the Higher Education Commission of Pakistan.
U2 *[Bal-FATA]*	These seats are for students of FATA, under project provision of "Higher Education Opportunities for Students of FATA and Baluchistan".	Applications are received by Project Director (BAL-FATA Project), Higher Education Commission, H-9, Islamabad. Selected candidates are nominated by the Higher Education Commission of Pakistan.

APPLICATION FILLING AND SUBMISSION

1. **CORRECTNESS OF INFORMATION ON THE APPLICATION FORM**
   It is your responsibility to enter correct information while filling the online application. In case of deliberate concealment of information or misinformation, admission, if offered, will be liable to be cancelled and the candidate will be placed in the HEC blacklist through public notification and will become ineligible to apply in any HEC institution.

2. **GETTING THE ADMISSION CODE ONLINE**
   You may get the Admission Code online:
   a)   Login to the admission portal **https://admission.uet.edu.pk**
   b)   Select "**Generate UG Admission Challan**" button on the admission portal.
   c)   You will be asked to enter your Name, Phone Number, and CNIC number.
   d)   A challan number will be generated. You may pay the application fee using this number online using one of the following options:

   2.1   Payment through HBL/ Konnect APP
   a)   Login to the Konnect mobile application and tap the" **LIFESTYLE"** button.
   b)   Select **"EDUCATION**" option.
   c)   Tap on "**SCHOOL FEE".**
   d)   A list of institutions will appear. Select **UET Lahore** and enter Challan Number.
   e)   After verifying your name, make the payment.
   f)   Now you may use this paid Challan Number as your Admission Code.

   2.2   Payment through HBL Online Banking (For HBL Account Holders only)
   a)   Login to the HBL online banking application on your computer or mobile if you have access to a HBL account.
   b)   Select **"MORE"** option.
   c)   Select "**EDUCATION**" under Bill Payment category.
   d)   A list of institutions will appear. Select **UET Lahore** and enter Challan Number.
   e)   After verifying your name, make the payment.
   f)   Now you may use this paid Challan Number as your Admission Code.

   2.3   Payment through UBL OMNI DUKAN / AGENT
   a)   A list of institutions will appear. Select **UET Lahore** and enter Challan Number.
   b)   After verifying your name, make the payment.
   c)   Now you may use this paid Challan Number as your Admission Code.

   2.4   Payment through UBL Online Banking (For UBL Account Holders only)
   a)   Login to the UBL mobile application if you have a UBL account.
   b)   Select **"PAYMENTS"** option.
   c)   Select "**GOVERNMENT & ONLINE PAYMENTS**"
   d)   Select "**ONLINE PAYMENTS**" under Government and Online Payments category.
   e)   A list of institutions will appear. Select **UET Lahore** and enter Challan Number.
   f)   After verifying your name, make the payment.
   g)   Now you may use this paid Challan Number as your Admission Code.

   2.5   Payment by Walking into any UBL branch
   a)   Walk in to any UBL branch with your Challan.
   b)   Teller will process the payment and share the computerized deposit slip with you.
   c)   Now you may use this paid Challan Number as your Admission Code.

3. **INSTRUCTIONS FOR FILLING THE ONLINE APPLICATION FORM**
   a) You will fill the admission application form by logging into **https://admission.uet.edu.pk**
   b) You will be asked to enter the following information:
      - CNIC Number
      - Challan number

   c) Read instructions and continue to next page for the verification.
   d) Verify your yourself via Email / Phone No.
   c) On the next screen, you will see your personal information, which you entered while submitting the Entrance Test Form.
   d) In case of non-ECAT candidate, you must enter your personal information.
   e) In case you are applying based on Intermediate Part-I examination, you will be required to:
      i. Enter the name of Board of Intermediate and Secondary Education (BISE) and your registration number in Matriculation examination and Intermediate Part-I examination.
      ii. Enter your obtained and total marks in Intermediate Part-I examination.
      iii. Enter your obtained and total marks in Matriculation examination.
      iv. Upload your Intermediate Part-I and Matriculation result card.
      v. In case of degree completion, you can add your final marks.
      vi. In case of not degree completion, you will be upload Roll No.

   f) In case you are applying based on "A" level or equivalent foreign examination, you will be required to:
      i. Enter your candidate number in the "O" level examination.
      ii. In case of completion A level / Intermediate, you have to enter the Marks, Registration Number, and Roll No.
      iii. Enter the IBCC equivalence certificate number and date issued (if available).
      iv. Enter your obtained and total marks as indicated on the IBCC equivalent certificate.
      v. If you do not have an IBCC equivalence certificate, you may visit the IBCC website and enter the marks according to IBCC formulas. Kindly note that original IBCC equivalence certificate will be required from admitted candidates.

   g) In case you are applying based on DAE examination, you will be required to:
      i. Enter the name of Board of Technical Education and your registration number in first year and second year DAE examinations.
      ii. Enter the name of your diploma.
      iii. Enter your obtained and total marks in first year DAE.
      iv. Enter your obtained and total marks in second year DAE.
      v. In case of degree completion, Enter your obtained and total marks in third year DAE.

   h) In case you are applying based on B.Sc. Engineering Technology or equivalent qualification, you will be required to:
      i. Enter the name of your degree and name of the university.
      ii. Enter your obtained and total CGPA. If you have earned percentage marks, you may enter the obtained and total marks up to seventh semester of education.

i) Select category and upload the relevant documents, In case of special category, additional documents need to be submitted as mentioned below.

Category M	Original certificate from the Registrar of the UET Lahore on prescribed Form-V and an undertaking of being unmarried on Form-VI
Category N	Attested photocopy of the relevant degree and PEC/PCATP registration of applicant's father or mother
Category O	Attested photocopy of the degree issued by UET Lahore and PEC/PCATP registration of applicant's father or mother
Category S	Original certificate on prescribed Form F-VIII regarding parent's employment in a foreign country and a photocopy of his resident visa attested by the Pakistan embassy in that country. In case of an orphan applicant applying under this category, following additional documents are required: (1) Father's death certificate issued by NADRA; (2) Proof of relationship with the guardian in the form of CNIC of all family members and NADRA Family Registration Certificate (FRC) highlighting the Family Tree structure of the applicant; (3) Copy of Nikah Nama in case the guardian is the maternal uncle (Mamoo) of the applicant. *Scanned / faxed copy of employment certificate and visa shall not be entertained.*
Category T	Original disability certificate / CNIC

j) Next you will choose your preferences for programs/ disciplines, campuses and categories.
k) Candidate will be asked to check the box that all the provided information is correct.
l) Muslim candidates will be asked to check the box on the Finality of Prophethood declaration form.
m) Once your application is complete, you will be asked to submit it. After submission, your application is final and submitted in university's records. You may print a copy for your own record.

PROCEDURE FOR THE SELECTED CANDIDATES

1. NOTIFICATION OF SELECTION

The candiddate can check his / her admission satus on the university admission portal **https://admission.uet.edu.pk**. Kindly note that no written offer letter would be dispatched to selected candidates. It is responsibility of the candidate to remain abreast with the status of admissions as available on the website.

IMPORTANT:

a) **Consideration in the Next Merit lists**

Admissions are granted on merit and according to preferences given by the applicants. An applicant who secures admission in a discipline of his lower preference and he desires to be considered in next merit lists, **must** submit all the dues and documents. If he fails to do so, his name would be excluded from any future merit lists and his admission would be cancelled.

b) **Admission made as a result of an error, omission or mistake shall not confer any right on an applicant.**

2. DEPOSITING OF DUES AND DOCUMENTS

Within the prescribed time, a selected candidate is required to pay the University dues and submit the following documents in a manner prescribed on the website **https://admission.uet.edu.pk** to the Deputy Registrar, Students Section:

a) Paid Original Bank Challan as proof of payment of dues. Online payment facility is available through Habib Bank Limited (HBL) internet banking/ Mobile application, HBL Konnect and ATMs. Candidate must keep photocopies of this challan/ proof of payment for his/her own record and for submission to the department.

b) One set of photocopies of each educational document including domicile.

c) Original applicable certificates and degree, like Matric/"O"-Level, Intermediate./ "A"-Level, Diploma of Associate Engineer (DAE), B.Sc. Engineering Technology or any equivalent qualifications.

d) Six copies of the most recent passport size photograph

e) Two attested copies of CNIC/ "B" Form.

f) Bio-data card Form-I duly completed in all respects.

g) Medical Certificate Form-II duly signed and stamped by Medical Practitioner registered with PMC.

h) Duly attested Current Income certificate of the parent/ guardian.

i) Undertaking (Sample Form –VII) on a Rs. 100/- judicial paper duly completed.

2.1 For Punjab Domiciled Applicants Who Possess Qualifications from Outside Punjab

Applicants for categories A1, A2, L, N, Q & R who have passed both the Secondary School Examination and the Higher Secondary School Examination from any Board of Intermediate and Secondary Education, not included in the Punjab province or Federal Capital Areas, Islamabad; Or, applicants who passed their Diploma of Associate Engineer from a Board of Technical Education other than that of Punjab; Or, applicants for category P who have passed their B.Sc. Engineering Technology or equivalent degree other than the University of Engineering and Technology, Lahore, are required to submit the additional documents as prescribed below:

a) **Children of Government Servants**

If the parent of the applicant is a government servant who belongs to Punjab but is serving in any other province of Pakistan, then the parent should produce a certificate on Form -V from the head of his Department affirming that he is a permanent resident of the Punjab. It shall be necessary in such cases that the period of the applicant's study corresponds with the period of the posting of the parent in that province.

b) **Children of the Armed Forces Personnel**

In addition to the seats reserved for the category J, the children of the Armed Forces Personnel can apply for admission on basis of merit against seats reserved for their province of domicile or the seats reserved for the province in which their parent (the member of the Armed Forces) is posted. Thus, an applicant who is domiciled in Sindh but his parent is posted in Punjab can apply against seats reserved for Sindh or against seats reserved for Punjab. However, if he applies under category A1 or A2, he has to submit with his application a certificate from the GOC of the area regarding the place of his parent's posting.

c) **All other applicants must submit the following additional documents**
   i.   An attested Photocopy of father's/mother's domicile certificate of the Punjab Province or the Federal Capital area, Islamabad
   ii. Documentary proof in the form of a certificate on Form -VI from the election officer of concerned area of the Punjab Province/Federal Capital Area, Islamabad to the effect that name of the applicant's father/mother appears in the electoral rolls
   iii. An attested photocopy of the relevant page of the electoral rolls on which the name of the father/mother of the applicant appears
   iv. An attested photocopy of the identity card of the applicant's father/mother
   v.   An undertaking from the candidate on Form-VII

d) **Applicant whose father is not alive**
   In case his father is not alive, and the above documents cannot be produced, the applicant should submit:
   i.   Documentary proof of his father's death
   ii. Documentary evidence of his parent's immovable property in Punjab or Federal Capital Area, Islamabad

3. RELAXATION IN TIME LIMIT
If a selected candidate is prevented by unavoidable circumstances from timely fulfillment of the requirements laid down in the above clause, then he should intimate the Convener Admission Committee about it within the prescribed time limit along with relevant documentary proof. The Convener Admission Committee may, at his discretion, grant relaxation in the time limit.

4. FORFEITURE OF RIGHT OF ADMISSION
A selected candidate who fails to fulfill the requirements laid down in the above clause, within the prescribed time-limit, shall forfeit his right of admission.

5. PROVISIONAL ADMISSION
On fulfillment of the obligations mentioned in the above clause a selected candidate will be admitted to the University. This admission shall, however, be provisional until all the original degrees or certificates submitted by him have been checked for their veracity. In case any document proves to be false, fake, or fabricated at a later stage, a provisionally admitted student shall be liable to expulsion from the University and to any other disciplinary or legal action the University may deem fit. Moreover, all the fees and charges deposited by him shall stand forfeited in favour of the University.

6. WARNING
If at any stage, a student is found indulging in politics, his admission will be cancelled as referred to in undertaking form -VII.

7. DEADLINE FOR ADMISSION
Admission shall be closed after the expiry of thirty days from the commencement or registration of the first-year class.

Note: Applicable to all the candidates who apply for admission on "merit" as well as under "reserved" seats

8. NOTIFICATION OF SELECTION OF CATEGORIES B, C, D, E1, E2, H1, H2, H3, H4, H5, J1, J2, K, Q, U1 & U2
The applicants for the seats reserved for these categories will be informed about selections by the authorities responsible for their selection. After that the University will issue them call letters with a target date to report in the Students Section to complete the remaining admission formalities within the stipulated time.

9. CONDITIONAL ADMISSION TO CANDIDATES
Since admission will be offered before declaration of the Intermediate Examination Part-II (or Equivalent) result, the following condition will apply:
- Admission of candidates, who are unable to earn the required marks to enrolled in the degree, in their B.Sc. Engineering Technology degree or Intermediate and equivalent qualification (such as A-level equivalence by IBCC) or DAE, will be cancelled and their dues will be reimbursed in full without deduction.

10. HOSTEL ACCOMMODATION

a) Hostel accommodation is limited and is provided on the basis of merit. Local students are not eligible to apply.

b) The selected candidates for Lahore Campus may apply to Senior Warden, University of Engineering and Technology, Lahore for hostel accommodation on prescribed application form obtainable from Senior Warden's office, along with the following documents:

- Two attested photographs
- An attested photocopy of the domicile certificate; and
- Attested photocopy of Bank Challan from the Habib Bank (Engineering University Branch).

c) The candidate selected for admission at Kala Shah Kaku campus, Faisalabad Campus and Narowal Campus should apply to Hostel Warden of the respective campus for hostel accommodation.

d) For hostel accommodation at Rachna College of Engineering and Technology, candidate should apply to Hostel Warden of Rachna College of Engineering and Technology, Gujranwala.

NOTE: **IT IS NOT A RIGHT/PRIVILEGE OF STUDENT TO GET HOSTEL ACCOMMODATION. IT IS SOLELY AT THE DISCRETION OF THE UNIVERSITY TO OFFER A PLACE IN A HOSTEL. A STUDENT INVOLVED IN ANY ACT OF MISCONDUCT, ILL DISCIPLINE, VIOLATION OF RULES AND INVOLVEMENT IN ANY POLITICAL ACTIVITY SHALL BE INELIGIBLE FOR HOSTEL ACCOMMODATION**

Departments

DEPARTMENT OF ELECTRICAL ENGINEERING

Dean
Prof. Dr. Muhammad Shoaib

Chairman
Prof. Dr. Syed Abdul Rahman Kashif

Professor Emeritus
Dr. K. E. Durrani
Dr. Shahid H. Bokhari
Dr. Haroon Atique Babri

Professors
Dr. Muhammad Tahir
Dr. Farhan Mahmood

Associate Professors
Dr. Asim Loan
Dr. Irfan Ullah Chaudhary
Dr. Umar Tabrez Shami
Dr. Rabia Nazir
Dr. Ahsan Tahir

Assistant Professors
Dr. Syed Shah Irfan Hussain
Dr. Naveed Nawaz
Mr. Arslan Abdul Rahim
Mr. Muhammad Bilal
Dr. Adeem Aslam
Dr. Imran Javed

Dr. Muhammad Salman Fakhar
Dr. Suleman Sami Qazi

Lecturers
Dr. Mustafeez ul Hasan
Dr. Muhammad Anique Aslam
Dr. Habib Wajid
Dr. Noor ul Ain
Mr. Omar Imtiaz
Mr. Umar Shahid
Mr. Rehan Naeem
Mr. Khalid Butt

The Department was established in 1923 as a part of the Maclagan Engineering College. Currently, it has a total student enrolment of about 914 including both graduate and undergraduate students.

Courses of Study
   Undergraduate Programs
- B.Sc. Electrical Engineering
- B.Sc. Artificial Intelligence

   Postgraduate Programs
- M.Sc. Electrical Engineering
- M.Sc. Artificial Intelligence
- Ph.D. Electrical Engineering

specializations while pursuing his master's degree in electrical engineering:
- Computer

- Electronics and Communications
- Power Systems

Eligibility criteria for the two undergraduate degrees is mentioned in the undergraduate prospectus. Students who have taken Mathematics, Physics and Computer Science in their high school are eligible for admission in the undergraduate Electrical Engineering program but, per the requirements of Pakistan Engineering Council, need to do a high school equivalent course in Chemistry. Students who have taken Biology, Physics and Chemistry in their high school are eligible for admission in the undergraduate Artificial Intelligence program, but per the requirements of National Computing Education Accreditation Council, need to do two high school equivalent courses in Mathematics.

Mission
To ensure understanding and application of electrical engineering fundamentals by inculcating analysis and design skills for betterment of humanity and to become a centre of excellence in the field of electrical engineering.

Program Educational Objectives (PEOs) for B.Sc. Electrical Engineering
PEO-01: Graduate should acquire and demonstrate their proficiency of electrical engineering knowledge by inculcating analysis and design skills using modern tools.
PEO-02: Graduate should possess the knowledge translation ability and contribute as an effective team member to reinforce their engineering competency.
PEO-03: Graduates should acquire strong moral values, ethical values, interpersonal and project management skills.
PEO-04: Graduates should build entrepreneurial and innovative mindset to address real world problems.

Program Educational Objectives for B.Sc. Artificial Intelligence
PEO-01: Graduates will possess and demonstrate their proficiency of AI knowledge by inculcating analysis and design skills using modern tools.
PEO-02: Graduates will have the knowledge translation ability and possess interpersonal and project management skills to contribute as an effective individual and team member.
PEO-03: Graduates will acquire strong moral and ethical values, ensure privacy and fairness in professional computing practices, follow societal norms leading to lifelong learning.

The bachelor's degree curriculum provides exposure to basic knowledge in Physics and Mathematics followed by an intensive coverage of the principles of Electrical Engineering both in classrooms and laboratories. To stimulate their imaginations, students are assigned complex engineering problems and projects at appropriate stages. Furthermore, the curriculum is regularly revised to cater for the contemporary needs of the field of engineering. In order to reinforce the liaison between industry and academia, a final year project exhibition is held every year to provide the students with an opportunity to manifest their technical acumen. Internships in the local industry provide the students with hands-on experience on industrial equipment.

Laboratories and Other Facilities
The Department has the following well-equipped laboratories:

- Power Systems
- Final Year Project Design
- Control Systems
- Electrical Machines
- Makers Lab
- Supcon Automation
- Computer Systems
- System Simulation
- Power Electronics
- Analog and Digital Electronics
- Wireless Communications
- Microwave Engineering
- Electric Machine Drives
- Artificial Intelligence
- Power Systems Research
- Communication Systems
- Basic Electrical Engineering
- Product Research
- Applied Electricity
- High Voltage Engineering
- Advanced Machines

Department has a highly qualified and experienced faculty with most of the Ph.D. faculty members qualified from reputed international and national universities. Research work being carried out at the Department, has direct bearing on the needs of national industry. Faculty members and postgraduate students are engaged in research and publish papers in international and national journals and conferences. Many faculty members have won research grants from HEC and ICT R&D funds.

The Department also organizes seminars and workshops frequently in various areas of electrical power, electronics, communications, computer, artificial intelligence and control systems engineering. Faculty members and prominent researchers from home and abroad deliver these seminars.

B.Sc. Electrical Engineering

Year 1								

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-123	Mechanics and Wave Motion	3	1
EE-100	Electric Circuits	3	1
ME-100L	Workshop Practice	0	1
IS-102	Islamic Studies//Ethics - I	3	0
MA-113	Calculus and Analytic Geometry	3	0
CS-103	Introduction of Computer Programming for Data Science	2	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-132	Electricity and Magnetism	3	1
MA-228	Differential Equations	3	0
EE-110	Circuit Analysis and Design	3	1
EE-133	Programming Fundamentals	3	1
HU-111	Communication Skills	1	0
QT-101	Translation of the Holy Quran - I	1	0

Year 2								

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EE-250	Electric Machinery Fundamentals	3	1
EE-216	Electronic Devices and Circuits	3	1
HU-212	Civics and Community Engagement	2	0
MA-234	Linear Algebra	3	0
EE-234	Data Structures and Algorithms	2	1
MA-240	Numerical Analysis	2	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EE-272	Digital Systems	3	1
EE-220	Signals and Systems	3	0
EE-302	Applied Probability	3	0
HU-221	Technical Writing and Presentation Skills	3	0
HU-213/214/215	Anthropology/Psychology/Social Work	2	0
QT-201	Translation of the Holy Quran - II	1	0
EE-202L	Occupational Health and Safety	0	1

Year 3								

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EE-339/356/384	Analysis and Design of Algorithms/ Power Transmission Distribution and Utilization/ Digital Signal Processing	3	1
EE-383	Electromagnetics and Its Applications	3	0
MGT-211	Principles of Management	3	0
EE-273	Microprocessor Systems	3	1
CMPL-341	Artificial Intelligence	3	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EE-338/312/313	Introduction to Machine Learning/ Power Electronics/ Integrated Electronics	3	1
EE-351/375/386	Power System Analysis and Design/Computer Architecture/Microwave and Antenna Engineering	3	1
EE-322	Analog & Digital Communications	3	1
EE-340	Control Systems	3	1
EE-300L	Embedded Systems Laboratory	0	1
QT-301	Translation of the Holy Quran – III	1	0

Year 4								

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EE-xyz	Core Depth Elective 2	3	1
EE-xyz	Core Depth Elective 3	3	1
EE-499a	Project (Phase-I)	0	3
EE-399	Internship	0	0
IS-202	Ideology and Constitution of Pakistan/ Ethics-II	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EE-xyz	Core Depth Electives 4	3	1
EE-xyz	Core Depth Elective 5	3	0
499-b	Project (Phase – II)	0	3
QT-401	Translation of the Holy Quran - IV	1	0
MGT-413	Entrepreneurship	3	0

List of Elective Courses

Power	Electronics and Communications	Computer
EE-450: High Voltage Engineering (L)	EE-419: Electrical Instruments and Measurements (L)	EE-431: Operating Systems (L)
EE-453: Power System Operation and Control (L)	EE-425: Wireless Communications (L)	EE-433: Deep Learning (L)
EE-454: Power System Protection (L)	EE-426: Digital Image Processing (L)	EE-436: Database Engineering (L)
EE-458: Smart Grids and Renewable Energy Systems (L)	EE-476: Introduction to VLSI Systems (L)	EE-476: Introduction to VLSI Systems (L)
EE-457: HVDC and FACTS	EE-482: Microwave Engineering – Passive Devices (L)	EE-432: Computer Networks (L)
EE-460: Electrical Drives (L)	EE-487: Microwave Engineering – Active Devices (L)	EE-437: Computer Vision (L)
EE-461: Design of Electrical Machines (L)	EE-485: Electromagnetic Compatibility (L)	

B.Sc. Artificial Intelligence

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
HU-103	Functional English	3	0
AI-121	Discrete Mathematics	3	0
MA-123	Calculus and Analytic Geometry	3	0
AI-101	Applications of ICT	2	1
AI-133	Programming Fundamentals	3	1
IS-102	Islamic Studies / Ethics-I	2	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
PHY-118	Applied Physics	2	1
HU-221	Technical Writing & Presentation Skills	3	0
AI-131	Software Engineering	2	0
QT-101	Translation of the Holy Quran-I	1	0
MA-234	Linear Algebra	3	0
AI-134	Object Oriented Programming	2	1
MA-224	Multivariate Calculus	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
AI-272	Digital Systems	3	1
AI-234	Data Structures	3	1
AI-XYZ	Domain Core	3	1
MA-234	Probability and Statistics	3	0
AI-232	Computer Networks	2	1

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
AI-273	Computer Organization and Assembly Language	3	1
MGT-211	Principles of Management	2	0
AI-274	Information Security	2	1
AI-275	Artificial Intelligence	3	1
QT-201	Translation of the Holy Quran-II	1	0
AI-XYZ	Domain Core	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
AI-336	Database System	2	1
AI-339	Analysis and Design of Algorithms	3	0
AI-XYZ	Domain Core	3	1
MCT-352	Robotics	3	1
MGT-XYZ	Introduction to Marketing / Financial Accounting	2	0
HU-222	Expository Writing	2	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
AI-XYZ	Domain Core	3	1
AI-XYZ	Domain Elective	3	1
AI-XYZ	Domain Elective	2	1
AI-XYZ	Domain Elective	2	1
MGT-349	Entrepreneurship	2	0
QT-301	Translation of the Holy Quran–III	1	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
AI-431	Operating Systems	3	1
AI-XYZ	Domain Core	3	1
IS-202	Ideology and Constitution of Pakistan/ Ethics-II	2	0
AI-XYZ	Domain Core	2	1
QT-401	Translation of the Holy Quran-IV	1	0
AI-499a	Project (Phase-I)	0	3

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
AI-XYZ	Domain Elective	3	1
HU-212	Civics and Community Engagement	2	0
AI-XYZ	Domain Elective	3	1
HU-XYZ	Social Science	2	0
AI-499b	Project (Phase-II)	0	3

List of Elective Courses

Domain Core	Domain Elective
AI-232: Programming for AI	AI-334: Speech Processing
AI-238: Knowledge Representation and Reasoning	AI-335: Natural Language Processing
AI-338: Machine Learning	AI-336: Human Computer Interaction
AI-333: Deep Learning	AI-432: Generative AI
AI-437: Computer Vision	AI-433: Reinforcement Learning
AI-432: Parallel & Distributed Computing	AI-434: Distributed Machine Learning

DEPARTMENT OF COMPUTER SCIENCE

Dean
Prof. Dr. Muhammad Shoaib

Chairman
Prof. Dr. Usman Ghani Khan

Professors
Dr. Muhammad Aslam
Dr. Muhammad Awais Hassan

Associate Professors
Dr. Muhammad Junaid Arshad
Dr. Tauqir Ahmad
Dr. Amjad Farooq

Assistant Professors
Dr. Talha Waheed
Dr. Syed Khaldoon Khurshid
Dr. Amna Zafar
Dr. Ayesha Altaf
Dr. Maimoona Salam
Dr. Hamra

Lecturers
Dr. Samyan Qayyum Wahla
Dr. Maida Shahid
Dr. Aatif Hussain
Dr. Abqa Javed
Mr. Nazeef Ul Haq
Mr. Muhammad Laeeq uz Zaman Khan Niazi
Mr. Syed Tehseen ul Hasan Shah
Mr. Waqas Ali
Mr. Nauman Shafi
Ms. Tazeem Haider
Ms. Aaliya Farooq
Ms. Rabeeya Saleem
Ms. Rimsha Afzal

Introduction

The Department of Computer Science is one of the prominent and oldest centers of computer education in the country. Its history dates back to 1968 when UET Lahore established a Computer Center under the supervision of Department of Mathematics. The center was equipped with a contemporary IBM-1130 third generation batch processing computing system that was equipped with a disk drive, monitor and printer. The center was responsible for teaching of courses in Computer Science and Numerical Analysis, which formed an integral part of the curricula for all disciplines of B.Sc. Engineering degrees offered by UET. The center also offered short term computer courses for private and public sector organizations. A Bachelor degree program in Computer Science was started in

1976. The course was upgraded to M.Sc. Computer Science in 1978, that was the first graduate program of the country in computer science. The computer center became an independent Department of Computer Science in 1991. A four years degree program, B.Sc. (Hons.) Computer Science, was introduced by the Department in 1999. Since September 2003 the department renamed the degree as B.Sc. Computer Science. The department also offers graduate degree of M.S. Computer Science since 2003, whereas Ph.D. Computer Science program was launched in 2002. (The details about these programs are available in graduate prospectus of UET.)The Department holds an endowment chair given by Sultan of Oman, His Majesty Sultan Qaboos Bin Said-Al-Said.

Mission
To impart high quality computing education to the students, in order to develop critical thinking, analytical skills and abilities to solve real-world problems; for the technological and socio-economic development.

Degree Program
The department is offering 4 years B.Sc. Computer Science, Applied Computing, Gaming and Animation programs where students can opt for general CS electives or do specialization in Data Science, Artificial Intelligence, Multimedia and Gaming, or Cyber Security. The B.Sc. Computer Science program is accredited by National Computing Education Accreditation Council (NCEAC). A minimum of 135 credit hours are required for the completion of the program.

Program Educational Objectives (PEOs)
PEO-01: Graduates demonstrate theoretical and practical knowledge and skills of computer science, to solve real-world complex problems.
PEO-02: Graduates demonstrate professionalism, leadership qualities and engage in continuous learning of new developments in diverse fields of computing.
PEO-03: Graduates communicate effectively, work in a multidisciplinary team environment and exhibit an awareness of the professional and social responsibility, by making an impact on the society in an ethical manner.

Facilities
With expansion in academic programs, there are four computer laboratories in the Department. These laboratories are equipped with 250 latest fully networked computers with state-of-the-art servers. In addition, the Department has a FYP Lab. Computer to student ratio is 1:3. The Department is proud of its no-piracy policy, all the operating systems installed are either licensed or open-source.

Department's computing facilities are linked with UET Research Center, Main Library and other teaching departments through a fiber optic backbone. Multimedia projectors are installed in the class rooms and high speed internet facility is available in all laboratories. Department's class rooms are located in a purposely-built adjacent building known as New Lecture Theaters.

B.Sc. Computer Science

Year 1

Semester 1					Semester 2			
Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
CSC102	Programming Fundamentals	3	1		CSC103	Object Oriented Programming (CSC102)	3	1
CSC100	Application of Information and Communication Technologies	2	1		CSC104	Database Systems	3	1
CSC101	Discrete Mathematics	3	0		CSC105	Digital Logic Design	2	1
MA-123	Calculus	3	0		MA-104	Calculus II (MA123)	3	0
PHY-111	Applied Physics	2	1		MA-205	Applied Statistics and Probability	3	0
					HU-111L	Communication Skills (Lab)	0	1
					QT-101	Translation of the Holy Quran-I	1	0

Year 2

Semester 3					Semester 4			
Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
CSC200	Data Structures and Algorithms (CS103)	3	1		CSC205	Computer Organization and Assembly Language (CSC105)	2	1
MA-234	Linear Algebra (MA123)	3	0		CSC201	Information Security	2	1
HU-102	Functional English	3	0		CSC202	Artificial Intelligence	2	1
CSC203	Computer Networks	2	1		CSC206	Theory of Automata	3	0
CSC204	Software Engineering	3	0		CSC208	Design and Analysis of Algorithms (CSC200)	3	0
IS-102	Islamic Studies / Ethics	3	0		CSC207	Advanced Database Management Systems (CSC104)	2	1
					QT-201	Translation of the Holy Quran-II	1	0

Year 3

Semester 5					Semester 6			
Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
CSC300	Operating Systems	2	1		CSC303	Compiler Construction	2	1
CSC301	Introduction to Human Computer Interaction	3	0		CSC304	Parallel and Distributed Computing (CSC300,CSC103)	2	1
CSC302	Computer Architecture(CSC205)	3	0		CSCXXX	Domain Elective 3	3	0
CSCXXX	Domain Elective 1	3	0		CSCXXX	Domain Elective 4	3	0
CSCXXX	Domain Elective 2	3	0		XX-XXX	Any course of Management Science (e.g. Management/ Marketing/ Project Management)	3	0
XX-XXX	Any course of social science (e.g. MGT-103 Sociology for Engineering / MGT-104 World Today / MGT-105 Introduction to Economics / MGT-106 Economy of Pakistan / MGT-107 Business and Society)	2	0		HU-222	Expository Writing	3	0
					QT-301	Translation of the Holy Quran-III	1	0

Year 4

Semester 7					Semester 8			
Course No	Subject (Pre-requisites)	Th	Prt		Course No	Subject (Pre-requisites)	Th	Pr
CSC401	Final Year Project – I	0	2		CSC402	Final Year Project – II (CSC401)	0	4
CSCXXX	Domain Elective 5	3	0		CSCXXX	Domain Elective 7	3	0
CSCXXX	Domain Elective 6	3	0		IS-202	Ideology and Constitution of Pakistan	3	0
XX-XXX	MGT-110 Social Responsibility/ HU-212 Civics and Community Engagement	2	0		CSC403	Professional Practices in Software Development	2	0
HU-XXX	Technical Report Writing	3	0		QT-401	Translation of the Holy Quran-IV	1	0
MGT-318	Entrepreneurship and Management	2	0		HU-XXX	International Language	0	0

B.Sc. Applied Computing

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
CSC102	Programming Fundamentals	3	1
CSC100	Application of Information and Communication Technologies	2	1
CSC101	Discrete Mathematics	3	0
MA123	Calculus	3	0
PHY111	Applied Physics	2	1

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
CSC103	Object Oriented Programming	3	1
CSC104	Database Systems	3	1
CSC105	Digital Logic Design	2	1
MA104	Calculus II	3	0
MA205	Applied Statistics and Probability	3	0
HU111L	Communication Skills (Lab)	0	1
QT101	Translation of the Holy Quran-I	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
CSC200	Data Structures and Algorithms	3	1
MA234	Linear Algebra	3	0
HU102	Functional English	3	0
CSC203	Computer Networks	2	1
CSC204	Software Engineering	3	0
IS102	Islamic Studies / Ethics	3	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
CSC205	Computer Organization and Assembly Language	2	1
CSC201	Information Security	2	1
CSC202	Artificial Intelligence	2	1
CSC206	Software Design and Architecture	3	0
CSC208	Design and Analysis of Algorithms	3	0
CSC207	Advanced Database Management Systems	2	1
QT201	Translation of the Holy Quran-II	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
CSC300	Operating Systems	2	1
CSC301	IT infrastructure	3	0
CSC302	Computer Architecture	3	0
CSCXXX	Domain Elective 1	3	0
CSCXXX	Domain Elective 2	3	0
HUXXX	Social Science (e.g. HU-240 Psychology/ Or Any one of Anthropology/Economics/Sociology/HU-215 Social Work/International Relations/Political Science)	2	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
CSC303	Cloud Computing	2	1
CSC304	Parallel and Distributed Computing	2	1
CSCXXX	Domain Elective 3	3	0
CSCXXX	Domain Elective 4	3	0
XXXXX	Elective Supporting Course (e.g. Introduction to Marketing/ Financial Accounting)	3	0
HU222	Expository Writing	3	0
QT-301	Translation of the Holy Quran-III	1	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
CSC401	Final Year Project – I	0	3
CSCXXX	Domain Elective 5	3	0
CSCXXX	Domain Elective 6	3	0
HU212	Civics and Community Engagement	2	0
HU200	Technical Report Writing	3	0
MGT349	Entrepreneurship	2	0

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
CSC402	Final Year Project – II	0	
CSCXXX	Domain Elective 7	3	0
IS202	Ideology and Constitution of Pakistan	3	0
CSC403	Professional Practices in Software Development	2	0
QT401	Translation of the Holy Quran-IV	1	0
HUXXX	International Language	0	0

BS Gaming and Animation

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
CSC102	Programming Fundamentals	3	1
CSC100	Application of Information and Communication Technologies	2	1
CSC101	Discrete Mathematics	3	0
MA123	Calculus	3	0
PHY111	Applied Physics	2	1

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
CSC103	Object Oriented Programming	3	1
CSC104	Database Systems	3	1
CSC105	Digital Logic Design	2	1
MA104	Calculus II	3	0
MA205	Applied Statistics and Probability	3	0
HU111L	Communication Skills (Lab)	1	1
QT101	Translation of the Holy Quran-I	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
CSC200	Data Structures and Algorithms	3	1
MA234	Linear Algebra	3	0
HU102	Functional English	3	0
CSC203	Computer Networks	2	1
CSC204	Software Engineering	3	0
IS102	Islamic Studies / Ethics	3	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
CSC205	Computer Organization and Assembly Language	2	1
CSC201	Information Security	2	1
CSC202	Artificial Intelligence	2	1
GAXXX	Mobile Multimedia	3	0
CSC208	Design and Analysis of Algorithms	3	0
GAXXX	Game Design and Development	2	1
QT201	Translation of the Holy Quran-II	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
CSC300	Operating Systems	2	1
GAXXX	Interactive Games and Animations	3	0
GAXXX	2D and 3D Animations	3	0
CSCXXX	Domain Elective 1	3	0
CSCXXX	Domain Elective 2	3	0
HUXXX	Social Science (e.g. HU-240 Psychology/ Or Any one of Anthropology/Economics/Sociology/HU-215 Social Work/International Relations/Political Science)	2	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
GAXXX	Game Programming	2	1
GAXXX	Video Production Techniques	2	1
CSCXXX	Domain Elective 3	3	0
CSCXXX	Domain Elective 4	3	0
XXXXX	Elective Supporting Course (e.g. Introduction to Marketing/ Financial Accounting)	3	0
HU222	Expository Writing	3	0
QT-301	Translation of the Holy Quran-III	1	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
CSC401	Final Year Project – I	0	3
CSCXXX	Domain Elective 5	3	0
CSCXXX	Domain Elective 6	3	0
HU212	Civics and Community Engagement	2	0
HU200	Technical Report Writing	3	0
MGT349	Entrepreneurship	2	0

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
CSC402	Final Year Project – II	0	3
CSCXXX	Domain Elective 7	3	0
IS202	Ideology and Constitution of Pakistan	3	0
CSC403	Professional Practices in Software Development	2	0
QT401	Translation of the Holy Quran-IV	1	0
HUXXX	International Language	0	0

Out of seven elective courses, student must choose at least five courses from any single specialization (AI, CY, DS, MG) to mention that particular specialization on the BSCS degree e.g., BSCS (Data Science Specialization). However, for BSCS without any specialization, any seven courses from the following list of electives can be taken. The BSCS degree program offers the following four specializations:

1) Artificial Intelligence (AI)
2) Cyber security (CY)
3) Data Science (DS)
4) Multimedia and Gaming (MG)

Elective Cources (3-0, Cr Hrs, if not specified)

Course No	Subject (Specialization)
CSC310	Graph Theory
CSC311	Numerical Analysis
CSC312	Operations Research
CSC313	Programming Languages
CSC314	Real Time Systems
CSC315	Wireless Networks
CSC316	Linux Kernel Implementation
CSC317	Internetworking with Unix TCP/IP
CSC318	System Programming
CSC319	Computer Graphics(MG)
CSC410	Mobile Application Development
CSC411	Open-Source Software Development
CSC412	Advanced Programming Techniques (Pre Req: OOP)
CSC413	E-Commerce
CSC414	Enterprise Application Development
CSC415	Web Technologies(MG)
CSC420	Object Oriented Analysis and Design
CSC421	Design Patterns
CSC422	Management Information Systems
CSC423	Intro to Program Analysis
CSC424	Formal Methods

CSC425	Leading Software Teams
CSC426	Habits of Highly Effective Software Engineer
CSC427	Personal, Team and Executive Software Processes
CSC430	Database Backup & Recovery
CSC431	Distributed Databases
CSC432	Graph Databases
CSC433	Database Administration
CSC434	Database Performance & Optimization
SE-211	Software Requirements Engineering
SE-222	Software Design & Architecture
SE-323	Software Construction and Development
SE-324	Principles of Web Engineering(MG)
SE-325	UX/UI Design(MG)
SE-331	Software Quality Engineering
SE-332	Software Measurement & Metrics
SE-341	Software Project Management
SE-442	Software Re-Engineering
SE-453	Software Engineering Economics
SE-454	Topics in Software Engineering
CSC350	Programming for AI (AI)
CSC351	Machine Learning(AI, DS)
CSC352	Introduction to Deep Learning(AI, DS)

5

DEPARTMENT OF COMPUTER ENGINEERING

Dean
Prof. Dr. Muhammad Shoaib

Chairman
Prof. Dr. Ali Hammad Akbar

Professor Emeritus
Dr. Mohammad Ali Maud

Professors
Dr. Muhammad Shahbaz
Dr. Kashif Javed

Associate Professors
Dr. Yasir Saleem
Dr. Muhammad Faisal Hayat

Assistant Professors
Dr. Asim Rehmat
Dr. Beenish Ayesha Akram
Dr. Fareed Ud Din Mehmood Jafri
Dr. Hina Khalid

Lecturers
Dr. Sahar Waqar
Mr. Hafiz Mohsin Mumtaz

Teaching Fellow
Ms. Sana Tasleem Rao
Mr. Afeef Obaid

Introduction

The University of Engineering and Technology Lahore (UET) is the pioneer institute that started computing education at the undergraduate level in the country. A four years degree program as B.Sc. (Hons) in Computer Science and Engineering was initiated in 2001. For students enrolling from September 2003 onwards, this B.Sc. program was renamed and modified into four years B.Sc. Computer Engineering (CE) program. CE program is accredited by Pakistan Engineering Council (PEC) since its inception till date. The CE department was established as a separate entity in 2020.

Our graduates are employed in international organizations such as Microsoft Bing, Google, Amazon, ORACLE, IBM and Sales Force. Our graduates have a good job market share in local industry such as Techlogix, Powersoft19, Netsol, I2C, Xavor, Mentor Graphics, I2C, Systems etc. Many of them are entrepreneurs of organization at National and International levels.

Mission
To disseminate computing education emphasizing entrepreneurship and ethical standards while encouraging the students to familiarize with latest developments in research, tools and processes and use their skills to identify and find solution to society's problems.

Courses of Study

Undergraduate Programs
- B.Sc. Computer Engineering
- B.Sc. Cyber Security

Postgraduate Programs
- M.Sc. Computer Engineering
- Ph.D. Computer Engineering

Program Educational Objectives (PEOs)

PEO-01: Graduates will be able to excel in careers with enhancement in their knowledge and skills as researchers, system engineers, services engineers and entrepreneurs.

PEO-02: Graduates will be effective in society and diverse professional environments maintaining high standards of ethics.

PEO-03: Graduates will be able to communicate effectively, demonstrate leadership qualities and professional integrity.

Laboratories
- Circuits and Electronics Systems
- AI and Embedded Systems Lab
- Computer systems
- Project
- Postgraduate research
- Industrial Automation

B.Sc. Computer Engineering

Year 1									

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-112	Mechanics and Waves Motion	3	1
HU-111L	Communication Skills	0	1
ME-100	Workshop Practice	0	1
IS-102	Islamic & Pakistan Studies-I	3	0
MA-123	Calculus - Single Variable	3	0
CMPE-111	Application of Information and Communication technologies	3	1
QT-101	Translation of the Holy Quran-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-131	Electricity and Magnetism	3	1
MA-224	Multivariate Calculus	3	0
CMPE-121	Circuit Analysis	3	1
MA-229	Ordinary Differential Equations	2	0
CMPE-112	Fundamentals of Programming & Data Science	3	1
HU-XXX	International Language	0	0
HU-102	Sociology	2	0

Year 2									

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CMPE-221	Circuits and Electronic Devices	3	1
IS-202	Ideology and Constitution of Pakistan	3	0
CMPE-222	Digital Logic Design	3	1
IS-202	Islamic Studies	2	0
CMPE-211	Object Oriented Programming	3	1
CMPE-251	Discrete Mathematical Structures	3	0
QT-201	Translation of the Holy Quran-II	1	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MA-234	Linear Algebra	3	0
CMPE-224	Occupational Health Safety	0	1
CMPE-232	Database systems	3	1
CMPE-223	Computer Organization	3	1
CMPE-252	Probability and Random Variables	3	0
CMPE-212	Data Structures and Algorithms	3	1

Year 3									

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
HU-221	Technical Writing and Presentation Skills	3	0
CMPE-331	Operating Systems	3	1
CMPE-311	Software Engineering	3	1
CMPE-341	Artificial Intelligence	3	1
CMPE-371	Signal and Systems	3	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MGT-410	Project Management	3	0
CMPE-333	Computer Networks	3	1
CMPE-371	Digital Signal Processing	3	1
CMPE-321	Embedded Systems	3	1
IME-262	Machine Design & CAD	3	1
QT-301	Translation of the Holy Quran-III	1	0

Year 4									

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CMPE-426	Computer Architecture	2	1
CMPE-491	Final Year Project I	0	3
CMPE-4XX	Civics and Community Engagement	3	0
MGT-414	Entrepreneurship and Business Management	3	0
CMPE-4XX	Computer Engineering Elective	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CMPE-492	Final Year Project II	0	3
CMPE-4XX	Computer Engineering Elective III	3	0
CMPE-4XX	Computer Engineering Elective IV	3	0
QT-401	Translation of the Holy Quran-IV	1	0

B.Sc. Cyber Security Program

Mission
To disseminate cybersecurity education emphasizing entrepreneurship and ethical standards while encouraging the students to familiarize with latest developments in research, tools and processes and use their skills to identify and find solution to society's problem.

Program Educational Objectives
PEO 1:   Graduates will be able to excel in their careers with enhanced knowledge and skills as researchers, system and services security specialist, and entrepreneurs.
PEO 2:   Graduates will be effective in society and diverse professional environments, maintaining high standards of ethics in cybersecurity practices.
PEO 3:   Graduates will be able to communicate effectively, demonstrate leadership qualities, and uphold professional integrity.

B.Sc. Cyber Security

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
CMPE-112	Fundamentals of Programming & Data Science	3	1
CMPE-111	Applications of Information and Communication Technologies	2	1
CMPE-251	Discrete Mathematical Structures	3	0
MA 123	Calculus	3	0
PHY111	Applied Physics	2	1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
CMPE-213	Object Oriented Programming	3	1
CMPE-231	Database Systems	3	1
CYS-121	Digital Logic Design	2	1
MA-224	Multivariate Calculus (Calculus)	3	0
CMPE-252	Probability and Random Variables	3	0
HU-111L	Communication Skills (Lab)	0	1
QT-101	Translation of the Holy Quran-I	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
CMPE-214	Data Structure and Algorithm	3	1
MA-234	Linear Algebra (Calculus)	3	0
HU-102	Functional English	3	0
CYS-232	Computer Networks	2	1
CYS-211	Software Engineering	3	0
CYS-261	Introduction to Cyber Security	2	1

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
CYS-222	Computer Organization & Assembly Language (DLD)	2	1
CYS-262	Information Security	2	1
CYS-241	Artificial Intelligence	2	1
CYS-263	Information Assurance	2	1
CYS-212	Design and Analysis of Algorithm (DS)	3	0
IS-102	Islamic Studies/Ethics	3	0
QT-201	Translation of the Holy Quran-II	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
CYS-333	Operating System	2	1
CYS-364	Network Security	2	1
CYS-365	Secure System Design and Development	2	1
CYS-xxx	Domain Elective 1	3	0
CYS-xxx	Domain Elective 2	3	0
HU 240	Social Science (e.g HU-240 Psychology / or any one of Anthropology/Economics/Sociology/HU 215 Social Work/ International Relation/political Science	2	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
CYS-366	Digital Forensic	2	1
CYS-367	Parallel and Distributed Computing	2	1
CYS-xxx	Domain Elective 3	3	0
CYS-xxx	Domain Elective 4	3	0
MGT-412	Elective Supporting Course (e.g. Introduction to Marketing/ Financial Accounting)	3	0
HU 222	Expository Writing	3	0
QT 301	Translation of the Holy Quran-III	1	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
CYS-491	Final Year Project - I	0	2
CYS-xxx	Domain Elective 5	3	0
CYS-xxx	Domain Elective 6	3	0
HU 212	Civic and Community Engagement	2	0
HU 200	Technical Report Writing (ECC)	3	0
MGT-414	Entrepreneurship and Business Management	2	0

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
CYS-492	Final Year Project - II (FYP-I)	0	4
CYS-xxx	Domain Elective 7	3	0
IS 202	Ideology and Constitution of Pakistan	3	0
CYS-413	Professional Practice in Software Development	2	0
QT 401	Translation of the Holy Quran-IV	1	0
HU xxx	International Language	0	0

INSTITUTE OF DATA SCIENCE

Director
Prof. Dr. Shazia Arshad

Teaching Assistant
Miss. Fatima Shafiq

Graduate Assistant
Miss Hijab Zehra Zaidi
Miss Amna Adnan

Assistant Professor
Dr. Faiza Iqbal

Mission
To equip students with the skills and knowledge to excel in a data-driven ecosystem through a dynamic learning environment that integrates advanced techniques, technologies, and ethical practices.

The Institute

The Institute of Data Science at the University of Engineering and Technology (UET) is dedicated to advancing the field of data science through innovative education and cutting-edge research. Offering undergraduate and postgraduate. programs, the department equips students with the skills needed to tackle complex data-driven challenges in industries such as AI, machine learning, and big data analytics. With state-of-the-art facilities and strong industry collaborations, the department fosters an environment where students and faculty can thrive in both academic and practical domains of data science.

Program Educational Objectives (PEOs)

PEO-01: Graduates should acquire a deep understanding of data science methodologies, tools, and techniques, empowering them to analyze and solve complex real-world problems.

PEO-02: Graduates should be prepared to lead in the domain of data science for societal and economic progress, demonstrating the ability to translate data insights into impactful decisions that support the development and commercialization of technologies.

PEO-03: Graduates should apply data science ethically, adhere to regulations, and effectively communicate data-driven insights within multidisciplinary teams to benefit society and industry.

Laboratory

Computer Lab:

The computing lab is equipped with the latest forty five HP Prodesk-400 Computing machines. Lab offers services for core computing areas e.g., computer fundamentals programming, database management systems, OOP, data structures and algorithms and planning to offer advanced courses like Blockchain technologies.

B.Sc. Data Sciences

Year 1							

Semester 1				Semester 1			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**			**Th**	**Pr**
CSC102	Programming Fundamentals	3	1	CSC103	Object Oriented Programming (PF)	3	1
CSC100	Application of Information and Communication Technologies	2	1	CSC104	Database Systems	3	1
CSC101	Discrete Mathematics	3	0	CSC105	Digital Logic Design	2	1
MA123	Calculus	3	0	MA104	Calculus II (Calculus)	3	0
PHY111	Applied Physics	2	1	MA205	Applied Statistics and Probability	3	0
				HU111L	Communication Skills (Lab)	0	1
				QT101	Translation of the Holy Quran-I	1	0

Year 2							

Semester 3				Semester 4			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**			**Th**	**Pr**
CSC200	Data Structures and Algorithms (OOP)	3	1	CSC205	Computer Organization & Assembly Language (DLD)	2	1
MA234	Linear Algebra (Calculus)	3	0	CSC201	Information Security	2	1
HU102	Functional English	3	0	CSC202	Artificial Intelligence	2	1
CSC203	Computer Networks	2	1	DS271	Statistics for Data Science	2	1
CSC204	Software Engineering	3	0	CSC208	Design and Analysis of Algorithms (DSA)	3	0
DS270	Introduction to Data Science	2	1	IS102	Islamic Studies / Ethics	3	0
				QT201	Translation of the Holy Quran-II	1	0

Year 3							

Semester 5				Semester 6			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**			**Th**	**Pr**
CSC300	Operating Systems	2	1	DS372	Data Warehousing & Business Intelligence	2	1
DS370	Data Mining	2	1	DS373	Parallel and Distributed Computing	2	1
DS371	Data Visualization	2	1	DSXXX	Domain Elective 3	3	0
DSXXX	Domain Elective 1	3	0	DSXXX	Domain Elective 4	3	0
DSXXX	Domain Elective 2	3	0	MGTXXX	Elective Supporting Course (e.g. Introduction to Marketing/ Financial Accounting)	3	0
HU-XXX	Social Science (e.g. HU-240 Psychology/ Or Any one of Anthropology/Economics/Sociology/HU-215 Social Work/International Relations/Political Science)	2	0	HU222	Expository Writing	3	0
				QT301	Translation of the Holy Quran-III	1	0

Year 4							

Semester 7				Semester 8			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**			**Th**	**Pr**
CSC401	Final Year Project – I (FYP-I)	0	2	CSC402	Final Year Project – II	0	4
DSXXX	Domain Elective 5	3	0	DSXXX	Domain Elective 7	3	0
DSXXX	Domain Elective 6	3	0	IS202	Ideology and Constitution of Pakistan	3	0
HU212	Civics and Community Engagement	2	0	CSC403	Professional Practices in Software Development	2	0
HU200	Technical Report Writing	3	0	QT401	Translation of the Holy Quran-IV	1	0
MGT-349	Entrepreneurship	2	0	HUXXX	International Language	0	0

Elective Courses

DS374	Advanced Database Management Systems
DS375	Big Data Analytics
DS376	Machine Learning
DS377	Artificial Neural Networks and Deep Learning
DS378	Business Process Analysis
DS379	Theory of Automata
DS470	Introduction to Human Computer Interaction
DS471	Platforms and Architectures for Data Science
DS472	Text Mining
DS473	Topics in Data Science
DS474	Speech Processing

DEPARTMENT OF MECHANICAL ENGINEERING

Dean
Prof. Dr. Tauseef Aized

Chairman
Prof. Dr. Asad Naeem Shah

Professor Emeritus
Mr. Dilshad Hussain

Professors
Dr. Nasir Hayat
Dr. Asif Mahmood Qureshi
Dr. Amjad Hussain
Dr. Ghulam Moeen-ud-Din
Dr. Muhammad Mahmood Aslam Bhutta
Dr. Muhammad Asim

Associate Professors
Dr. Awais Ahmad Khan
Dr. Muhammad Usman
Dr. Zia-ul-Rehman Tahir
Dr. Jamal Umar

Assistant Professors
Dr. Naseer Ahmad
Mr. Shabbir Hussain
Mr. Muhammad Rashid Sajid
Mr. Muhammad Kashif Tariq
Mr. Umair Ashraf Khokhar
Dr. Hafiz Zahid Nabi
Mr. Ahmad Naveed
Mr. Syed Saqib

Dr Jawad Sarwar
Dr. Jafar Hussain
Dr. Muhammad Zubair Sheikh
Dr. Syed Nadeem Abbas Shah
Dr. Muhammad Waqar Nasir

Lecturers
Ms. Rabbia Sehar
Mr. Haris Hussain
Dr Syed Wasim Hassan Zubair
Dr. Hibbah Akhtar
Dr Rehmat Bashir
Mr. Muhammad Waqas Rafique

The Department of Mechanical Engineering is as old as the institution itself. The Department of Mechanical Engineering is the biggest department of the university and spans over four buildings: New Mechanical, Old Mechanical (Main Block), University Workshops, and Design Center. The department has been ranked 250-300 in QS world ranking 2024-25. The programs being offered are as below:

Courses of Study
    Undergraduate Programs
- B.Sc. Mechanical Engineering

Postgraduate Programs
- M.Sc. Mechanical Design Engineering
- M.Sc. Thermal Power Engineering
- M.Sc. Renewable Energy Systems Engineering
- M.Sc. Railway Engineering
- M.Sc. Engineering Project Management∗
- Ph.D. Mechanical Engineering

Mission
To produce mechanical engineers, equipped with knowledge and skills to carry on lifelong learning, through quality teaching and training. Our graduates shall be able to serve for the sustainable development of society while demonstrating professional ethics and social conduct.

Program Educational Objectives (PEOs)
PEO-01: Apply the knowledge to solve analytical and practical engineering problems. (Engineering Capabilities)
PEO-02: Work for continuous professional and sustainable socio-technical development. (Societal Development and Lifelong Learning)
PEO-03: Demonstrate professional ethics, effective communication, and managerial skills. (Ethics, Management, and Communication)

Laboratories and Other Facilities
The latest equipment has been inducted in the following labs and students are encouraged to fully utilize the lab facilities.
- Thermodynamics
- Engineering Mechanics
- Fluid Mechanics
- Mechanics of Machines
- Mechanics of Materials
- Computer Lab
- Computer Aided Design
- FEA Lab
- Heat & Mass Transfer
- Refrigeration & Air Conditioning
- IC Engines
- Energy & Power Systems
- Instrumentation & Control
- Mechanical Vibrations
- Machine Tools & Machining
- Engineering Drawing

The Department has several licensed software (Pro- E, Solid Works, AutoCAD, CATIA, Fluent, ANSYS, TRNSYS, Solid Edge, HAP, Ecotect, MATLAB, etc.), and students make use of them throughout their studies.

University Workshops
The University Workshops were established in 1937 and are designed to provide know-how with hands-on practical training in workshop technology to engineering students. A package practical course, titled "Workshop Practice" is offered to all first-year undergraduate students of the engineering disciplines. The course has been skilfully planned to impart practical training supported by relevant theoretical knowledge in the field of fabrication and production. As an outcome, the students are enabled to acquire ample expertise by going through practical assignments in handling tools and plants. The students are also

assigned small projects to accomplish their tasks efficiently and successfully. The course offered inculcates self-confidence in the students, for their success in future careers.

The following shops are available in the workshops:
  i.   Machine Shop
  ii. Fitting Shop
  iii. Carpentry Shop
  iv. Electric Shop
  v.   Welding Shop

Design Center
The Design Center has been established to provide state-of-the-art facilities to the students for designing, prototyping, and developing projects.
Currently, the Design Center has the following facilities:
  i.   Flexible Manufacturing Systems
  ii. Heat Treatment furnaces
  iii. Welding Machines
  iv. Machine Shop-I
  v.   Machine Shop-II
  vi. Automation & Robotics Lab
  vii. Engineering Entrepreneurship Lab

External Linkages
The Department has established a dedicated office of "Internships and External Linkages" for fostering linkages with the industry, alumni, and other institutions. The Department has an active internship program and provides the internship facility for all of its students in their third year of degree program, in renowned industrial organizations across Pakistan. In addition, students are encouraged to do their projects in collaboration with industries.

The Department believes in a strong Academic-Industrial interaction and regularly offers refresher courses to the local industry on several topics related to Mechanical Engineering. The Department works in close association with ESUPAK (Pvt) Ltd., to provide Consultancy and Advisory services to local industry.

Student Societies
Several student societies have been formed to engage the students in co-curricular and extra-curricular activities. The department has established student chapters of the following societies:
  • American Society of Mechanical Engineers (ASME)
  • American Society of Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE)
  • Institution of Mechanical Engineers (IMechE)

A dedicated office has been allocated to societies. The societies conduct various activities as part of professional development including seminars, contests, and trainings. Additionally, there are several societies at the university level including the Literary Society, Dramatic Society, Media Society, and Blood Donor Society for nurturing social and welfare activities.

B.Sc. Mechanical Engineering

Year 1							
Semester 1				**Semester 2**			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**			**Th**	**Pr**
HU-111L	Communication Skills	0	1	IS-102	Islamic Studies	3	0
MA-113	Calculus and Analytic Geometry	3	0	ME-131(22)	Materials and Manufacturing-I	3	1
PHY-119	Engineering Physics	2	0	ME-124(22)	Engineering Mechanics-II	2	0
CSC-100 &CSC100 --L	Application of Information & Communication Technologies	2	1	HU-221L	Technical Writing & Presentation Skills	0	1
ME-111	Thermodynamics-I	3	1	MA-225	Differential Equations and Transforms	3	0
ME-121(22)	Engineering Graphics and Drawing	1	1	EE- 101	Basic Electrical Machines	1	0
ME-123(22)	Engineering Mechanics-I	2	0	HU-212	Civics & Community Engagement	2	0
QT-101	Translation of Holy Quran-I	1	0	ME-100L	Workshop Practice	0	1
				ME-122(22)L	Engineering Mechanics	0	1

Year 2							
Semester 3				**Semester 4**			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**			**Th**	**Pr**
IS-202	Ideology & Constitution of Pakistan	3	0	ME-272	Engineering Project Management	2	0
ME-231(22)	Materials and Manufacturing-II (ME-131(22))	2	1	ME-212	Thermodynamics-II (ME-111)	3	1
ME-251L	Computer Aided Drawing	0	1	ME-213(22)	Fluid Mechanics-II (ME-211(22))	3	1
ME-221	Mechanics of Materials-I	3	1	ME-222	Mechanics of Materials-II (ME-221)	3	1
ME-211(22)	Fluid Mechanics-I	3	1	MA-241	Applied Engineering Statistics	2	0
HU-003	International Language	0	0	ME-273L	Engineering Entrepreneurship	0	1
CS-103	Introduction to Computer Programming for Data Science	2	1	QT-201	Translation of Holy Quran-II	1	0

Year 3							
Semester 5				**Semester 6**			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**			**Th**	**Pr**
ME-321(22)	Mechanics of Machines	3	1	ME-342	Robotics and Automation (ME-341(22))	2	1
ME-312(22)	Heat and Mass Transfer	2	1	ME-382	Engineering Data Analytics & AI	2	1
ME-341(22)	Instrumentation and Control	2	0	ME-323 (22)	Machine Design II (ME-322(22))	2	0
ME-322(22)	Machine Design -I	3	0	ME-352L	Computer Aided Design-II	0	1
ME-351L	Computer-Aided Design -I	0	1	ME-332	Metrology and Quality Assurance (MA-241)	2	0
ME-381aL	Health Safety & Industrial Environment	0	1	ME-361(22)	Energy Resources and Utilization	2	0
ME-399L	Semester Design Project	0	1	ME-353a	Numerical Analysis for Mechanical Engineers	2	1
QT-301	Translation of Holy Quran-III	1	0	ME-371a	Professional Ethics in Engineering Practices	1	0

Year 4							
Semester 7				**Semester 8**			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**			**Th**	**Pr**
ME-415(22)	Power Plants Engineering (ME-212)	2	0	ME-461	Energy Conservation & Management	2	0
ME-478	Engineering Economics	2	0	ME-464L	Energy & Power Systems	0	1
ME-453a	Computational Engineering (ME-353a)	2	1	ME-412(22)	Refrigeration and Air Conditioning (ME-312(22))	2	1
ME-411	IC Engine (ME-212)	2	1	ME-421(22)	Mechanical Vibrations (ME-321(22))	3	1
ME-496L	FYDP-I	0	3	ME-472	Supply Chain Management	2	0
ME-4xx	Elective-I	2	0	ME-497L	FYDP- II (ME-496L)	0	3
QT-401	Translation of Holy Quran-IV	1	0	ME-4xx	Elective-II	2	0
ME-471	Production and Operations Management	2	0				

AUTOMOTIVE ENGINEERING CENTRE

Dean
Prof. Dr. Tauseef Aized

Director
Dr. Ali Hussain Kazim

Assistant Professors
Dr. Hasan Izhar Khan
Dr. Saad Jahangir
Dr. Muhammad Ali Shahbaz

Lecturers
Dr. Adeel Shehzad
Mr. Omer Asghar
Mr. Sheikh Tahir Asif
Mr. Muhammad Usman Sheikh
Mr. Muhammad Jawad

Overview

Automotive industry has been flourishing in Pakistan since the last decade. With the increase in purchasing power and enhancement of quality of life of middle class the production of cars has been increasing and new companies have also initiated production. Automotive industry has become an essential part of modern lifestyle because of the wider use of cars, buses, motorcycles, trucks, tractors, and other agricultural machinery. The automotive industry is a pillar of the national economy, a main driver of macroeconomic growth and technological advancement, spanning many adjacent industries.

The Automotive Engineering Centre was initiated in 2005 to contribute to the automotive engineering field through research and innovation. A wide variety of Research, Development & Consultancy facilities such as engine performance testing, emission testing, automotive noise level measurement etc., are available at the Centre to support educational and industrial requirements. The B.Sc. Automotive Engineering program has been accredited by Pakistan Engineering Council (PEC), under Washington Accord (WA), on Level II Outcome Based Education (OBE) system.
For more details, you can visit the official website at: https://aec.uet.edu.pk

Courses of Study
Undergraduate Programs
- B.Sc. Automotive Engineering

Postgraduate Programs
- M.Sc. Automotive Engineering
- Ph.D. Automotive Engineering

Mission
To produce Automotive Engineers with sound knowledge base, leadership skills, and professional ethics to intelligently respond and adapt to technological advancements.

Program Educational Objectives (PEOs)
PEO-01: Apply knowledge and modern tools to solve complex engineering problems related to Automotive Engineering.
PEO-02: Pursue research and innovation to meet the diverse technological challenges of the industry and the society.
PEO-03: Manifest effective communication and managerial skills with ethical, environmental, and global responsibilities.

Laboratories and Other Facilities
To supplement theoretical studies with practical work, Centre is well equipped with resources in the form of following laboratories:
- Internal Combustion Engines
- Alternative Fuel
- Vehicle Emission
- Fuel Injection
- Vehicle Testing
- Vehicle Mechanisms
- Hybrid & Electric Vehicles
- Vehicle Management
- Automotive Electronics
- Brake and Suspension
- Chassis

Career Opportunities
Automotive Engineering graduates may work as automotive design engineer, quality control engineer, manufacturing engineer, sales engineer, service engineer, research & development engineer etc. Graduates have sufficient opportunities of getting jobs in prestigious international automotive manufacturing organizations such as Toyota, Honda, Changan, Kia, Hyundai, Suzuki, Morris Garages (MG), FAW, Yamaha etc. and work with local companies such as Pakistan Association of Automotive Parts & Accessories Manufacturers (PAAPAM), Al-Ghazi Tractors, Heavy Industries Taxila, Millat Tractors. Ravi Motorcycles, Sazgar, United Auto Industries, Jolta, etc.

B.Sc. Automotive Engineering

Year 1

Semester 1				
Course No	**Subject (Pre-requisites)**	**Credit Hours**		
		Th	**Pr**	
HU-111L	Communication Skills	0	1	
IS-102	Islamic studies/Ethics for Non-Muslims	3	0	
PHY-119	Engineering Physics	2	0	
MA-113	Calculus and Analytic Geometry	3	0	
AM-100L	Workshop Practice	0	1	
AM-111	Thermodynamics	3	1	
AM-121	Engineering Graphics & Drawing	1	1	

Semester 2			
Course No	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**
QT-101	Translation of Holy Quran-I	1	0
HU-003	International Language	0	0
HU-200	Technical Report Writing	3	0
HU-212	Civics and Community Engagement	2	0
EE-101(22)	Electrical Engineering & Electronics	2	0
CS-103	Introduction to Computer Programming for Data Science	2	1
AM-122	Engineering Mechanics	3	1
AM-131(23)	Manufacturing Processes	2	1

Year 2

Semester 3			
Course No	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**
IS-202	Ideology and Constitution of Pakistan	3	0
MA-225	Differential Equations and Transforms	3	0
CSC-100	Applications of Information and Communication Technologies	2	1
AM-223(23)	Mechanics of Materials	3	1
AM-224L	Computer-Aided Drawing (AM-121)	0	1
AM-241	Professional Ethics in Engineering Practices	2	0

Semester 4			
Course No	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**
QT-201	Translation of Holy Quran-II	1	0
MA-240	Numerical Analysis	2	1
AM-212(23)	Fluid Mechanics-I	2	1
AM-225	Mechanics of Machines (AM-122)	3	1
AM-242	Project Management and Engineering Economics	2	0
AM-261	Automotive Electronics (EE-101(22))	2	1

Year 3

Semester 5			
Course No	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**
MA-242(22)	Engineering Statistics	2	0
AM-313(23)	Fluid Mechanics-II (AM-212(23))	2	1
AM-326	Vehicle Structure Design (AM-223(23))	3	1
AM-332(23)	Machine Tools and Machining (AM-131(23))	2	1
AM-351	Vehicle Tribology	3	0
AM-352	Automotive Paints and Coatings	2	0

Semester 6			
Course No	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**
QT-301	Translation of Holy Quran-III	1	0
AM-314(23)	Heat and Mass Transfer (AM-111)	3	1
AM-315	Vehicle Air Conditioning (AM-111)	2	1
AM-343	Engineering Entrepreneurship	1	1
AM-353	Automotive Health, Safety, and environment	2	0
AM-354	Vehicle Mechanisms (AM-225)	3	1

Year 4

Semester 7			
Course No	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**
QT-401	Translation of Holy Quran-IV	1	0
AM-416	IC Engines (AM-111)	3	1
AM-427	Finite Element Analysis (AM-326)	3	1
AM-462	Vehicle Instrumentation and Control Systems (AM-261)	3	1
AM-47X	Elective I	2	0
AM-498L	FYDP-I	0	3

Semester 8			
Course No	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	**Pr**
AM-417	Computational Fluid Dynamics (AM-313(23))	3	1
AM-444	Operations and Supply Chain Management	3	0
AM-456	Vibration & Noise Control (AM-326)	2	0
AM-457	Electric & Hybrid Vehicles	3	1
AM-47X	Elective-II	2	0
AM-499L	FYDP-II (AM-498L)	0	3

Elective Courses	
AM-471	Energy Storage Technologies in Vehicles
AM-472	Powertrain Design
AM-473	Micro & Nano Manufacturing
AM-474	Additive Manufacturing in Automotive
AM-475	Automotive Ergonomics
AM-476	Automotive Assembly Plant Facility Development
AM-477	Autonomous Vehicles
AM-478	Computer Integrated Manufacturing
AM-479	Advanced Topics in Automotive Engineering

DEPARTMENT OF INDUSTRIAL & MANUFACTURING ENGINEERING

Dean
Prof. Dr. Tauseef Aized

Chairman
Prof. Dr. Muhammad Qaiser Saleem

Professor Emeritus
Dr. Nadeem Ahmad Mufti

Associate Professors
Dr. Kashif Ishfaq
Dr. Sarmad Ali Khan

Assistant Professors
Dr. Rakhshanda Naveed
Dr. Muhammad Faisal Shahzad
Mr. Muhammad Bilal Arshad

Dr. Syed Farhan Raza Rizvi
Dr. Sana Ehsan

Lecturers
Dr. Kiran Mughal

Mission
To impart quality industrial and manufacturing engineering knowledge through effective learning process for life-long career and leadership in the industry

Program Educational Objectives (PEOs)
PEO-01: Effective application of knowledge and analytical skills to solve complex engineering problems related to Industrial and Manufacturing Engineering.
PEO-02: Demonstrate management and communication skills complimenting technical competence.
PEO-03: Ability to use and improve upon contemporary and emerging technologies while focusing lean methodologies.
PEO-04: Demonstrate professional and ethical values and commitment towards continuous professional improvement.

Introduction
The department was established in 2006 to cater for the ever competitive needs of industry which demand highly skilled and motivated engineers, equipped with excellent management & soft skills. In a global marketplace, creating and maintaining competitive advantage is the key to success. Today's industry leaders must satisfy customers' expectations for high quality products while dealing with the realities of soaring energy prices and increasing international competition. Cross-functional

engineers, equipped with: a solid technical background, comprehension of new equipment and process technologies, a firm grasp of business matters and aspects of manufacturing policy, strong understanding of productivity improvement techniques and readiness to lead diverse teams, are the future of world-class manufacturing. Today, almost all major manufacturing and services industries train their newly inducted engineers for the aforementioned traits. Department of Industrial and Manufacturing Engineering, however, has designed its curricula to give its graduates a head start in this respect by including courses like Manufacturing Processes, Industrial Materials, Engineering Economics, Communication Skills, Project Management, Optimization Techniques, Production & Operations Management, Total Quality Management, Entrepreneurship, Social & Ethical Aspects in Engineering, Finite Element Analysis, Maintenance Engineering & Management and Production Tooling Design to name a few.

Courses of Study

Undergraduate Programs

- B.Sc. Industrial and Manufacturing Engineering

Postgraduate Programs

- M.Sc. Engineering Management
- M.Sc. Manufacturing Engineering
- Ph.D. Engineering Management
- Ph.D. Manufacturing Engineering

The department takes pride in the fact that its B.Sc. IME program has been accredited by Pakistan Engineering Council on Level II outcome based education (OBE) system. To ensure continuous compliance to the requirements of this system, following important cells/committees have been formed. Additionally there exists an Industrial Advisory Board to incorporate industrial stakeholder's opinions/input on various matters.

- OBE Core Committee
- Quality Control Cell
- Labs Committee
- Alumni, Internship Projects and Industrial Linkages Cell
- Student Counseling and Personal Development Committee

Laboratories & Infrastructure

The department houses following laboratories containing equipment related to teaching, research and industrial support.

- Precision Machining Laboratory
- Non-Conventional Processes Laboratory
- Measurement and Calibration Laboratory
- Rapid Prototyping Laboratory
- Computer Systems Laboratory
- CAD/CAM Laboratory
- Machine Tools and Production Tooling Laboratory
- Metrology and Quality Assurance Laboratory
- Work Study and Ergonomics Laboratory
- Foundry Shop
- Welding Laboratory
- Post-Graduate Laboratory

The department has modern computing facilities (i7 computers) and Wi-Fi along with a well-equipped library for facilitation of studies and research. Additionally, a center named "Foundry Service Center" (FSC) has been established at the premises of the department with the help of "Small & Medium Enterprises Development Authority" (SMEDA) and "Pakistan Foundry Association" (PFA) with an aim to bridge the gap between industry and academia. The Department has also made it mandatory for third year students to successfully complete industrial internship for practical experience of real life. For this purpose an independent cell called Alumni, Industrial Linkages and Internship Cell is established to facilitate and monitor the internship process. The department also offers dynamic student life by providing range of co-curricular activities such as workshops, quizzes, seminars, sport galas etc. These are primarily arranged by students from the platform of Industrial and Manufacturing Engineering Club (IMEC) under the supervision of Chairman

B.Sc. Industrial and Manufacturing Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
HU-111L	Communication Skills	0	1
MA-113	Calculus and Analytic Geometry	3	0
CSC-100	Applications of ICT	2	1
IS-102	Islamic Studies/Ethics	3	0
IME-131(24)	Engineering Mechanics	2	1
HU-XXX	Arts and Humanities Elective	2	0
IME-161(24)	Engineering Drawing and Graphics	1	1

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
MA-116	Linear Algebra and Differential Equations	3	0
IS-202	Ideology and Constitution of Pakistan	3	0
QT-101/SC-101	Translation of Holy Quran-I / Social Ethics	1	0
CS-103	Introduction to Computer Programming for Data Science	2	1
IME-141	Introduction to Thermo-Fluids	3	1
IME-111	Industrial Materials	2	1
ME-100L	Workshop Practice	0	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
MA-244	Probability & Statistics	2	1
HU-200	Technical Report Writing	3	0
IME-231(24)	Mechanics of Materials	2	1
IME-221 (24)	Manufacturing Processes-I (IME-111 & IME-111L)	3	1
IME-251 (24)	Occupational Health, Safety and Environment	2	0
EE-215	Basic Industrial Electronics	2	1

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
QT-201 /SC-201	Translation of Holy Quran-II / Social Ethics	1	0
MA-259	Quantitative Reasoning-II	3	0
HU-212	Civics and Community Engagement	2	0
IME-261(24)	Machine Design and CAD (IME-161 (24) & IME-161 (24) L IME-231 (24) & IME-231 (24) L)	2	1
IME-232 (24)	Mechanics of Machines	2	1
IME-252 (24)	Environment and Sustainability	2	0
MA-346	Numerical Methods	3	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
MGT-320	Project Management in Engineering	2	0
QT-301 /SC-301	Translation of Holy Quran-III / Social Ethics	1	0
XXX-XXX	Social Science Elective	2	0
XXX-XXX	Management Science Elective	2	0
IME-351(24)	Human Factors Engineering	3	1
IME-352 (24)	Production Planning & Control	3	0
IME-321	Manufacturing Processes-II	3	1

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
IME-356 (24)	Entrepreneurship	2	0
IME-373(24)	Optimization Techniques for Engineers	2	1
IME-357(24)	Industrial Repair and Maintenance	2	1
IME-361(24)	Instrumentation and Control	2	1
IME-362(24)	CAD/CAM	3	1
IME-358 (24)	Operations and Supply Chain Management	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
QT-401 /SC-401	Translation of Holy Quran-IV / Social Ethics	1	0
IME-481(24)	Metrology & Quality Control	3	1
IME-491	Computer Simulations of Manufacturing Systems	2	1
IME-XXX	Elective-I	3	0
MCT-434	Industrial Automation	2	1
IME-401L	Final Year Project-I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
IME-XXX	Elective - II	3	1
IME-XXX	Elective - III	3	1
IME-XXX	Elective - IV	3/2	0/1
IME-XXX	Elective - V	3/2	0/1
IME-402L	Final Year Project-II	0	3
HU-003	International Language	0	0

Note:
1. A mandatory six week zero credit hr, internship (IME-301L) is to be undertaken in summer before 7th semester
2. The study scheme/courses may be subject to amendment/change.

DEPARTMENT OF MECHATRONICS & CONTROL ENGINEERING

Chairman
Dr. Ali Raza (Associate Professor)
Professor
Dr. Waqar Mahmood
Associate Professors
Dr. Mohsin Rizwan
Dr. Muhammad Ahsan
Dr. Syed Abbas Zilqurnain Naqvi

Assistant Professors
Dr. Ayisha Nayyar
Ms. Aisha Shoaib
Dr. Maria Akram
Dr. Maliha Saleem Bakhshi
Dr. Muhammad Ahsan Naeem

Lecturers
Ms. Amina Younas
Mr. Muhammad Rzi Abbas
Mr. Misbah-ur-Rehman
Mr. Amir Sharif
Ms. Qurat Ul Ain Masud
Mr. Shujat Ali
Mr. Abdullah Sheeraz

The Department of Mechatronics and Control Engineering boasts a legacy spanning over two decades, during which it has established academic standards aligned with global benchmarks. Committed to both excellence in education and its impact on national development, the department maintains strong ties with its Industrial Advisory Board through regular consultative meetings, in addition to leading employers and alumni. This ensures our curriculum remains relevant and responsive to real-world industrial demands and stake-holders' requirements. As a result, our graduates are well-prepared to thrive in both local and international industries. Moreover, the department actively supports and encourages talented students to pursue advanced studies, fostering pathways for their professional growth and future success. Furthermore, we actively promote an entrepreneurial mindset, empowering students to become innovators and job creators in the modern economy.

For more details, one can visit the official website at: https://mce.uet.edu.pk/

Mission
The department, through quality education and enabling environment, aims to foster professional engineers capable of designing complex Mechatronic/robotic systems, serving current industrial needs and developing innovative technologies

Courses of Study
Undergraduate Programs
- B.Sc. Mechatronics & Control Engineering
- B.Sc. Robotics and Intelligent Systems

Postgraduate Programs
- M.Sc. Mechatronics Engineering
- Ph.D. Mechatronics Engineering

B.Sc. Mechatronics & Control Engineering:
This program is accredited by Pakistan Engineering Council (PEC) under Washington Accord (W.A). Mechatronics is the synergistic combination of mechanical engineering, electronics, control engineering and computer science. It is essential in the design of intelligent products; it allows engineers to transform their concepts into reality. Currently, the use of intelligent products with improved flexibility, performance, reliability and maintainability is crucial for the economic vitality of any country. Thus, mechatronics engineering carries the potential to make major impacts upon various industries such as automotive, consumer electronics, biomedical and robotics/automation. At the same time, mechatronics is becoming popular at universities from the viewpoint of research as well. Research areas, relevant to mechatronics, are diverse and include robotics, actorics/sensorics, Micro-Electro-Mechanical Systems (MEMS), mechatronic devices/machines, control of mechatronic systems, human-machine-interface/haptics, embedded computing and software engineering as well as design/integration methodologies for mechatronic systems.

Initially, mechatronics was offered as a postgraduate degree program at UET Lahore in 1999. Keeping in view of the futuristic needs as well as the market demand, the undergraduate program was initiated in 2001. The programs were run by the department Mechanical Engineering, and after maturation, by independently constituted department of Mechatronics & Control Engineering (DMCE) from 2005. Present undergraduate enrollment is around 310 students. The undergraduate program is designed to address the needs of technology-based-industries. It provides in-depth knowledge in the fundamentals, design, development, analysis and operation of mechatronic systems. The objective of the program is to provide a course of study which enables the students to effectively design integrated mechatronic systems. The prime role of mechatronics is one of initiation and integration throughout the design process, with mechatronics engineer as the team leader. Up til 2025, twenty one batches are serving the industry, in mechanical, electronics, instrumentation, automation, oil and gas, aviation and other sectors.

This undergraduate program has active collaborations with international universities, specifically the Technical University of Applied Sciences Wurzburg-Schweinfurt (THWS), Germany. Every year, best students are offered admissions in THWS on the recommendations of the department. Furthermore, a group of students and faculty members visit THWS during the Robotics Exchange week. The students participate in the Roboticists Forum, attend lectures, visit labs, take part in intercultural training, and visit industries in Germany. The department is also conducting state of the art robotics research especially around Human Centered Robotics for which its HCR lab is indigenously developing collaborative robots, exoskeletons, active prostheses and care robots. Our Ihya Lab, similarly, is actively pursuing the development of bio-medical devices and bio-mechanical systems.

Program Educational Objectives (PEOs)
To nurture Mechatronics engineer who:
- **PEO-01:** can Skilfully design, implement and/or maintain integrated solutions to general Mechatronics engineering problems.
- **PEO-02:** is capable of developing professional/managerial skills, while adhering to high ethical values, to excel in industry/research organizations or succeed in entrepreneurial ventures.

- **PEO-03:**   can embark on new directions or enhance the existing practices in advancing the Mechatronics technologies which have direct national and international relevance.
- **PEO-04**:   is capable of contributing to diversity, socioeconomic growth and sustainable development as a team member.

B.Sc. Robotics and Intelligent Systems:

Robotics is the science and technology of designing, building, operating, and maintaining robots and robotic systems. A robot is a machine that can be (re)programmed to carry out a range of tasks autonomously. Modern Robotics encompasses a wide range of applications in Industrial Robots, Service Robots, Autonomous Vehicles, and Humanoid Robots. Intelligent Systems, on the other hand, refer to systems that utilize AI, machine learning, and other advanced technologies to perform tasks that traditionally require human intelligence. The synergy of Robotics and Intelligent systems provides a perfect combination of the modern world's requirements. Hence, Robotics and Intelligent Systems a rapidly evolving field that intersect mechatronics engineering, computer science, machine vision, and artificial intelligence (AI), aiming to design machines and systems that can perform tasks autonomously and/or assist humans in ways that enhance productivity, safety, and convenience. These technologies are increasingly becoming integral to industries, healthcare, transportation, manufacturing, and even daily life, transforming how we interact with machines and enabling new forms of automation and intelligence.

Although B.Sc. Robotics and Intelligent Systems is a non-engineering program accredited under PEC, still its graduates can enjoy a wide range of employment opportunities across diverse industries. They can pursue careers in fields such as robotics, cyber physical systems, physical AI, applied intelligence, automation engineering, autonomous systems, and industrial robotics. The demand for robotics is not only growing in Pakistan but internationally as well because of unified combinations of Mechatronics & AI.

Laboratories and Other Facilities

To supplement theoretical studies with practical work, department is well equipped with resources in the form of following laboratories:

- AI & Robotics
- Hydraulics and Pneumatics
- Instrumentation & Control
- Simulation
- Digital Systems
- Mechanics
- Power Electronics
- Industrial Automation
- Embedded Systems
- Computer

Department is also adding labs for the drones development and mixed reality. It also shares some of the labs and other resources with Mechanical, Industrial & Manufacturing and Electrical Engineering Departments.

LIBRARY

The department has a well-stocked library with a large number of books and journals on mechatronics system design, robotics, industrial automation, artificial intelligence, machine vision, biomedical engineering, digital signal processing, control system, electronics, instrumentation and measurements, microprocessor and microcontroller CAD/CAM, engineering mechanics, engineering drawing and graphics, communication systems.

INDUSTRIAL TRAINING

Refresher courses in various fields of mechatronics engineering are offered to the industry and practicing professionals. Lectures and seminars on different technical aspects are arranged by local and foreign experts. The department also renders advisory services to a large number of organizations in the field of Automation, Robotics, Hydraulics and Pneumatics, and Embedded Systems. The degree program has a compulsoray internship component.

STUDENT ADVISORY SERVICES

Department has deputed faculty members as session mentors so that students may seek guidance regarding different aspects of student's life in the university. Queries regarding curricular and co-curricular activities can be discussed with the allocated mentor.

MECHATRONICS CLUB

Mechatronics club provides lab-like supplementary and schedule-friendly workplace that students can flexibly leverage to work on their projects and hone their technical skills. It is run by a student-body under supervision of a faculty member. It is equipped with all the necessary tools and equipment. Its mission is to foster technological innovation and develop necessary skills of Mechatronics Engineers by providing them quality mechanical & electronic design-and-fabrication facility. A number of workshops, tutorials and competitions are regularly arranged every year which provides opportunity for juniors to mingle with seniors and learn skills right from the start.

RESEARCH

The department provides liberal facilities for research to the final year undergraduate students, postgraduate students and to the faculty members. Current research areas are:

AI & ROBOTICS LAB

The current research focus of this area include: Artificial intelligence, Machine Learning, Biological Computation, Evolutionary, Cellular and Neural Computation, Complex Adaptive Systems, Sensory Systems and Behavior Evolution, Language evolution, Mimetic Evolution.

INDUSTRIAL AUTOMATION LAB

Research in this area involves conventional as well as modern approaches for plant automaton; starting from the use of PLCs, open architecture solutions, embedded solutions, SCADA and DCS.

HUMAN-CENTERED ROBOTICS LAB of THE NCRA

Human-Centered Robotics Lab of our department is part of Pakistan's National Center of Robotics and Automation. The lab aims to indigenously design and develop integrated robotic systems, based on smart sensing and actuation, to seamlessly interact with humans, actively learn from them and eventually create an effective collaborative environment. A dedicated team of Mechatronics Engineers is currently working on the indigenous development of collaborative robots, industrial exo-skeletons and active prostheses. Recently, the HCR team has introduced Pakistan's first industrial-grade robotic arm to the industry.

IHYA LAB FOR MECHATRONICS RESEARCH IN RESUSCITATION SCIENCES

This research lab has been recently established by the department of Mechatronics and Control Engineering in collaboration with Hamad Medical Corporation Qatar. The Lab aims to develop smart and marketable mechatronic devices which aid in the resuscitation practices, in and out of hospital settings, thus saving precious lives of the patients. It also aims to become an innovation hub in the domain of resuscitation sciences. Currently, the major focus of the lab is on the development of newer CPR technologies, sports-biomecahnics and associated biomedical devices.

MECHATRONICS FAB LAB

The Mechatronics Fabrication (FAB) Lab is a recent and valuable addition to the department, offering students access to advanced manufacturing tools such as CNC machining and other essential fabrication facilities. This resource enables students to design and produce components for their academic and research projects at no additional cost. The FAB Lab serves as a centralized hub where students actively work on their Final Year Projects, showcasing their innovation, technical skills, and research under one roof.

B.Sc. Mechatronics and Control Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisite)	Th	Pr
MA-113	Calculus and Analytic Geometry	3	0
MCT-111	Engineering Graphics and Drawing	1	2
MCT-121	Electric Circuits	3	1
IS-101/HU-101	Islamic and Pak Studies –I/Ethics and Pak Studies - I	3	0
PHY-118	Applied Physics	2	1
ME-100L	Workshop Practice	0	1
QT-101	Translation of the Holy Quran-I	1	0

Semester 2

Course No	Subject (Pre-requisite)	Th	Pr
MA-225	Differential Equations and Transforms	3	0
MCT-113	Manufacturing Processes	3	1
MCT-117	Engineering Mechanics	3	1
MCT-122	Electronic Devices and Circuits	3	1
MCT-142	Computer Programming-I	0	2
MCT-100	Community Service	0	0
HU-111	Communication Skills	0	1

Year 2

Semester 3

Course No	Subject (Pre-requisite)	Th	Pr
MA-129	Vector and Complex Analysis	3	0
MCT-206	Entrepreneurship-I	1	0
MCT-217	Mechanisms	3	1
MCT-223	Electrical Machinery	2	1
MCT-241	Digital Logic Design	3	1
MCT-243	Computer Programming-II (MCT-142)	0	2
QT-201	Translation of the Holy Quran-II	1	0

Semester 4

Course No	Subject (Pre-requisite)	Th	Pr
MA-234	Linear Algebra	3	0
MCT-216	Machine Design and Elements	3	1
MCT-236	Embedded Systems- I (MCT-142)	3	1
MCT-244	Signal Processing	2	1
IS-201/HU-201	Islamic and Pak Studies –II/Ethics and Pak Studies - II	3	0
HU-003	International Language	0	0

Year 3

Semester 5

Course No	Subject (Pre-requisite)	Th	Pr
MA-240	Numerical Analysis	2	1
MCT-305	Probability and Statistics	3	0
MCT-306	Entrepreneurship-II	1	0
MCT-331	Modeling and Simulation (MA-225)	3	1
MCT-336	Embedded Systems-II (MCT-236)	2	1
MCT-361	Hydraulics and Pneumatics	2	1
QT-301	Translation of the Holy Quran-III	1	0

Semester 6

Course No	Subject (Pre-requisite)	Th	Pr
MCT-xxx	Elective I	2	1
MCT-333	Control Systems – I	3	1
MCT-335	Instrumentation and Measurements	2	1
MCT-341	Data Science and Analytics (MCT-142)	0	1
MCT-352	Robotics (MA-234)	3	1
HU-221	Technical Writing & Presentation Skills	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisite)	Th	Pr
MCT-xxx	Elective II	2	1
MCT-403	Product Design	2	1
MCT-406	Entrepreneurship-III	1	0
MCT-434	Industrial Automation	2	1
MCT-435	Control System-II (MCT-331)	3	0
MCT-498	Final Project- I	0	3
QT-401	Translation of the Holy Quran-IV	1	0

Electrive Subjects

Course No	Subject (Pre-requisite)	Th	Pr
MCT-xxx	Elective III	2	1
MCT-404	Professional Ethics	2	0
MCT-499	Final Project- II (MCT-498)	0	3
MGT-211	Principles of Management	3	0

Elective Subjects

MCT-412	Condition Monitoring
MCT-415	Mechanical Vibrations
MCT-421	Digital Signal Processing (MCT-244)
MCT-422	Power Electronics (MCT-122)
MCT-432	Digital Control Systems (MCT-333)
MCT-433	Estimation and Filtering (MCT-333)
MCT-452	Intelligent Systems (MCT-142)
MCT-453	Machine Vision (MCT-243)
MCT-454	Mobile Robotics (MCT-351)
MCT-455	Wearable Robotics
MCT-456	Internet of Things
MCT-457	Biomedical Devices
MCT-458	Human Centered Robotics
MCT-459	Aerial Robotics
MCT-461	Smart Electric Vehicles
MCT-491	Special Topics in Mechatronics

B.Sc. Robotics and Intelligent Systems

Year 1									
Semester 1					Semester 2				
Course No	Subject (Pre-requisite)	Credit Hours			Course No	Subject (Pre-requisite)	Credit Hours		
		Th	Pr.				Th	Pr.	
RIS-121	Electric Circuits	3	0		HU-111	Communication Skills	0	1	
MECH-xxxL	Engineering Graphics and Drawing	0	1		MECH-xxx	Engineering Mechanics	3	0	
PHY-118 & PHY-118L	Applied Physics	2	1		ELEC-xxx	Electronic Devices and Circuits	3	0	
CSC-106 & CSC-106L	Communication Technologies	2	1		RIS-141 & RIS-141L	Computer Programming-I	1	1	
MA-110	Basic Mathematics	3	0		MA-113	Calculus and Analytic Geometry	3	0	
IS-102	Muslims	3	0		CY-101 & CY-101L	Applied Chemistry	2	1	

Year 2									
Semester 3					Semester 4				
Course No	Subject (Pre-requisite)	Credit Hours			Course No	Subject (Pre-requisite)	Credit Hours		
		Th	Pr.				Th	Pr.	
MECH-xxx & MECH-xxxL	Mechanisms	3	1		MECH-xxx & MECH-xxxL	Robots	3	1	
ELEC-xxx & ELEC-xxxL	Digital Logic Design	3	1		MA-154	Quantitative Reasoning	3	0	
CS-xxxL	Computer Programming-II	1	1		RIS-232 & RIS-232L	Embedded Systems	3	1	
RIS-231 & RIS-231L	Introduction to Robotics	2	1		MA-129	Vector and Complex Analysis	3	0	
MA-225	Transforms	3	0		QT-201	Translation of The Holy Quran-II	1	0	
QT-101	Translation of The Holy Quran-I	1	0						

Year 3									
Semester 5					Semester 6				
Course No	Subject (Pre-requisite)	Credit Hours			Course No	Subject (Pre-requisite)	Credit Hours		
		Th	Pr.				Th	Pr.	
CS-xxx & CS-xxxL	Applied Intelligence	2	1		RIS-333 & RIS-333L	Robot Kinematics and Dynamics	2	0	
ELEC-xxx & ELEC-xxxL	Signal Processing	3	0		RIS-351 & RIS-351L	Machine Vision	3	0	
RIS-331 & RIS-331L	Robot Operating Systems	3	0		IS-202	Pakistan	3	0	
ELEC-xxx & ELEC-xxxL	Sensors and Actuators	2	0		MA-343	Applied Probability and Statistics	3	0	
MA-234	Linear Algebra	3	0		QT-401	Translation of The Holy Quran-IV	1	0	
QT-301	Translation of The Holy Quran-III	1	0		RIS-301	Internship	0	3	

Year 4									
Semester 7					Semester 8				
Course No	Subject (Pre-requisite)	Credit Hours			Course No	Subject (Pre-requisite)	Credit Hours		
		Th	Pr.				Th	Pr.	
RIS-xxx	Elective I	2	0		RIS-xxx	Elective-II	2	0	
DS-xxx & DS-xxxL	Data Science and Analytics	2	1		RIS-432 & RIS-432L	Mobile Robotics	2	0	
MGT-xxx	Social Science Elective	2	0		MGT-110	Social Responsibility	2	0	
RIS-431 & RIS-431L	Control	3	0		HU-221	Skills	3	0	
CS-xxx & CS-xxxL	Deep Learning	2	0		RIS-499	Final Project-II	0	3	
RIS-498	Final Project-I	0	3		MGT-318	Entrepreneurship and Management	2	0	

Elective Subjects

RIS-441	Extended Reality	
RIS-452	Swarms and Collective Intelligence	
RIS-433	Wearable Robotics	
RIS-441	Internet of Things	
BME-xxx	Biomedical Devices	
RIS-434	Human-Centered Robotics	
RIS-435	Aerial Robotics	
AM-477	Autonomous Vehicles	
RIS-436	Medical Robotics Systems	
RIS-437	Humanoids	
RIS-438	Human-Robot Interactions	
RIS-402	Industry 5.0	
List of Social Science Elective Subjects		
MGT-103	Sociology for Engineering	
MGT-104	World Today	
MGT-105	Introduction to Economics	
MGT-106	Economy of Pakistan	
MGT-107	Business and Society	

DEPARTMENT OF CIVIL ENGINEERING

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Noor Muhammad Khan

Professor Emeritus
Dr. Ziauddin Mian

Professors
Dr. Asad Ullah Qazi
Dr. Asif Hameed
Dr. Muhammad Burhan Sharif
Dr. Rashid Hameed
Dr. Hassan Mujtaba Shahzad

Associate Professors
Dr. Muhammad Azhar Saleem
Dr. Safeer Abbas
Dr. Qasim Shaukat Khan
Dr. Ali Ahmed
Dr. Nauman Khurram
Dr. Jehanzaib Israr
Dr. Muhammad Irfan-ul-Hassan
Dr. Waseem Abbass
Dr. Rizwan Azam
Dr. Muhammad Mazhar Saleem
Dr. Muhammad Rizwan Riaz
Dr. Syed Asad Ali Gillani
Dr. Usman Akmal

Assistant Professors
Dr. Imtiaz Rashid
Dr. Muhammad Yousaf
Dr. Ehtesham Mehmood
Mr. Usman Ali
Dr. Umbreen us Sahar
Dr. Aqsa Shabbir
Dr. Muhammad Ali
Dr. Muhammad Kashif
Dr. Zubair Masood

Lecturers
Mr. Muhammad Rehan Ashraf
Mr. Ubaid Ahmad Mughal
Ms. Aamina Rajput
Mr. Bilal Ahmad Khokar
Mr. Abdul Rehman

Civil Engineering Department is one of the oldest department in the country imparting Civil Engineering courses at undergraduate and postgraduate levels. The Department was established in 1939 as a part of the Maclagan Engineering College, Lahore. Currently it has an enrolment of over 1000 students in bachelor, Master and Ph.D. levels. The department has one of the largest number of Ph.D. qualified faculty. Since 2014 the department adopted Outcome Based Education system and got accredited with Washington Accord. Henceforth, the graduates are considered recognized in 21 signatory countries.

Civil engineering graduate of UET Lahore has sufficient opportunities of getting jobs in various government/private departments i.e. Communication & Works (C & W), Water and Power Development Authority (WAPDA), Punjab Irrigation and Power Engineering Department, Civil Aviation Authority, Pakistan Railways, National Highway Authority (NHA), Lahore Development Authority (LDA), Water and Sanitation Agency (WASA), Public Health Engineering Department, National Engineering Services Pakistan (NESPAK), Associated Consultant Engineers (ACE), National Development Consultants (NDC), SKB Engineering & Construction, Descon Engineering Limited and many more.

Mission
To impart high quality civil engineering education through modern teaching and research for the national and international socio-economic development.

Program Educational Objectives (PEOs)
PEO-01: Graduates demonstrate their proficiency of applying the knowledge & skills to solve complex civil engineering problems.
PEO-02: Graduates communicate effectively and contribute in the project team.
PEO-03: Graduates uphold principles of ethics and societal obligations with integrity throughout their professional practices.
PEO-04: Graduates engage themselves in continuous professional learning process for the sustainability.

The Department has the following divisions to conduct its teaching and research programs:
1. Structural Engineering   2. Geotechnical Engineering   3. Hydraulics and Irrigation Engineering

Courses of Study
Undergraduate programs
- B.Sc. Civil Engineering

Postgraduate programs
- M.Sc. Hydraulics and Irrigation Engineering
- M.Sc. Geotechnical Engineering
- M.Sc. Structural Engineering
- Ph.D. Civil Engineering

Laboratories and Other Facilities
The Department has the following well-equipped laboratories, which meet the academic needs of students and teachers as well as the professional demands of the government and private organizations:
- Concrete
- Computer
- Earthquake Engineering
- Engineering Mechanics
- Geotechnical Engineering
- Hydraulics & Irrigation Engineering
- Strength of Materials
- Surveying & Levelling
- Test Floor
- Transportation Engineering

Civil Engineering graduates are eligible to get membership form Pakistan Engineering Council (PEC) which has become the full signatory of prestigious Washington Accord (WA). This would facilitate mobility of engineering graduates and professionals of Pakistan at international levels as undergraduate degree program of Civil Engineering is well recognized in all Washington Accord countries. The graduates from PEC accredited engineering programs will be accepted for education and employment purposes in other member countries of Washington Accord.

B.Sc. Civil Engineering

YEAR-1

1st Semester

Course Code	Subject (Pre-requisite)	Th	Pr
CE-104A	Civil Engineering Materials	2	0
CE-105A	Engineering Drawing	1	2
CE-102A	Engineering Mechanics	2	1
MA-111	Applied Mathematics-I	3	0
Phy-124	Applied Physics and Electro-mechanical Fundamentals	2	1
MinE-170A	Geology for Engineers	2	0
QT-101	Translation of the Holy Quran-I	1	0

2nd Semester

Course Code	Subject (Pre-requisite)	Th	Pr
CE-101A	Engineering Surveying	2	1
CE-150A	Computer Programming and Applications of ICT	2	1
CE-111A	Mechanics of Solids-I	2	1
HU-111L	Communication Skills	0	1
IS-102	Islamic Studies/Ethics	3	0
MA-112	Applied Mathematics-II	3	0
ME-100L	Workshop Practice	0	1

YEAR-2

3rd Semester

Course Code	Subject (Pre-requisite)	Th	Pr
CE-201A	Surveying and Geo-Informatics	3	1
CE-231A	Fluid Mechanics	3	1
MA-346	Numerical Methods	3	0
IS-202	Ideology and Constitution of Pakistan	3	0
CE-208A	Quantity Surveying and Project Planning	1	1
CE-209A	Professional Ethics and Community Engagement	2	0

4th Semester

Course Code	Subject (Pre-requisite)	Th	Pr
CE-205A	Computer Graphics and BIM	0	2
CE-207A	Economics for Engineers	2	0
CE-211A	Structural Analysis-I	3	0
CE-221A	Soil Mechanics	2	1
ATP-201	Introduction to Architecture and Town Planning	2	0
QT-201	Translation of the Holy Quran-II	1	0
CE-236A	Engineering Hydrology	2	1
CE-200A	Occupational Health & Safety	0	1
CE-100A	Survey Camp	Non-Credit	

YEAR-3

5th Semester

Course Code	Subject (Pre-requisite)	Th	Pr
CE-301A	Construction Project Management	2	0
CE-311A	Structural Analysis-II	2	0
CE-313A	Steel Structures	3	1
CE-321A	Geotechnical Engineering	3	1
CE-302A	Construction Engineering	2	0
HU-300	Technical Report Writing	3	0
QT-301	Translation of the Holy Quran-III	1	0

6th Semester

Course Code	Subject (Pre-requisite)	Th	Pr
CE-312A	Mechanics of Solids-II	3	1
CE-314A	Reinforced Concrete Design-I	3	1
CE-331A	Advanced Fluid Mechanics	3	1
MA-356	Probability and Statistics in Engineering	2	0
Mgt-319	Entrepreneurship for Engineers	2	0
CE-323A	Foundation Engineering	2	0
CE-300A	Internship (6-8 weeks)	Non-Credit	

YEAR-4

7th Semester

Course Code	Subject (Pre-requisite)	Th	Pr
CE-401A	Structural Engineering	3	0
CE-411A	Reinforced Concrete Design-II	3	1
CE-421A	Transportation Engineering	3	1
CE-434A	Hydraulic Engineering	3	1
CE-499A	FYDP-I	0	3

8th Semester

Course Code	Subject (Pre-requisite)	Th	Pr
CE-431A	Irrigation Engineering	3	1
CE-412A	Computer Aided Design of Structures	1	2
CE-423A	Pavement Analysis and Design	2	0
ENE-440	Environmental Engineering	3	1
QT-401	Translation of the Holy Quran-IV	1	0
CE-499A	FYDP-II	0	3

DEPARTMENT OF ARCHITECTURAL ENGINEERING & DESIGN

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Khurram Rashid

Associate Professor
Dr. Maria Idrees

Assistant Professors
Dr. Nasir Javed
Dr. Ahmad Riaz
Dr. Sidra Jamshed

Lecturers
Dr. Anam Fatima
Mr. H. Abrar Ahmad
Dr. Abdul Mueed Iqbal
Dr. Huda Riaz

Ms. Afia Razzaq
Ms. Khadija Mawra

The Department of Architectural Engineering and Design was established first time in Pakistan at University of Engineering and Technology Lahore in the year 2001. The department is offering 4-years B.Sc. Architectural Engineering, M.Sc. Building Engineering, M.Sc. Integrated Building Design, M.Sc. Construction Management and PhD in Architectural Engineering. The Architectural Engineering program is a blend of Architecture and Engineering, the emphasis of this Program is to give quality education to the students and prepare them for the building industry of Pakistan as successful professionals with innovative and multi-disciplinary approach. The department has enrollment of average 50 students per batch in undergraduate program. The Graduates of Architectural Engineering program are working in various national/international organizations and enjoying good repute. The demand of Architectural Engineers has increased rapidly during last few years resulting 100% absorption of graduates in private and public-sector organizations and upgradation of admission merit. Presently the merit position of the Architectural Engineering program is at 5th out of nineteen undergraduate programs at UET Lahore. An Architectural Engineer having background of multidisciplinary knowledge on various areas of buildings has a greater opportunity to work according to his/her aptitude. The most prominent areas of curriculum include Building Structures, HVAC system of Buildings, Electrical System of Buildings (Lighting and Illumination), Water Supply and Sanitation System for Buildings, Building Construction, Energy Efficient Buildings, Integrated Building Design, Green Buildings, Project Management, Fire Safety, Acoustics of

Buildings, Materials of Construction, and Conservation of Historical Buildings. Students have choice to select the field of their interest by studying elective course in 8th semester and final year project in the same area. This conforms to the offering of specialized field in Architectural Engineering Program at various international universities. The department has adopted Outcome Based Education (OBE) system since 2015.

The department has faculty from various disciplines including Architectural Engineering, Civil Engineering, Architecture, Electrical Engineering, Mechanical Engineering and Environmental Engineering. The department has a dedicated library, three Digital Studios and six Laboratories including Structural Engineering Laboratory, Construction Laboratory, Geo-Technical Engineering Laboratory, Survey Laboratory, Environmental Control Systems Laboratory, Materials Labortory and Electrical Laboratory.

Mission
To give quality education in architectural engineering with innovative and multi-disciplinary approach for sustainable solutions to meet the requirements of building industry and societal benefits.

Program Educational Objectives (PEOs)
The graduates of Architectural Engineering program on completion of 5 years in the field shall,
PEO-01: Have the ability to propose reasonably acceptable, sustainable and innovative solutions of routine projects and complex architectural engineering problems.
PEO-02: Have attained position of leadership of a small section/ team and enjoying good repute in terms of communication skills and professional ethics.
PEO-03: Continue to improve serviceable skills related to the profession through continuing education (higher education, participation in training courses, workshops, conferences, CPD courses, seminars)

B.Sc. ARCHITECTURAL ENGINEERING

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
AE 101	Surveying	2	1
CS 103	Introduction to Computer Programming for Data Science	2	1
IS 102	Islamic Studies / Ethics	3	-
MA 123	Calculus	3	-
AE 114	Construction Materials	2	1
AE 145L	Architectural and Engineering Drawing	-	2
QT 101	Translation of the Holy Qur'ān -I	1	-

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 111L	Communication Skills	-	1
AE 151L	Occupational Health and Safety	-	1
AE 132	Mechanics of Materials - I	3	1
PHY 102	Physics for Architectural Engineers	2	1
ME 100 WL	Workshop Practice	-	1
AE 144	History of Building Technology	2	-
AE 146L	Computer Aided Drawing	-	1
CSC 100	Applications of Information and Communication Technologies	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
IS 202	Ideology and Constitution of Pakistan	3	-
MA 228	Differential Equations	3	-
AE 235	Elementary Structural Analysis	3	-
AE 243L	Architectural Design - I	-	2
AE 220	Environmental Control Systems	2	1
MA 242	Engineering Statistics	3	-
QT 201	Translation of the Holy Qur'ān -II	1	-
HU 003	International Language*	-	-

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MA 234	Linear Algebra	3	-
AE 225	Renewable Energy Systems for Buildings	1	1
AE 234	Mechanics of Materials - II	3	1
AE 214	Construction Engineering and Building Information Modelling	3	1
AE 244L	Architectural Design - II	-	3
MGT 105	Introduction to Economics	2	-

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
AE 302	Water Supply and Sanitation Systems for Buildings	2	1
AE 327	Electrical Systems for Buildings	2	1
AE 333	Design of Concrete Structures – I	3	1
AE 343L	BIM in Architectural Design	-	2
AE 363	Geotechnical Engineering	2	1
QT 301	Translation of the Holy Qur'ān -III	1	-
HU 206	Civics and Community Engagement	2	-

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 221	Technical Writing and Presentation Skills	3	-
AE 328	Mechanical Systems for Buildings	2	1
AE 334	Design of Concrete Structures - II	3	1
AE 364	Foundation Engineering	3	1
AE 351	Estimation and Quantity Surveying	2	1
	Note: 6-8 weeks mandatory internship program offered in summer break	0	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
AE 435	Computer Aided Structural Analysis	3	1
AE 436	Design of Steel Structures	3	1
AE 441L	Integrated Building Design – I	-	2
MGT 320	Project Management in Engineering	2	-
AE 499	Final Year Design Project – I	-	3
QT 401	Translation of the Holy Qur'ān -IV	1	-
MGT 318	Entrepreneurship and Management	2	-

Course No	Subject (Elective Subjects)	Credit Hours Th	Credit Hours Pr
AE 444	Zero Energy Buildings	2	-
AE 403	Research Methodology	2	-
AE 415	Sustainable and Energy Efficient Building Materials	2	-
AE 455	Procurement Management	2	-
AE 439	Structural Systems for High Rise Buildings	2	-

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
AE 437	Structural Dynamics and Earthquake Engineering	3	1
AE 442L	Integrated Building Design - II	-	2
AE 456	Professional Ethics	1	-
AE 4xx	Elective	2	-
AE 499	Final Year Design Project - II	-	3
AE 455	Construction Management	2	1

DEPARTMENT OF TRANSPORTATION ENGINEERING & MANAGEMENT

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Dr. Zia-ur-Rehman

Professors
Dr. Ammad Hassan Khan

Associate Professor
Dr. Abdur Rahim

Assistant Professors
Dr. Izza Anwer
Dr. Hina Saleemi
Dr. Saadia Tabassum

Dr. Mujasim Ali Rizvi
Dr. Bilal Zia Malik

Teaching Fellow/Graduate Assistant
Engr. Sohail Jameel

The Department of Transportation Engineering and Management (DTEM) was established under the Faculty of Civil Engineering in 2002. The Department has the distinction of being the first department in Pakistan to offer a formal B.Sc. Degree course in Transportation Engineering. The establishment of this Department aimed to produce transportation engineers capable of planning, designing, constructing, managing, operating, and maintaining various modes of transportation such as highways, railways, airways, seaways, and pipeways. Nineteen sessions (2002-2020) of the DTEM have already graduated.

Mission
Our mission is to produce transportation engineering graduates with sound knowledge and skills to meet the evolving needs of the society for national and international socio-economic development.

Program Educational Objectives (PEOs)
PEO-01: Graduates actively engage themselves in problem-solving to address the evolving transportation needs of the society for sustainable development.
PEO-02: Graduates exhibit sound professionalism, managerial qualities, effective communication, and capacity building in the field of transportation engineering.
PEO-03: Graduates demonstrate commitment to serving the society with a sense of responsibility, moral values, and teamwork.

Courses of Study
Undergraduate Programs
- B.Sc. Transportation Engineering

Postgraduate Programs
- M.Sc. Transportation Engineering
- M.Sc. Transportation Informatics
- Ph.D. Transportation Engineering

The emphasis of the bachelor's degree course is on the understanding of the fundamental concepts and principles that constitute the basis of transportation engineering. The courses consist of lectures, design/practical work, laboratory/field investigations, presentations, and final year research project. Field survey camp is also a part of the B.Sc. degree program.

Laboratories and Other Facilities
The Department has various dedicated laboratories that include Geo-materials, Pavement Materials, Transportation Computer Aided Design, Asphalt and Concrete Mix Design, Traffic Engineering, and is in the process of establishing Railway Engineering, and Geomatics Engineering Labs. The Department also uses laboratories from the Departments of Civil, Environmental, Geological, and Electrical Engineering. The Department is using state-of-the-art software and tools for teaching and training purposes. The Department has a well-stocked library with a large number of the latest relevant books, journals, and research publications.

Transportation engineering graduates of this program have sufficient opportunities of getting jobs in various government/private departments including (but not limited to), Lahore Development Authority (LDA), Traffic Engineering & Transport Planning Agency (TEPA) under Lahore Development Authority (LDA), Punjab Mass Transit Authority (PMA), Transport Department Government of Punjab, Orange Line Metro Rail Transit System (OLMRTS), Lahore Ring Road Authority, Punjab Safe City Authority, Urban Unit, National Engineering Services Pakistan (NESPAK), National Transport Research Centre (NRTC), Pakistan Army, TransPeshawar, TransKarachi, Daewoo, VEDA Transit Solutions, Ravi Urban Development Authority (RUDA), Associated Consultant Engineers (ACE), National Development Consultants (NDC), SKB Engineering & Construction, Mott MacDonald Pakistan (MMP), Frontier Works Organization (FWO), National Logistics Cell (NLC), National Highway Authority (NHA), Multan Development Authority (MDA) and many other public and private sector organizations. There is a high employment demand for Transportation Engineers in the Middle East, Europe, Australia, and the United States. A number of our alumni are successfully serving in different international engineering and research organizations around the globe. Since the accreditation of the Program with PEC level-II Washington Accord, the international recognition and acceptance of our graduates is rapidly increasing.

B.Sc. Transportation Engineering

Year 1

Semester 1				Semester 2			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	Pr			Th	Pr
MA-113	Calculus and Analytic Geometry	3	0	HU-111L	Communication Skills	0	1
CY-101	Applied Chemistry	2	0	TE-106	Construction and Pavement Materials	2	1
HU-102	Functional English	3	0	TE103L	Engineering Drawing and Graphics	0	2
CS-103	Introduction to Computer Programming for data science	2	1	Geo-E-110	Physical Geology	3	1
TE-102	Surveying-I	3	1	IS-102	Islamic Studies/ Ethics	3	0
PHY-122	Basic Mechanics	2	1	TE-105	Information and Communication Technologies in Transport	2	1
				ME-100L	Workshop Practice	0	1
				QT-101z	Translation of the Holy Quran-I	1	0

Year 2

Semester 3				Semester 4			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	Pr			Th	Pr
IS-202	Ideology and Constitution of Pakistan	3	0	TE-203	Geotechnical Engineering-I	3	1
TE-212	Mechanics of Solids (PHY-122)	2	1	MA-346	Numerical Methods	**3**	**0**
TE-213	Surveying-II (TE-102)	2	1	HU-200	Technical Report Writing	**3**	**0**
MA-228	Differential Equations	3	0	MGT-105	Introduction to Economics	**2**	**0**
EE-299	Electrical Systems for Transport Infrastructure	2	1	TE-206	Traffic Engineering - I	2	1
QT-201	Translation of the Holy Quran-II	1	0	TE-208	Automotive Engineering	2	1
HU-212	Civics and Community Engagement	2	0	Survey camp		Non Credit (Mandatory)	

Year 3

Semester 5				Semester 6			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	Pr			Th	Pr
MA-343	Applied Probability and Statistics	3	0	Mgt-316A	Professional Ethics and Engineering Entrepreneurship	2	0
EnE-307	Environmental Engineering	2	1	TE-316	Geometric Design for Transportation Facilities	2	1
TE-314	Railway Engineering-I	2	0	TE-327	Transportation Planning	3	0
TE-315	Pavement Analysis and Design	2	1	TE-329	Pipeway Engineering	2	0
TE-318	Waterway Transportation	2	0	TE-312	Traffic Engineering – II (TE-206)	2	1
TE-324	Structural Analysis (TE-212)	2	1	TE-311	Geotechnical Engineering-II (TE-203)	3	1
QT-301	Translation of the Holy Quran-III	1	0	TE-329	Pipeway Engineering	2	0
				Internship		Non Credit (Mandatory)	

Year 4

Semester 7				Semester 8			
Course No	**Subject (Pre-requisites)**	**Credit Hours**		**Course No**	**Subject (Pre-requisites)**	**Credit Hours**	
		Th	Pr			Th	Pr
TE-401	Bridge and Tunnel for Transportation Engineering	3	0	TE-427	Project Management	2	0
TE-423	Airport Engineering	3	0	TE-438	Pavement Evaluation and Rehabilitation (TE-315)	2	1
TE-424	Pavement Drainage system and Design (TE-315)	2	1	TE-439	Sea Freight and Logistics (TE-318)	2	0
TE-433	Plain and Reinforced Concrete (TE-324)	2	1	TE-429	Railway Engineering-II (TE-314)	2	0
TE-425	Ports and Harbour Management (TE-318)	2	0	TE-449	Transportation Informatics	2	1
QT-401	Translation of the Holy Quran-IV	1	0	TE-428L	Occupational Health and Safety	0	1
TE-499	Final Year Design Project-I	0	3	TE-499	Final Year Design Project-II	0	3

INSTITUTE OF ENVIRONMENTAL ENGINEERING & RESEARCH

Dean
Prof. Dr. Khalid Farooq

Professor Emeritus
Dr. Javed Anwar Aziz

Director
Prof. Dr. Amir Ikhlaq

Professors
Prof. Dr. Amir Ikhlaq

Associate Professors
Dr. Muhammad Umar Farooq
Dr. Muhammad Irfan Jalees
Dr. Mehwish Anis

Assistant Professors
Dr. Fizzah Zahid
Lecturers
Dr. Gul -E- Hina
Engr. Sahar Aurangzeb
Engr. Qurat-ul-Ain
Engr. Tanveer Ahmed
Engr. Asma Imam
Engr. Aroosa Aslam

Introduction

The Institute was established in 1972 with the assistance of World Health Organization (WHO). It is the premier educational institute that train professionals in the field of Environmental Engineering. The areas include water supply, sewerage, water and wastewater treatment, solid waste management, air pollution control and environmental studies. Until 2004, its role remained as a post-graduate institute. However, to meet the increasing demand of professionals in the field of environmental engineering, B.Sc. Environmental Engineering degree was initiated in 2005. It is also one of the oldest and most reliable Institute that provides commercial testing services of water, wastewater, and air quality. The Institute remained instrumental in framing National Environmental Quality Standards (NEQS) and National Standards for Drinking Water Quality (NSDWQ). In 2017, it switched to Outcome Based Education (OBE) system. Batches from 2013 and onwards are accredited by Pakistan Engineering Council (PEC) on OBE. B.Sc. Environmental Engineering degree is now recognized by 18 members of Washington Accord including USA, UK, Australia, Canada, Japan, China, and others.

Mission

To produce graduates capable to solve complex engineering problems related to environmental engineering, provide innovative and sustainable solutions for water supply, sewerage, water and wastewater treatment, solid waste management & air pollution problems, and devise appropriate solutions for the above utility services.

Courses of studies

Undergraduate Programs
- B.Sc. in Environmental Engineering
- B.S. in Environmental Science

Postgraduate Programs
- M.Sc. in Environmental Engineering
- M.Phil. in Environmental Science
- Ph.D. in Environmental Engineering

Laboratories and Other Facilities

The Institute has laboratory facilities in the following areas:
- Water and Wastewater Analysis
- Unit processes
- Air Pollution Monitoring
- Environmental Microbiology
- Heavy Metal Analysis
- Pesticides, insecticides, and organic compounds analysis

In addition, the institute is also equipped with modern computer laboratory having high speed internet facility and one library. All classrooms are air conditioned and equipment with essential audio-visual aids.

Research & Investigation

High quality research is conducted in the following areas:
- Water pollution analysis & control
- Water supply and sanitation
- Water and air quality modeling
- Air pollution analysis and control
- Water treatment
- Wastewater treatment
- Climate change

Research is problem based and conducted through M.Sc., M.Phil., and Ph.D. students. Research work is published in high quality international journals and is widely cited throughout the world.

Careers in Environmental Engineering

The graduates of IEER have very encouraging employment rates. They serve within and outside the country. The employers of IEER graduates within the country include Water and Sanitation Agencies (WASAs), Water and Power Development Authority (WAPDA), Lahore Waste Management Company (LWMC), The Urban Unit, Punjab, Environmental Protection Department (EPD), WWF Pakistan, NESPAK, Mott McDonalds Pakistan (MMP), National Development Consultants (NDC) and several other national consulting firms. The graduates of IEER have also been serving in international firms including Saud Consult, Saudi Arabia, Parsons International Limited, UAE etc.

B.Sc. Environmental Engineering Program

Since its inception in 2005, the B.Sc. Environmental Engineering degree program was accredited by PEC. Recently it has switched to the Outcome Based Education (**OBE**) system.

Program Educational Objectives (PEOs)

PEO-01: Graduates will be designing and developing sustainable solutions, providing stewardship for the challenging environmental problems in national and international organizations.

PEO-02: Graduates will excel in their professional careers by exhibiting analytical and soft skills along with latest tools usage.

PEO-03: Graduates will spearhead the environmental projects, observe ethical and professional values while fulfilling the diverse needs of society.

B.S. Environmental Science Program

The B.S. Environmental Science degree program is recently started in IEER with following educational objectives.

Program Educational Objectives (PEOs)

PEO-01: Apply the knowledge of chemical and physical sciences to provide solutions of environmental problems through advance tools of the field.

PEO-02: Acquire skills necessary for the management of environmental problems in multidisciplinary environments and demonstrate moral and ethical values in fulfilling professional and societal obligations.

PEO-03: Commitment to continue learning for the professional growth of society and conservation of sustainable environment.

B.Sc. Environmental Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
HU-111L	Communication Skills	0	1
IS-102	Islamic Studies/Ethics (for Non-Muslims)	3	0
CE-101	Elementary Surveying	3	0
CE-101L	Elementary Surveying	0	1
EnE-101	Introduction to Environmental Engineering	2	0
PHY-112	Applied Physics	2	0
PHY-112L	Applied Physics	0	1
MA-115	Engineering Mathematics	3	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
CSC-100	Application of Information and Communication Technologies	2	0
CS-100L	Application of Information and Communication Technologies	0	1
EnE-103	Environmental Laws and Policies	2	0
EnE-104	Environmental Chemistry	2	0
EnE-104L	Environmental Chemistry	0	1
EnE-105	Ecological Management	2	0
ME-100L	Workshop Practice	0	1
MA-116	Linear Algebra and Differential Equations	3	0
QT-101	Translation of Holy Quran-I	1	0
HU-200	Technical Report Writing	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
IS-202	Ideology and Constitution of Pakistan	3	0
EnE-201	Environmental Microbiology	2	0
EnE-201L	Environmental Microbiology	0	1
CE-232	Fluid Mechanics	3	0
CE-232L	Fluid Mechanics	0	1
CE-235	Soil Mechanics	3	0
CE-235L	Soil Mechanics	0	1
MA-242	Engineering Statistics	3	0
QT-201	Translation of Holy Quran -II	1	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
EnE-225L	Occupational health and Safety	0	1
CRP-220	GIS and Remote Sensing	2	0
CRP-220L	GIS and Remote Sensing	0	1
ME-238	Thermodynamics	2	0
ME-238L	Thermodynamics	0	1
CE-240	Engineering drawings and CAD	1	0
CE-240L	Engineering drawings and CAD	0	2
CE-210	Structural Systems	3	0
CS-103	Introduction of Computer Programming for Data Science	2	0
CS-103L	Introduction of Computer Programming for Data Science	0	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
CRP-301	Sustainable Urban Planning	2	0
EnE-331	Water Supply and Wastewater Engineering	3	0
EnE-331L	Water Supply and Wastewater Engineering	0	1
MGT-105	Introduction to Economics	2	0
EnE-323	Solid Waste Management	3	0
EnE-323L	Solid Waste Management	0	1
EnE-325	Environmental Engineering Lab Techniques	1	0
EnE-325L	Environmental Engineering Lab Techniques	0	1
CE-333	Engineering Hydrology	2	0
CE-333L	Engineering Hydrology	0	1
QT-301	Translation of Holy Quran -III	1	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
EnE-326	Environmental Impact Assessment and Management	3	0
EnE-337	Principles and Design of Water Treatment	3	0
EnE-337L	Principles and Design of Water Treatment	0	1
ChE-320	Cleaner Production Techniques	2	0
CE-345	Water Resources & Irrigation Engineering	3	0
CE-346	Project Management and Construction Supervision	3	0
MA-346	Numerical Methods	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
EnE-435	Air and Noise Pollution Control	3	0
EnE-435L	Air and Noise Pollution Control	0	1
EnE-436	Principles and Design of Wastewater Treatment	3	0
EnE-436L	Principles and Design of Wastewater Treatment	0	1
EnE-432	Environmental Modeling	2	0
EnE-432L	Environmental Modeling	0	1
QT-401	Translation of Holy Quran-IV	1	0
EnE-499A	Final Year Design Project-I	0	.3
HU-212	Civics and Community Engagement	2	0
HU-003	International language	0	0

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
ME-481	Energy Resources & Management	2	0
EnE-404	Ethics and Interpersonal Skills	1	0
EnE-404L	Ethics and Interpersonal Skills	0	1
EnE-426	Wastewater Disposal and Reuse	2	0
EnE-433	Industrial and Hazardous Waste Management	3	0
MGT-349	Entrepreneurship	2	0
EnE-427	Climate Change: Adaptation, Mitigation and Sustainable Development	2	0
EnE-499B	Final Year Design Project-II	0	3
EnE-428	Review of Environmental Engineering (Optional Course)	0	0

B.S. Environmental Science

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
ES-101	Introduction to Environmental Science	3	0
CY-142	Physical and Analytical Chemistry	2	0
CY-142L	Physical and Analytical Chemistry	0	1
MA-110	Basic Mathematics	3	0
HU-111L	Communication Skills	0	1
ES-109	Basics of Environmental Pollution	2	0
CSC-100	Applications of Information and Communication Technologies	2	0
CSC-100L	Applications of Information and Communication Technologies	0	1
MGT-102	Sociology	3	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
ES-103	Introduction to Earth Sciences	2	0
ES-103L	Introduction to Earth Sciences	0	1
MA-123	Calculus	3	0
IS-102	Islamic Studies/Ethics	3	0
PHY-113	Applied Physics	2	0
PHY-113L	Applied Physics	0	1
ES-102	Environmental Biochemistry	2	0
ES-102L	Environmental Biochemistry	0	1
QT-101	Translation of Holy Quran-1	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
IS-202	Ideology and Constitution of Pakistan	3	0
PHY-211	Environmental Physics	3	0
ES-202	Economic Aspects of Environmental Protection	3	0
CY-221	Inorganic and Organic Chemistry	2	0
CY-221L	Inorganic and Organic Chemistry	0	1
MA-154	Quantitative Reasoning-I	3	0
ES-214	Psychology & Ethics	2	0
QT-201	Translation of Holy Quran-2	1	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
ES-204	Ecology & Environment	3	0
ES-205	Microbiology and Environment	2	0
ES-205L	Microbiology and Environment	0	1
ES-206	Environmental Chemistry	2	0
ES-206L	Environmental Chemistry	0	1
HU-212	Civic and Community Engagement	2	0
HU-200	Technical Report Writing	3	0
MA-259	Quantitative Reasoning-II	3	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
ES-301	Environmental Toxicology	2	0
ES-301L	Environmental Toxicology	0	1
ES-302	Environmental Profile of Pakistan	2	0
ES-304	Analytical Techniques in Environmental Sciences	2	0
ES-304L	Analytical Techniques in Environmental Sciences	0	1
ES-305	Project Planning & Management	3	0
ES-306	Hydrology & Water Pollution	2	0
ES-307	Energy & Environment	2	0
ES-307L	Energy & Environment	0	1

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
CRP-302	GIS and Remote Sensing	2	0
CRP-302L	GIS and Remote Sensing	0	1
ES-309	Environmental Management Systems	2	0
ES-309L	Environmental Management Systems	0	1
ES-310	Biodiversity & Conservation	2	0
ES-310L	Biodiversity & Conservation	0	1
ES-311	Solid Waste Management	2	0
ES-399	Internship*	0	0
QT-301	Translation of Holy Quran-3	1	0
ES-312	Occupational Safety, Health & Environment	2	0
ES-312L	Occupational Safety, Health & Environment	0	1
MGT-349	Entrepreneurship	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
ES-401	Air Pollution	2	0
ES-402	Environmental Impact Assessment	2	0
ES-402L	Environmental Impact Assessment	0	1
ES-403	Research Methods in Environmental Sciences	3	0
ES-404	Environmental Sampling & Monitoring	2	0
ES-404L	Environmental Sampling & Monitoring	0	1
ES-414	Environmental Nanotechnology	2	0
ES-496A	Final Year Project-I	0	3
QT-401	Translation of Holy Quran-4	1	0

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
ES-405	Environmental Governance	2	0
ES-406	Climate Change	3	0
ES-408	Pollution Control Technologies	2	0
ES-409	Natural Resource Management	2	0
ES-413	Urban Environmental Management	2	0
ES-496B	Final Year Project	0	3
HU-003	International Language**	0	0

*Internship will be offered after 2nd year.

** English/Arabic/Chinese/Turkish

DEPARTMENT OF CHEMICAL ENGINEERING

Dean
Prof. Dr. –Ing. Naveed Ramzan

Chairperson
Prof. Dr. Hafiz Muhammad Zaheer Aslam

Professor Emeritus
Dr. Shahid Naveed

Professor on SNGPL Chair of Gas Engineering
Dr. Hafiz Muhammad Zaheer Aslam

Associate Professors
Dr. M. Azam Saeed
Dr. Muhammad Faheem
Dr. Usman Ali
Dr. Umair Aslam
Dr. Farhan Javed
Dr. Asif Akhtar

Assistant Professors
Mr. Qazi Zaka-ur-Rehman
Dr. Humayun Wali
Dr. Umer Afzal
Dr. Muhammad Wasim Tahir
Dr. Ayesha Irshad

Dr. Saira Bano
Dr. Hira Anjum
Dr. Farhan Ahmed

Lecturers
Mr. Rizwan Ali
Ms. Hafiza Aroosa Aslam Khan
Ms. Sobia Anwar
Mr. Aamir Abbas
Mr. Hafiz Muhammad Mudasser
Mr. Qazi Muhammad Omer
Mr. Haseeb Ullah Khan Jatoi
Mr. Muhammad Usman

Mission: The mission of the Undergraduate program of the Department of Chemical Engineering encompasses three (3) key aspects:
1. **Education:** To offer an outstanding academic program to enable graduates master process synthesis, design, and operation's knowledge and develop excellent technical, technological, and leadership skills.
2. **Research:** To provide a vibrant interdisciplinary research program in engineering science, creating novel and sustainable solutions to serve public interests in areas such as health, energy, and environment.
3. **Social Responsibility:** To promote inclusive, safe, collaborative, and respectful community for learning and work with integrity.

Program Educational Objectives (PEOs)
PEO-01: Apply the knowledge, principles, and skills in process industry, academia, and complementary fields to meet the stakeholder requirements.

PEO-02: Graduates achieve professional success by practicing ethical behavior, social responsibility, and diversity, both as individuals and in team environments with effective communication.

PEO-03: Graduates pursue innovative approaches and career growth through professional practice, graduate studies, and other training programs in engineering sciences and management.

Courses of Study

Undergraduate Programs
- B.Sc. Chemical Engineering

Postgraduate Programs
- M.Sc. Chemical Engineering
- Ph.D. Chemical Engineering

The curriculum for the Bachelor's course has evolved over a number of years and is designed to prepare the students for design, operation, and supervision of chemical process plants as well as for research and development work in the process industry. Study tours and inspection trips are an essential component of the curriculum, which enable the students to visit industrial plants and projects of national importance in chemical industry. The students are assigned projects involving design and other aspects of Chemical Engineering. Emphasis is given to the use of computers in problem solving and design of equipment and plants.

Laboratories and Other Facilities

The Department has well-equipped and well-maintained laboratories in the following fields:
- Chemical Engineering Thermodynamics
- Chemical Reaction Engineering
- Computer Applications and Process Simulation
- Energy Engineering
- Environmental Engineering
- Fluid Flow
- Heat Transfer
- Catalysis & Energy Research
- Instrumentation and Control
- Mass Transfer
- Process/Wet Analysis
- Smart Class Room
- QEC Room
- UNSDGS wall
- Seminar Hall (300 capacity)
- Free Wifi internet

The UNSDGS wallartment is equipped with state-of-the-art equipment including Atomic Absorption Spectrophotometer, Bomb Calorimeter, Elemental Analyzer, Fourier Transform Seminar Hall (300 capacity) Infrared Spectrophotometer (FTIR), Gas Chromatograph (GC), High Performance Liquid Chromatograph (HPLC), and Ultraviolet (UV) SpectropFree Wifi internethotometer.

The Department has a computer center equipped with latest systems. Apart from learning computer languages and applications in various courses of Chemical Engineering, the students are encouraged to use this laboratory for their design projects, research dissertations, and class assignments.

The Department has a well-organized library with a large number of textbooks, handbooks, reference books, journals, design projects, and research thesis submitted in the past. Latest publications are regularly added to the collection to cope with the modern research in the field.

B.Sc. Chemical Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
ChE-101	Industrial Stoichiometry – I	3	0
CS-106	Application of Information and Communication Technologies	2	1
CY-142	Physical and Analytical Chemistry	2	1
HU-111	Communication Skills	0	1
MA-113	Calculus and Analytic Geometry	3	0
ME-125L	Engineering Drawing	0	1
IS-102	Islamic Studies/Ethics (non-Muslim students)	3	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
ChE-108	Fluid Flow-I	3	0
CS-103	Introduction to Computer Programming for Data Science	2	1
ChE-109	Chemical Process Industries	2	1
MA-116	Linear Algebra and Differential Equations	3	0
QT-101	Translation of the Holy Qur'ān – I/SE-101-Social Ethics (for non-Muslims)	1	0
ME-100L	Workshop Practice	0	1
PHY-113	Applied Physics	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
ChE-201	Industrial Stoichiometry – II	3	0
ChE-203	Particle Technology	3	1
ChE-204	Chemical Engineering Thermodynamics – I	3	1
CY-221	Inorganic and Organic Chemistry	2	1
HU-221	Technical Writing and Presentation Skills	3	0
QT – 201	Translation of the Holy Qur'ān – II/SE-201-Social Ethics (for non-Muslims)	1	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
ChE-208	Fluid Flow-II	2	1
ChE-209	Process Heat Transfer	3	1
ChE-211	Separation Processes-I	3	0
IS-202	Ideology and Constitution of Pakistan and Islamic Studies/ Ethics (For non-Muslims)	3	0
MA-242	Engineering Statistics	3	0
ChE-105L	Occupation Health and Safety	0	1

Year 3

Semester 5

Course No	Subject	Th	Pr
ChE-301	Chemical Reaction Engineering	3	1
ChE-311	Engineering Materials	2	0
ChE-312	Unit Processes	2	1
ChE-304	Chemical Engineering Thermodynamics – II	3	0
MA-240	Numerical Analysis	2	1
MGT-318	Entrepreneurship and Management	2	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
ChE-321	Chemical Process Design & Economics	3	1
ChE-319	Chemical Engineering Mathematics	2	1
ChE-310	Separation Processes-II	2	1
QT – 301	Translation of the Holy Qur'ān – III/SE-301-Social Ethics (for non-Muslims)	1	0
ChE-308	Energy Engineering	3	1
HU-212	Civics and Community Engagement	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
ChE-432 to ChE-444	Elective – I	2	0
ChE-409	Chemical Process Equipment Design and Rating	3	0
ChE-406	Environmental Engineering	3	1
ChE-404	Instrumentation and Control	3	1
MGT-103	Sociology for Engineering	2	0
ChE-461	Final Year Project – I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
ChE-413	Transport Phenomena	3	0
ChE-432 to ChE-444	Elective-II	2	0
ChE-421 to ChE-431	Elective-III	3	0
ChE-401	Chemical Reactor Design	2	0
ChE-462	Final Year Project – II	0	3
QT – 401	Translation of the Holy Qur'ān -IV	1	0
MGT-320	Project Management in Engineering	2	0

Elective Subjects

Course No	Subject (Pre-requisites)	Th	Pr
ChE-421	Gas Engineering	3	0
ChE-422	Biochemical Engineering	3	0
ChE-427	Biomass and Biofuels	3	0
ChE-428	Industrial Safety and Risk Management	3	0
ChE-429	Clean Coal Technologies	3	0
ChE-430	Material Characterization Techniques	3	0
ChE-431	Maintenance Engineering	3	0
ChE-432	Industrial Psychology and Ethics	2	0
ChE-442	Machine Learning in Chemical Engineering	2	0
ChE-444	Textile Technology	2	0

Course No	Subject (Pre-requisites)	Th	Pr
ChE-434	Petroleum Refinery	2	0
ChE-435	Food Engineering	2	0
ChE-436	Membrane Technology	2	0
ChE-437	Computational Fluid Dynamics	2	0
ChE-438	Computer Aided Design	2	0
ChE-439	Process Analysis and Optimization	2	0
ChE-440	Chemical Safety and Security	2	0
ChE-441	Process Equipment Malfunction	2	0
ChE-443	Electrochemical Engineering	2	0

DEPARTMENT OF POLYMER ENGINEERING

Dean
Prof. Dr. Ing. Naveed Ramzan

Chairman
Prof. Dr. Asif Ali Qaiser

Professors
Dr. Farhan Saeed

Associate Professors
Dr. Atif Javaid
Dr. Muhammad Sarfraz
Dr. Yasir Qayyum Gill
Dr. Rabia Nazar

Assistant Professors
Dr. Muhammad Farooq
Dr. Umer Mehmood
Dr. Muhammad Aamir Shehzad
Dr. Zaman Tahir

Lecturers
Nida Abid

Introduction

Polymer Engineering is an emerging field of research and industrial commercialization, finding a widespread and fast-growing use, ranging from the consumer market to specialized industrial and defence applications. In Pakistan, polymer industry is one of the fastest growing sectors that needs trained manpower and research support. Keeping this in view, the undergraduate degree program in Polymer and Process Engineering was launched in 2002 under Polymer Engineering Division of Department of Chemical Engineering. As a result of a far-reaching ambition, and keen vision which led to the realization of the increasingly important role that Polymer Engineering plays in today's world, the university decided to upgrade the division into an independent degree awarding department in January 2006. Further to this development, MSc Polymer & Process Engineering was started in 2007 and Ph.D. Polymer Science & Engineering in 2019.

The Department of Polymer and Process Engineering has already gained considerable prestige and standing in the academic and industrial worlds due to motivated and outstanding faculty, hardworking and dedicated administration, and state-of-the-art laboratories costing more than Rs.300 Million. Our graduates find jobs industrial sectors of in plastics processing, packaging, paints, composites, rubber and tyres, pipes and profiles, appliances, automotive parts, foams, defence industries.

Courses of Study

Undergraduate Programs
- B.Sc. Polymer Engineering

Postgraduate Programs
- M.Sc. Polymer and Process Engineering
- M.S. Polymer Science and Technology
- Ph.D. Polymer Science and Engineering

Departmental Core Strengths
- Foreign qualified Ph.D. faculty and state-of-the-art laboratories
- Well-established industrial liaison in terms of job placement and collaborative projects
- Wider acceptance as a specialized degree for postgraduate study abroad
- Research oriented product development in Final Year Projects
- Vibrant research clusters in polymer membranes, polymer processing and recycling, renewable energy, and elastomeric materials
- A dynamic Society of Polymer Engineers and Technologists (SPET) to promote social and extra-curricular activities

Mission
To inculcate application-oriented knowledge of polymer engineering so that the graduates should serve the industrial and research sectors with their developed analytical and design abilities showing high moral values and professional competency.

Program Educational Objectives (PEOs)
PEO-01: Technical Proficiency: Graduates will be technically competent and creative in all major aspects of polymer and process engineering as well as supporting math and science disciplines, allowing these graduates to conduct experiments and tests, solve problems based on data from these experiments, design new products, materials, and processes, all with a commitment to quality, timeliness, and continuous improvement.

PEO-02: Interpersonal Skills and Management: Graduates will exhibit appropriate interpersonal and managerial skills by showing flexibility and adaptability in the workplace, possess the capacity to embrace new opportunities of emerging technologies and embrace leadership and teamwork opportunities, all affording sustainable engineering careers.

PEO-03: Work ethics: Graduates will exhibit professional work ethics including an interest in personal and professional growth.

PEO-04: Awareness of Societal Impact: Graduates will be aware of how their professional role will impact the global community and will act with global, ethical, societal, ecological, and commercial awareness expected from practicing engineering professionals.

PEO-05: Effective Communication: Graduates will be skilled in written and oral communication to effectively convey technical content.

The graduates with these attributes are playing effective role in polymer manufacturing industry and various research organizations in public sector. Our goals are to advance scientific and engineering knowledge in these areas, to disseminate the information, and transfer this knowledge to the industry. Many aspects of our research are interdisciplinary by nature, involving fruitful collaboration with other academic areas across traditional academic boundaries.

Laboratories and Other Facilities
The Departmental Laboratories are divided into four categories:
- Undergraduate Teaching
- Research
- Industrial Testing and Product Development
- Process Engineering

1. **Undergraduate Teaching Laboratories**

Fundamentals of Polymer Engineering
Polymer Structures & Synthesis
Polymer Reaction Engineering
Simulation in Polymer Processing
Polymer Analysis & Characterization
Polymer Processing Design
Rubber Compounding and Processing
Polymer Rheology

2. **Research Laboratories**
Electrochemical and Energy System Testing
Polymer Analysis & Characterization
Polymer Composites and Blends
Conducting Polymers and Membrane Research

3. **Industrial Testing & Product Development**
Plastic Pipe Testing and Quality Assurance
Flexible Packaging and Films Testing
Plastic Materials and Products Testing under ASTM, ISO & PS Standards
Paints and Adhesives Testing

4. **Process Engineering Laboratories**
Process Heat Transfer
Fluid Flow
Mass Transfer
Instrumentation & Control
Particle Technology
Process Plant Design

Strong Internship Program
The productive collaboration with the industry has resulted in ample internship opportunities for our students. The Department provides 100 % internship to its 4th year students and many juniors, as well.

Students Financial Aid/Scholarships
The department offers a number of need-cum-merit based scholarship in collaboration with polymer industry to the eligible students so each student can continue his/her study free of financial worries. The department has recently established an Endowment Fund to help deserving students in terms of financial aid and/or loans.

Careers in Polymer & Process Engineering
Polymers have numerous possibilities in consumer, structural, electrical, mechanical, and medical applications due to their unique physical properties and ability to be tailored through chemistry, cross-linking, and surface modification. Polymers are the most rapidly growing sector of the materials industry. As polymer production has grown, so has the number of people who work in this field. Our graduates find jobs in:
- Polymer engineers in defence related industries (NESOM, KRL, PAEC, SUPARCO)
- Polymer producing companies such as PVC, PET, and other resins
- Polymer packaging industries

- Plastic product industry
- Plastic (PVC, PPRC etc.) pipe making industries
- Automotive, foams, paints, and flexible films industries etc.
- Elastomers, tires etc.
- Polymer and additives compounding and marketing industry

The reception by the industry to our graduates in the past years has been remarkable and the demand is ever-growing. Some of the employers of our graduates are KRL Complex, Packages Pvt. Limited, Engro Polymer Karachi, Descon Engineering Pvt. Limited, Attock Oil Refinery, Pakistan Petroleum, National Refinery, Fauji Fertilizer Company, Fatima Fertilizers, Engro Fertilizers, Lotte PTA, Popular Pipes, Panther Tyres. Service Industries Pvt. Ltd., Awan Sports, Roshan Packages, SPEL, Bin Rasheed Chemicals, Popular Pipes.

Our graduates find a promising scope in higher studies both in Pakistan and overseas. The advanced and multidisciplinary nature of B.Sc. Polymer Engineering Degree has exceptional acceptability, particularly in the overseas academic world. Each year, a number of our graduates proceed abroad on scholarship for pursuing their higher studies.

B.Sc. Polymer Engineering

Year 1							
Semester 1				**Semester 2**			
Course Code	Subject (Pre-requisite)	Credit Hours		Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr			Th	Pr
PPE-107	Engineering Materials	3	0	PPE-108	Fundamentals of Polymer Engineering	3	1
HU-111L	Communicational Skills	0	1	PPE-109	Industrial Stoichiometry	3	0
CS-XXX	100 level course on computing	2	1	HU-102	Functional English	3	0
CY-161	Polymer Chemistry-I	2	1	MATH-302	Vector and Tensor Analysis	3	0
MA-123	Calculus	3	0	ME 100L	Workshop Practice	0	1
IS-101	Islamic and Pakistan Studies I or HU 101 Ethics and Pakistan Studies-I	3	0	CS103	Computer Programming for Data Sciences	2	1
QT-101/SE-101	Translation of the Holy Qur'ān-I/ Social Ethics-I	1	0				

Year 2							
Semester 3				**Semester 4**			
Course Code	Subject (Pre-requisite)	Credit Hours		Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr			Th	Pr
PPE-219	Fluid Flow	2	1	PPE-211	Heat Transfer	3	1
PPE-208	Polymer Structures & Synthesis	3	1	MA-242	Engineering Statistics	3	0
PPE-217	Polymer & Petrochemical Industries	3	0	PPE-213	Polymer Processing Operations	3	1
PPE-210	Thermodynamics	3	0	PPE-218	Engineering Economics	2	0
MA-228	Differential Equations	3	0	PPE-219L	Occupational Health and Safety	0	1
QT-201/ SE-201	Translation of the Holy Qur'ān-II/Social Ethics-II	1	0	IC-101	Ideology and Construction of Pakistan	3	0

Year 3							
Semester 5				**Semester 6**			
Course Code	Subject (Pre-requisite)	Credit Hours		Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr			Th	Pr
PPE-313	Mass Transfer	3	1	PPE-318	Polymer Analysis & Characterization	3	1
PPE-314	Mechanical Properties of Polymers	3	0	PPE-319	Instrumentation & Control	3	1
PPE-315	Polymer Reaction Engineering	3	1	PPE-320	Polymer Composites	3	0
PPE-316	Polymer Compounding & Blending	3	0	PPE-321	Polymer Rheology	3	1
PPE-317	Transport Phenomena	3	0	PPE-323	Total Quality Management	2	0
QT-301/SE-301	Translation of the Holy Qur'ān-III/ Social Ethics-III	1	0	HU-212	Civics and Community Engagement	2	0

Year 4							
Semester 7				**Semester 8**			
Course Code	Subject (Pre-requisite)	Credit Hours		Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr			Th	Pr
PPE-433	Final Year Design Project-I	0	3	PPE-414	Polymer Product Design	3	0
PPE-413	Process Plant Design	3	1	PPE-415	Polymer Processing Design & Simulation	3	1
PPE-4XX	Elective-I	3	0	PPE-436	Entrepreneurial Management	2	0
PPE-4XX	Elective-II	3	0	PPE-434	Final Year Design Project-II	0	3
QT-401/SE-401	Translation of the Holy Qur'ān-IV/ Social Ethics-IV	1	0	PPE-4XX	Elective-III	3	0

Departmental Electives – 9 Credit Hours

PPE-419	Smart Polymers	3(3,0)	No Pre-requisite	PPE-427	Polymers in Automotive Applications 3(3,0)		No Pre-requisite
PPE-420	Mold Design & Fabrication	3(3,0)	PPE-213	PPE-428	Fiber Technology	3(3,0)	No Pre-requisite
PPE-421	Polymers in Energy Applications	3(3,0)	No Pre-requisite	PPE-429	Additive Manufacturing	3(3,0)	No Pre-requisite
PPE-422	Nanotechnology	3(3,0)	No Pre-requisite	PPE-430	Biopolymers	3(3,0)	CY-161
PPE-423	Polymer Packaging	3(3,0)	No Pre-requisite	PPE-431	Polymeric Foams	3(3,0)	No Pre-requisite
PPE-424	Polymer Coating & Adhesives	3(3,0)	No Pre-requisite	PPE-432	Elastomeric Materials	3(3,0)	No Pre-requisite
PPE-425	Industrial Membranes Technology	3(3,0)	No Pre-requisite	PPE-435	Computer-Aided Design (CAD)	3(2,1)	No Pre-requisite
PPE-426	Recycling & Waste Management	3(3,0)	No Pre-requisite				

DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING

Dean
Prof. Dr.-Ing Naveed Ramzan

Chairman
Prof. Dr.-Ing Furqan Ahmed

Professor
Dr. Muhammad Asif Rafiq

Associate Professors
Dr. Ehsan Ul Haq
Dr. Adnan Maqbool

Assistant Professors
Dr.-Ing. Muhammad Zubair

Dr.-Ing. Khushnuda Nur

Lecturers
Dr.-Ing. Amjad Ali
Dr. Syed Farrukh Alam Zaidi

Mission

To produce Metallurgical and Materials Engineers with strong professional knowledge, sound ethical values, a passion for lifelong learning and keen sense of social responsibilities. The graduates are trained for their active role in academia, industry and R&D sector at national and international level keeping in view the latest trends and maintaining the standards in the field.

Introduction

The department of Metallurgical and Materials Engineering (MME) was established in 1965 and it is the oldest department in this field in the country. Since its inception it has been providing the students with high quality education and training in the field of modern materials. This department has a well-trained, dedicated, and 100% Ph.D. faculty, as well as well-equipped laboratories. The total enrolment of students in the department is around 120.

Program Educational Objectives (PEOs)

PEO-01: Generate sustainable solutions to the industrial and analytical problems related to metallurgy and materials engineering using contemporary tools and techniques.

PEO-02: Work in teams with effective leadership, entrepreneurial and communication skills.

PEO-03: Achieve professional development while demonstrating socio-ethical responsibility.

Courses of Study

The courses have been designed to produce graduates with strong understanding of science and engineering concepts of both metals and modern materials. The part of metallurgy covers courses ranging from relevant concepts of extractive, industrial, physical, mechanical metallurgy to the science and design of

different modern metals and alloys used in engineering applications. Special emphasis is made on ffoundry & steel making practices, destructive and non-destructive testing, corrosion and control, heat treatment of metals/alloys, metal working and welding processes. In the area of materials engineering, courses are offered with the focus on material synthesis, processing, and their characterization. Students are taught the fundamentals and trained for the refinement, selection, processing and design of modern materials including polymers, ceramics, electronic materials, functional materials, bio-materials, nanomaterials, and composites. Students and the faculty of the MME department are also actively engaged in the modern-day research activities on structural and functional materials. Moreover, a close co-operation with local industry is maintained by the Department to build a strong academia-industry relationship.

Courses of Study

Undergraduate Programs

- B.Sc. Metallurgical and Materials Engineering

Postgraduate Programs

- M.Sc. Metallurgical and Materials Engineering
- Ph.D. Metallurgical Engineering

MME participation in the ISAM 2023

2nd prize won by the MME students at PAPAAM Auto Show 2022

In order to maintain a professional standard; exposure to an integrated knowledge based on mathematics, chemistry, physics and management sciences is also emphasized. Instructional tours to metallurgical & material development industries, and research organizations are frequently arranged to help the students to relate their theoretical knowledge with industrial practices. Educational / technical seminars are regularly arranged by inviting national and international speakers from the industrial and R&D sectors to keep the students up to data with the global challenges and market demands. The students are also engaged in internships with different metallurgical and materials related organizations every year for practical training. The internships help the students to develop their academic concepts and prepare themselves to tackle the practical problems of the industry. Extra focus is made on developing the soft and management skills of the students to make them well prepared for the future goals. The students are regularly engaged in several extra- and co-curricular activities to improve their interpersonal, soft, technical and management skills.

Workshops and Seminars for MME Students

Industrial Visits by MME Students

The department is equipped with the following laboratories:
- Ceramic Materials
- Polymeric Materials
- Inspection and Testing of Materials
- Welding and Joining of Materials
- Corrosion and Protection
- Metallography and Microscopy
- Foundry Engineering
- Computer
- Heat Treatment
- Mechanical Workshop

The department has a library with over thirteen hundred handbooks, textbooks, and reference books for the faculty members and students. The library is provided with internet facility to access the HEC digital library and research articles from national and international web sources. The department has a computer laboratory that is equipped with latest hardware to handle advance modeling, simulation, and other technical software for the students to have hands on experience on the modern tools of materials engineering.

Careers in Metallurgical and Materials Engineering

Career opportunities in Metallurgical and Materials Engineering both at home and abroad are excellent. The engineers in this field can find jobs in sectors like defense, steel, foundry, glass and ceramics, polymer, automotive, metal working and fabrication, nuclear, construction, inspection and testing, oil and gas, corrosion and prevention etc. Our notable graduates are working in leading national and international organizations like TWI, Bosch, P&G, Schlumberger, KRL, SNGPL, OGDCL, PAEC, NESCOM, PINSTECH, NDC, PMO, Descon, different Steel Mills, Foundries, PCSIR, PSQCA, PITAC etc. Furthermore, especially in last few years, there is an increasing tendency among students to thrive for scholarships and every year several of our graduates secure well renowned scholarships including Erasmus Mundus, MAP, Marie Curie, DAAD, A*Star, full bright and many more. Our graduates are studying, serving, and leading in well reputed national and international universities such as University of Cambridge, University of Oxford, University of Bristol, National University of Singapore (NUS), Karlsruhe Institute of Technology (KIT), Royal Institute of Technology (KTH), National University of Science and Technology (NUST), Pakistan Institute of Science and Technology (PIEAS), Ghulam Ishaq Khan Institute (GIKI) etc.

B.Sc. Metallurgical and Materials Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
EE-199	Basic Electrical and Electronics Engineering	3	1
ME-122L	Engineering Drawing	0	2
MME-101	Introduction to Metallurgy and Materials	3	1
IS-101	Islamic and Pakistan Studies-I	3	0
MA-111	Applied Mathematics-I	3	0
QT-101	Translation of The Holy Quran-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
PHY-114	Applied Physics	2	1
CY-151	Material Chemistry-I	2	1
ME-100L	Workshop Practice	0	1
HU-111L	Communication Skills	0	1
MME-104	Mechanics of Materials	3	0
MA-112	Applied Mathematics-II	3	0
CS-103	Introduction of computer programming for data science	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
MME-202	Applied thermodynamics	3	0
IS-201	Islamic and Pakistan Studies-II	3	0
MA-240	Numerical Analysis	2	1
MME-212	Inspection and Quality Assurance	3	1
MME-213	Extractive Metallurgy	2	0
MME-214	Industrial Safety and Environmental Engineering	2	0
QT-201	Translation of The Holy Quran-II	1	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
MME-217	Physical Metallurgy (MME-202)	3	1
MME-218	Iron and Steel Making Processes (MME-213)	3	0
MA-242	Engineering Statistics	3	0
HU- 221L	Technical Writing & Presentation Skills	0	1
MME-215	Ceramic Materials	3	1
MME-216	Mechanical Behavior of Engineering Materials (MME-104)	3	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
MME-301	Electrical and Magnetic Materials	2	1
QT-301	Translation of The Holy Quran-III	1	0
MME-304	Process Control and Instrumentation	2	0
MME-310	Characterization of Engineering Materials (MME-217)	3	0
MME-313	Foundry Engineering	3	1
MME-314	Polymeric Materials	3	1
MME-325	Advanced Ceramics (MME-215)	3	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
MME-327	Heat Treatment and Phase Transformation (MME-217)	3	1
MME-305	Welding and Joining of Materials	3	1
MME-306	Industrial and Financial management	3	0
MME-309L	Computational Methods in Materials Engineering (MME-216)	0	2
MME-315	Powder Metallurgy	2	0
MME-316	Corrosion and Corrosion Control	3	1

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
MME-423	Solidification of Metals and Alloys (MME-313)	3	1
QT-401	Translation of the Holy Quran-IV	1	0
MME-426	Metal Working and Removal processes (MME-216)	3	0
MME-Elective-1	Engineering Elective 01	2	0
MME-Elective-2	Engineering Elective 02	2	0
MME-411	Final Project-I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
MME-403	Composite Materials	3	1
MME Elective-3	Engineering Elective 03	2	0
MME Elective-4	Engineering Elective 04	2	0
MME Elective-5	Engineering Elective 05	2	0
MME Elective-6	Engineering Elective 06	2	0
MME-412	Final Project-II (MME-411)	0	3

Engineering Electives:

MME-401 Nuclear Materials 2(2,0)
MME-402 Nano Materials 2(2,0)
MME-405 Surface Science and Engineering 2(2,0)
MME-406 Bio Materials 2(2,0)

MME-407 Vacuum Technology 2(2,0)
MME-408 Energy Materials 2(2,0)
MME-409 Advanced Steels 2(2,0)
MME-410 High Temperature Materials 2(2,0)

MME-413 Fracture and Failure Analysis 2(2,0)
MME-414 Functional Materials 2(2,0)
MME-415 Thin Film Technology 2(2,0)
MME-416 Additive Manufacturing 2(2,0)

DEPARTMENT OF MINING ENGINEERING

Dean

Prof. Dr. Tauseef Aized

Chairman
Dr. Shahab Saqib

Professor
Dr. Zulfiqar Ali
Dr. Yasir Majeed

Associate Professors
Dr. Shahab Saqib
Dr. Muhammad Zaka Emad

Dr. Muhammad Azeem Raza

Assistant Professors
Dr. Muhammad Usman Khan
Dr. Muhammad Badar Hayat
Dr. Muhammad Shahzad

Introduction

The Department of Mining Engineering was established in 1954 as a part of the Maclagan Engineering College and has the distinction of being the first in the country to offer a formal degree course in Mining Engineering. The Mining Engineering program has the tradition, history and repute of producing quality mining engineers who are serving both nationally and internationally.

Mission

The mission of the Mining Engineering department is to continue to improve and maintain quality graduate program, that is well supported by a modern and up-to-date curriculum and labs, and qualified faculty, and to produce technically competent and disciplined mining engineers who possess the required leadership and team skills and can compete in the global job market.

Program Educational Objectives (PEOs)

PEO-01: Mining Engineering Capabilities: Mining engineering graduates demonstrate sound analytical, technical and design capabilities to cope with latest global advances in mining engineering practices.

PEO-02: Innovation and Research: Mining engineering graduates can comprehend, exercise, and innovate solutions to engineering problems, on-going research, and global issues.

PEO-03: Social and Professional Ethics: Mining engineering graduates are aware of societal issues and their professional and ethical responsibilities, including health, safety, environmental, and legal aspects and Corporate Social Responsibility (CSR).

PEO-04: Leadership and Lifelong Learning: Mining engineering graduates have leadership aptitude, teamwork spirits, and inter-personal skills and embrace lifelong learning to foster individual as well as organizational goals in diverse settings.

Courses of Study

Undergraduate Programs
- B.Sc. Mining Engineering

Postgraduate Programs
- M.Sc. Mining Engineering
- M.Sc. Tunneling and Underground Excavation Engineering
- Ph.D. Mining Engineering

The curriculum for the Bachelor's degree in Mining Engineering is broad-based in its contents and is designed to produce graduates who can cope with a wide range of tasks which a mining engineer is called upon to perform. It offers basic subjects in science and engineering in the first two years; in the later two years it covers the relevant subjects in mining operations, geology, management and mine environment in detail. The graduate students are prepared to handle the geotechnical problems related to surface and underground excavations, the extraction & beneficiation of coal and other minerals, and other rock and mine/mineral related problems.

Career Choices and Job Placement

A degree in Mining Engineering offers attractive careers both in private and public sectors. The private sector jobs include coal mining, cement industry, hydro-power projects, tunneling and underground construction projects, and coal energy sector.

The government sector, where the mining engineers are employed, includes the Mines and Minerals Department, Govt. of Punjab, the Inspectorate of Mines, Pakistan Mineral Development Corporation (PMDC), Punjab Mineral Development Corporation (PUNJMIN), Pakistan Atomic Energy Commission, and National Development Complex (NDC), etc.

Field Training and Internships

Industrial Tours and Field Internships are an integral part of the mining engineering curriculum and are arranged for the students on regular basis. In addition, two to three weeks Summer Field Surveying camp and a week-long First Aid Training camp are also compulsory requirements for the completion of the degree program.

Laboratory and Other Facilities

The department has the following major laboratories:
- Mineral Processing
- Mine Surveying
- Rock Mechanics
- Mine Environment
- Applied/ Structural Geology
- Mine Safety and Rescue
- Explosives Engineering
- Excavation Engineering
- Mine Design and Simulation

Other facilities include a good departmental library, a computer center and a graduate study room. Some of the key equipment in our department includes a 200-Ton Universal Testing Machine, Rock abrasivity and Brittleness test set-ups and a total station for survey. In processing of minerals and coal, department possesses various types of crushers, grinding machines, concentrating equipment, and analytical tools.

B.Sc. Mining Engineering

Year 1								
Semester 1					**Semester 2**			
Course No	Subject (Pre-requisites)	Credit Hours			Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr				Th	Pr
MA-113	Calculus & Analytic Geometry	3	0		CS-103	Introduction of Computer Programming for Data Sciences	2	1
ME-122L	Engineering Drawing	0	2		EE-197	Basic Electrical and Electronics Engineering	2	1
Min-E-101	Applied Geology	2	1		CY-144	Physical and Industrial Chemistry	2	1
CSC-106	Applications of ICT	2	1		#	Social Science-Elective	2	1
ME-100L	Workshop Practice	0	1		Min-E-122	Stratigraphy and Structural Geology	2	1
IS-102	Islamic Studies	3	0		Min-E-121	Mining Engineering Fundamentals	3	0
HU-102	Functional English	3	0		*QT-101	Translation of the Holy Quran-I	1	0
Year 2								
Semester 3					**Semester 4**			
Course No	Subject (Pre-requisites)	Credit Hours			Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr				Th	Pr
MA-228	Differential Equations	3	0		MA-234	Linear Algebra	3	0
MA-235	Engineering Mechanics	2	1		MA-242	Engineering Statistics	3	0
CE-231	Fluid Mechanics-I	3	1		ME-202	Mechanics of Materials	2	0
ME-201	Applied Thermodynamics	2	1		HU-200	Technical Writing Report	3	0
IS-202	Ideology and Constitution of Pakistan	3	0		Min-E-241	Surveying	3	2
HU-212	Civics and Community Engagement	2	0		*QT-201	Translation of the Holy Quran-II	1	0
					HU-003	International Language	0	0
Year 3								
Semester 5					**Semester 6**			
Course No	Subject (Pre-requisites)	Credit Hours			Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr				Th	Pr
Min-E-350	Rock Mechanics	3	1		Min-E-352	Mine Power Drainage & Material Handling	3	1
Min-E-354	Mineral Exploration & Reserves Estimation	3	1		MGT-320	Project Management in Engineering	2	0
MA-346	Numerical Methods	3	0		Min-E-365	Underground Mine Design	3	0
Min-E-353	Mine Ventilation	3	1		Min-E-366	Surface Mine Design	3	0
Geo-E-353	Introduction to GIS and Remote Sensing	2	1		Min-E-364	Drilling and Blasting	3	1
					QT-301	Translation of the Holy Quran-III	1	0
					Min-E-365	Mine Design Lab	0	1
Year 4								
Semester 7					**Semester 8**			
Course No	Subject (Pre-requisites)	Credit Hours			Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr				Th	Pr
$	Technical Elective-Breadth	3	0		Min-E-486	Mine Hazards, Safety and Health Management	2	1
MGT-318	Entrepreneurship and Management	2	0		Min-E-487	Occupational Health & Safety	1	0
Min-E-471	Tunnelling and Excavation Engineering	3	1		£	Technical Elective-Depth	3	0
Min-E-474	Environmental Management in Mining	2	0		Min-E-483	Mining Law	1	0
Min-E-472	Mineral Processing	3	1		Min-E-489	Final Year Design Project-II	0	3
Min-E-479	Final Year Design Project -I	0	3		*QT-401	Translation of the Holy Quran-IV	1	0
					CSC-250	Application of Artificial Intelligence	2	1

Note:
1. An internship of six to eight weeks after 3rd year is a mandatory requirement for the award of degree in Mining Engineering Program. The students may choose their internship in the following areas: (i) Industry, (ii) Community service, (iii) Any assignment at UET (in case internship is not arranged in industry and community service)
2. First aid training, survey camp, and mine rescue & safety camp are compulsory requirements for the award of degree in Mining Engineering program. The BOS of the department may decide alternatives in case of non-arrangement of such pieces of compulsory training due to unforeseen and unavoidable circumstances.

#: Course number of the offered Social Science elective course will be used
$: From the offered Technical Elective (Breadth) Courses
£: From the offered Technical Elective (Depth) Courses
* From the offered Arts and Humanities Electives

#Social Science Electives:

Social Science Electives		
Course No	**Courses**	**Credit Hrs (Th+Lab)**
Min-E-102	Critical Thinking	2+0
Min-E-103	Sociology for Engineers	2+0
Min-E-104	Social Psychology	2+0
Min-E-105	Sustainability and Social Responsibility	2+0
Min-E-106	Circular Economy	2+0
MGT-105	Introduction to Economics	2+0
HU-213	Anthropology	2+0
HU-214	Psychology	2+0
HU-215	Social Work	2+0
IME-371	Engineering Economics	2+0

*Arts and Humanities Electives:

Arts and Humanities Electives		
Course No	**Courses**	**Credit Hrs (Th+Lab)**
Min-E-203	Organizational Behavior	2+0
Min-E-204	Professional Ethics	2+0
IS-	Religious Studies	2+0
HU111L	Communication Skills	0+1
QT-101	Translation of the Holy Quran-I	1+0
QT-201	Translation of the Holy Quran-II	1+0
QT-301	Translation of the Holy Quran-III	1+0
QT-401	Translation of the Holy Quran-IV	1+0

$ Technical Electives Breadth

Technical Electives Breadth		
Course No.	Courses	Credit Hrs (Th + Lab)
Min-E-411	Ground Control Engineering	3+0
Min-E-420	Operations Research	3+0
Min-E-431	Industrial Minerals	3+0
Min-E-432	Minerals Marketing/ Utilization	3+0
Min-E-433	Cement Technology	3+0
Min-E-440	Drilling Technology	3+0
Min-E-450	Mine Management	3+0
Min-E-412	Engineering Geology & Soil Mechanics	3+0
Min-E-460	Applications of Finite Element Analysis in Mining	3+0
Min-E-414	Applied Geotechnical Engineering	3+0

Technical Electives-Depth

Technical Electives -Depth		
Course No.	Courses	Credit Hrs (Th + Lab)
Min-E-421	Coal Technology	3+0
Min-E-422	Solution Mining	3+0
Min-E-424	Extractive Metallurgy	3+0
Min-E-437	Rock Engineering	3+0
Min-E-451	Sustainable Mining	3+0
Min-E-438.	Dimension Stones Mining	3+0
Min-E-434	Coal Mining	3+0
Min-E-425	Mining & Processing of Rare Earth Elements	3+0
Min-E-436	Placer Mining & Processing	3+0
Min-E-451	Mine Systems Analysis	3+0
Min-E-440	Mine Automation and Digitization	3+0
Min-E-452	Commercial Explosive Handling and Storage	3+0

DEPARTMENT OF GEOLOGICAL ENGINEERING

Dean
Prof. Dr. Tauseef Aized

Chairman
Prof. Dr. Muhammad Farooq Ahmed

Associate Professor
Dr. Muhammad Arshad
Dr. Ghulam Mohyuddin Sohail

Assistant Professors
Dr. Sadia Ismail
Dr. Hafiz Muhammad Awais Rashid

Lecturers
Mr. Ahsan Mehmood
Ms. Maryum Zameer Khan
Mr. Umer Waqas

Mission

To develop all corridors of knowledge in the areas of geological, geotechnical and energy resources exploration, provide adequate scientific knowledge and engineering skills to the students, enabling them to become leaders in geological engineering practice and research fields for the national and international socio-economic development.

Program Education Objectives (PEOs)

PEO-01: Exhibit the proficiency of applying the engineering and scientific knowledge and skills to solve complex geological engineering problems.

PEO-02: Communicate effectively and contribute in the project team with leadership qualities.

PEO-03: Manifest ethical, environmental and societal responsibilities throughout their professional life.

PEO-04: Engage themselves in continuous professional development and learning process.

In the 21st century, the most vital challenge faced is the preservation and efficient utilization of Geo-Space and its resources without disturbing the ecological balance. The Geological Engineering degree program aims to come up with engineering solutions that can meet the challenges in the field of geotechnical engineering, rock mechanics and tunneling, natural energy resources exploration and to give solutions to the environmental impact of groundwater resources. The Geological Engineering discipline was introduced in 2001, for the first time in the country by the University of Engineering and Technology, Lahore, under the Mining Engineering Department. In view of the national demand and popularity of the degree program, an independent Department of Geological Engineering was established in January 2006.

The primary objective of the program is to provide professional engineers in the field of:
1. Rock Engineering and Geotechnical Engineering

2. Natural Energy Resources Exploration
3. Geoenvironmental Engineering

Courses of Study

Undergraduate Programs
- B.Sc. Geological Engineering

Postgraduate Programs
- M.Sc. Geological Engineering
- M.Sc. Geological Sciences
- Ph.D. Geological Engineering

Field Visits and Instructional Tours

Field visits and instructional tours are an essential part of B.Sc. Geological Engineering degree program. The department arranges a number of instructional tours to different areas where students are exposed to various aspects of this degree program and beautiful landscapes. In such an environment, students learn professional skills enthusiastically and relish the field trips. In addition to instructional tours, survey and field geology camps are also conducted, which are considered mandatory for completing the degree. The most famous locations for the instructional tours are Abbottabad, Mansehra, Muzaffarabad, Khewra Gorge, Namal Gorge, Salt Range, Dam sites (Tarbela, Mangla, Khanpur, Neelum Jhelum, etc.), different oil/gas drilling rig sites and visits to different construction sites. These tours give the students necessary exposure to the natural field conditions and prepare them to work in the field. Sometimes the students with an exceptional academic record can get the opportunity to visit abroad for advanced learning under funding offered by international agencies.

Liaison/Internship with Industry

The department has established continuing links with the geotechnical and petroleum industries. As a result, many national and multinational organizations are providing internships for practical training. Leading companies, including NESPAK, WAPDA, MMP, Berkeley Associates, NDC, ACE, OGDCL, PPL, NURICON, Punjab Mineral Company, etc., also offer internships and job

Collaboration with International Universities

The Department of Geological Engineering is currently collaborating with Saitama University, Japan. This research and academic collaboration mainly focus on promoting joint research projects and the exchange of faculty and students between the Department of Geological Engineering and the Department of Civil and Environmental Engineering, Saitama University, Japan.

Departmental Laboratories
- Engineering Geology
- Geotechnical Engineering
- Geophysics
- Excavation Engineering
- Hydrogeology
- Geoenvironmental Engineering
- Physical Geology
- Mineralogy and Petrology
- Computing

Key Research Areas
- Engineering Geology
- Geotechnical and Geo-Mechanics
- Geophysical Exploration
- Non-Explosive Rock Fragmentation
- Tunnel Design and Mechanical Excavation
- Geotechnical Instrumentations
- Geoenvironmental Engineering
- Hydrogeology and Environment
- Drilling and Petrophysical Well Logging
- Formation Evaluation
- Petroleum Geomechanics
- Shale Gas/Oil Shale Reservoir Characterization

B.Sc. Geological Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
CSC-106	Application of Information and Communication Technologies	2	1
MA-113	Calculus and Analytical Geometry	3	0
CY-143	Physical and Industrial Chemistry	3	1
Geo-E-122L	Engineering Drawing and Graphics	0	2
Geo-E-110	Physical Geology	3	1
QT-101	Translation of the Holy Quran-I	1	0
ME-100L	Workshop Practice	0	1

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
PHY-117	Applied Physics	2	1
MA-116	Linear Algebra and Differential Equations	3	0
Geo-E-120	Structural Geology and Stratigraphy	2	1
CS-103	Introduction to Computer Programming for Data Science	2	1
HU-111	Communication Skills	0	1
IS -101	Islamic and Pakistan Studies-I	3	0
Geo-E-121	Occupational Health and Safety	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
HU-200	Technical Report Writing	3	0
MA-235	Engineering Mechanics	2	1
MA-242	Engineering Statistics	3	0
QT-201	Translation of the Holy Quran-II	1	0
Geo-E-231	Mineralogy and Petrology	2	1
HU-212	Civics and Community Engagement	2	0
IS -202	Ideology and Constitution of Pakistan and Islamic Studies-II	3	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
MA-240	Numerical Analysis	2	1
Min -E-241	Surveying	3	2
ME-220	Mechanics of Materials	3	1
CE-233	Fluid Mechanics	2	1
Geo-E-245	Petroleum Geology	2	1
HU-003	International Language	0	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
Geo-E-356	Engineering Geology	3	1
Geo-E-351	Geotechnical Engineering I	3	1
Geo-E-353	Introduction to GIS/RS	2	1
Geo-E-354	Hydrogeology	3	1
MGT-320	Project Management in Engineering	2	0
QT-301	Translation of the Holy Quran-III	1	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
Min-E-350	Rock Mechanics	3	1
Geo-E-357	Earthquake Seismology and Risk Assessment	2	1
Geo-E-363	Explosive Engineering and Construction Blasting	3	0
Geo-E-364	Introduction to Geophysical Exploration Techniques	2	1
MGT-318	Entrepreneurship and Management	2	0
IME-371	Engineering Economics	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
Geo-E-xxx	Major Elective I	3	1
Geo-E-xxx	Major Elective II	2	1
Geo-E-466	Drilling Engineering	2	1
Min-E-471	Tunneling and Excavation Engineering	3	1
Geo-E-498	Final Year Design Project I	0	3
QT-401	Translation of the Holy Quran-IV	1	0

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
Geo-E-482	Environmental Geological Engineering	3	1
Geo-E-xxx	Major Elective-III	2	1
Geo-E-xxx	Major Elective-IV	2	1
Geo-E-499	Final Year Design Project II	0	3
CS-462	Data Mining	3	0

Note: Field Geology camp and surveying camp are mandatory

At least 6-8 weeks Industrial Training/Internship is mandatory for all students after 3rd year.

LIST OF MAJOR BASED CORE (DEPTH) ELECTIVES COURSES

These are proposed engineering elective courses and the HEIs may further add or choosecourses as per their program objectives and needs.

MAJOR ELECTIVE – 1			MAJOR ELECTIVE – 2		
Geotechnical and Rock Engineering (GRE)	**Natural Energy ResourceExploration (NERE)**	**Geo-Environmental Engineering (GEE)**	**Geotechnical and RockEngineering (GRE)**	**Natural Energy ResourceExploration (NERE)**	**Geo-Environmental Engineering (GEE)**
Geotechnical Engineering–II (*Geo-E-472*) (Pre-requisite Geo-E-351)	Reservoir Engineering (*Geo-E-473*)	Environmental Impact Assessment and Management (*Geo-E-474*)	Geotechnical Site Investigation (*Geo-E-461*)	Seismic Data Processing and Interpretation (*Geo-E-479*) (Pre-requisite Geo-E-364)	Risk Assessment in Environmental Studies (*Geo-E-464*)
Statistical Methods in Geology and Engineering (*Geo-E-476*)	Resource Engineering (*Geo-E-496*)	Exploration and Environmental Geochemistry (*Geo-E-478*)	Fluvial Processes (*Geo-E-462*)	Surficial Processes, Sedimentation and Stratigraphy (*Geo-E-463*)	Geological Aspects of Hazardous Waste Management (*Geo-E-465*)

MAJOR ELECTIVE – 3			MAJOR ELECTIVE – 4		
Geotechnical and Rock Engineering (GRE)	**Natural Energy ResourceExploration (NERE)**	**Geo-Environmental Engineering (GEE)**	**Geotechnical and RockEngineering (GRE)**	**Natural Energy ResourceExploration (NERE)**	**Geo-Environmental Engineering (GEE)**
Ground Improvement and Geosynthetics (*Geo-E-495*)	Petrophysics and Well Logging (*Geo-E-483*) (Pre-requisite Geo-E-245)	Environmental Soil Science (*Geo-E-494*)	Pavement and FoundationEngineering (*Geo-E-481*)	Production Engineering (*Geo-E-488*)	Environmental Data Analysis (*Geo-E-489*)
Geomorphology and Terrain Analysis (*Geo-E-484*)	Petrogenesis and Metallogenesis (*Geo-E-486*)	Site RemediationEngineering (*Geo-E-487*)	Analysis of Rock Structures (*Geo-E-491*)	Carbonate Sedimentology (*Geo-E-492*)	Recycling and Sustainable Engineering (*Geo-E-493*)

DEPARTMENT OF PETROLEUM & GAS ENGINEERING

Dean
Prof. Dr. Tauseef Aized

Chairman
Prof. Dr. Muhammad Khurram Zahoor

Associate Professor
Dr.- Ing. Faisal Mehmood

Assistant Professors
Engr. Azam Khan
Dr.- Ing. Muhammad Haris
Dr. Arshad Shehzad Ahmad Shahid

Lecturers
Mr. Muhammad Rizwan Latif
Dr. Muhammad Kashif Ali
Mr. Hasan Jehanzaib
Ms. Mahwish Akram

Introduction

The Department of Petroleum & Gas Engineering has the distinction of being the pioneer in the country to offer degree programs in Petroleum & Gas Engineering. It was first instituted in 1969 as a division of the Mining Engineering Department. Realizing the importance of discipline and the department by the national petroleum sector, a full-fledged department of Petroleum & Gas Engineering was established in 1975.

The department has been the major contributor towards endowing and establishing the profession of Petroleum Engineering in Pakistan and has always maintained a leading role in petroleum engineering education. It is now almost two decades that the department started the postgraduate programs and has since strengthened its research capabilities over the years. The department offers degree program at Undergraduate and Postgraduate levels in Petroleum & Gas Engineering. The B. Sc. Petroleum & Gas Engineering program at UET Lahore is OBE Level-II accredited by Pakistan Engineering Council (PEC), and has also been ranked (51-100) in the prestigious QS World University Rankings by Subject. This makes the Department of Petroleum & Gas Engineering at UET, Lahore, the first-ever department (of any discipline) in Pakistan to achieve this feat. It is all because of the continuous support of university administration, faculty members, industry partners, alumni and students.

Mission
To transform young brains into brilliant Petroleum Engineers, through modern teaching and research, to achieve professional excellence in oil and gas industry.

Program Education Objectives (PEOs)
PEO-01: To equip graduates with updated engineering knowledge and research skills for examining and solving complex industry problems.
PEO-02: To enhance graduates' interpersonal, teamwork and management skills while focusing on socio-economic development in an eco-friendly manner.
PEO-03: To develop an aptitude for lasting personal capacity-building through continued professional development, along with integrity and a sense of ethical norms and values.

The curriculum is diversified and includes courses in Geo-Energy Resources, Field Operations, Production Engineering, Artificial Lift Methods, Reservoir Engineering/ Management, Petroleum Fluid Properties, Enhanced Oil Recovery Techniques, Well Testing, Well Logging, Natural Gas Transmission & Distribution, Rock Properties, Petroleum Economics, Storage Problems and many other related subjects. In addition to this, strong support of basic sciences courses at different levels is also a part of the curriculum.

Actual field data and related problems are included in the courses to develop a field-oriented approach among the students. The spread of the course contents is broad enough to groom the graduates for any major area of petroleum engineering profession. Students are provided with opportunities to visit oil and gas fields to familiarize themselves with the tasks and operations they have to undertake in their professional career.

Laboratories and Other Facilities
The department has the following laboratories to meet the academic and research needs of both students and faculty members:
- Computer/Reservoir Simulation
- Drilling Engineering
- Integrated Petroleum Engineering
- Petroleum Reservoir Fluids
- Petrophysics

The department has the facility of a well-stocked library as well. The library is features with more than 2000 books. The Japanese aid through JICA Program for laboratory equipment resulted in upgraded laboratories. Apart from university merit scholarships, students could avail scholarships from the local industry, District Government and Zakat Fund. Majority of students get financial support from these scholarships.

The research areas of the faculty include reservoir engineering, production engineering, drilling engineering, enhanced oil recovery, well testing and reservoir simulation. The department is working on a consolidated program to offer professional courses and consultancy services to the industry. The students have the opportunity to carry out comprehensive research projects related to practical industrial problems as part of their final year projects.

The graduates of the department have been offered well-paid positions in national and multinational companies. Doors of jobs are open for the graduates of the department worldwide as well. Many graduates of the department are serving worldwide including the Middle East, Europe, North America, Africa, etc.

Liaison with the Industry
A key to modern day success in any profession rests with the integrated working environment between different components of that profession. In this regard, it is very important that the institution must have live coordination with relevant industry, so it is true for the Department of Petroleum & Gas Engineering. Even though petroleum industry of Pakistan is clustered in Islamabad and Karachi, the department has successfully managed to establish and strengthen effective coordination.

Students are exposed to the industry through instructional tours, seminars by field experts and summer internships. Thanks to the industry support, majority of our third-year and final-year Undergraduate students avail summer internships.

B.Sc. Petroleum & Gas Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr.
Pet. E-101	Fundamentals of Petroleum Engineering	3	0
CSC-100	Applications of Information and Communication Technologies	2	1
HU-111L	Communication Skills	0	1
IS-102	Islamic Studies/ Ethics (For non-Muslim Students)	3	0
MA-123	Calculus	3	0
ME-120L	Engineering Drawing & Graphics	0	1
Min E-101	Applied Geology	2	1
QT-101	Translation of Holy Quran-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr.
Pet. E-102	Petroleum Geology & Geophysics	3	0
Pet. E-103L	Occupational Health and Safety	0	1
CS-103	Introduction to Computer Programming for Data Science	2	1
CY-171	Petroleum Chemistry	2	1
MA-129	Vector and Complex Analysis	3	0
ME-100L	Workshop Practice	0	1
Phy-115	Applied Physics	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr.
Pet. E-203	Petrophysics	2	1
Pet. E-204	Drilling Engineering-I	3	1
CE-216	Strength of Materials	2	1
EE-201	Electrical Engineering and Electronics	2	1
HU-003	International Language	0	0
HU-212	Civics and Community Engagement	2	0
MA-225	Differential Equations and Transforms	3	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr.
Pet. E-201	Reservoir Geomechanics	2	0
CE-233	Fluid Mechanics	2	1
Ch. E-253	Applied Thermodynamics	2	1
HU-200	Technical Report Writing	3	0
IS-202	Ideology and Constitution of Pakistan	3	0
MA-240	Numerical Analysis	2	1
QT-201	Translation of Holy Quran-II	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr.
Pet. E-314	Reservoir Engineering	3	1
Pet. E-318	Properties of Reservoir Fluids	3	1
Pet. E-321	Natural Gas Processing and Transportation	3	1
Pet. E-323	Field Operations in Petroleum Engineering	3	0
MGT-320	Project Management in Engineering	2	0
QT-301	Translation of Holy Quran-III	1	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr.
Pet. E-311	Well Logging and Interpretation	3	1
Pet. E-315	Petroleum Production Engineering-I	3	1
Pet. E-319	Well Test and Analysis	2	1
XXXXX	Social Science Elective*	2	0
MGT-349	Entrepreneurship	2	0
XXXXX	Elective **	3/ 2	0/ 1

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr.
Pet. E-422	Principles of Reservoir Simulation	2	1
Pet. E-425	Petroleum Production Engineering-II (Pet. E-315)	3	1
Pet. E-461	Internship	0	0
CMPE-442	Machine Learning	3	0
Pet. E- 498	Final Year Design Project (Phase-I)	0	3

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr.
Pet. E-411	Drilling Engineering-II (Pet. E-204)	3	1
Pet. E-427	Reservoir Management	3	1
Pet. E-429	Principles of Enhanced Oil Recovery	3	1
QT-401	Translation of Holy Quran-IV	1	0
Pet. E- 499	Final Year Design Project (Phase-II) (Pet. E-498)	0	3

*Social Science Elective:
Pet. E-312   Petroleum Economics and Risk Management
IME-371   Engineering Economics

Elective:
Pet. E-301   Geo-Energy Resources
Pet. E-302   Unconventional Resources
Pet. E-303   Well Completion
Pet. E-304   Offshore Field Development
Pet. E-305   Principles of Corrosion Control
Ch. E-352   Chemical Technology of Petroleum
Ch. E-361   Instrumentation and Control
Min-E-359   Surveying & Levelling

DEPARTMENT OF ARCHITECTURE

Dean
Prof. Dr. Rizwan Hameed

Chairperson
Dr. Munazzah Akhtar

Professor Emeritus
Prof. Dr. Neelam Naz

Associate Professors
Dr. Munazzah Akhtar
Ar. Quratulain Asghar

Assistant Professors
Dr. Malik Usman Mehmood Awan
Dr. Mamuna Iqbal
Ms. Fatima Javeed

Dr. Maryam Siddiq
Ar. Madiha Zaman
Ar. Qudsia Asif
Ar. Sarah J. Shah

Lecturer
Ar. Hina Nabeel
Ar. Afnan Ahmed

The history of the Department of Architecture is more than 60 years old. It was founded in 1962 and is notable for providing Pakistan's first professional five-year architecture degree program. As a result, the Department has played a key role in the development and creation of the architectural profession in the nation. With about 1,600 graduates, it has a sizable alumni base that has contributed significantly to the development of Pakistan's built environment today.

The Department has accumulated unparalleled knowledge in several areas of the architectural profession throughout the years. At the moment, its faculty is significantly more qualified than that of any other architecture school or department in the nation, as is the scope and depth of its knowledge base. As a result, the Department has not only kept up its position as a leader in architectural education, but it is also well-positioned to break new ground with the specializations it offers. In the same vein, this new professional degree of Bachelor of Science in Interior Design (BSID) is being introduced in the spring of 2025.

The Department of Architecture at UET Lahore's BSID program has several strong advantages that meet the needs of the regional industry as well as more general educational objectives. By empowering the upcoming generation of designers, a bachelor's degree in interior design may assist cultural preservation, enhance the architectural landscape of the city, and promote economic growth in the design sector. Additionally, UET is well-positioned to provide a Bachelor of Science (BS) in Interior Design, which is unique in that it takes a more technical, research-focused, and industry-specific approach than other degrees typically offered. For students seeking a demanding, technically sound education that provides access to specialized positions and further study in the design sector, a bachelor's degree in interior design is advantageous.

Bachelor of Science Degree Program in Interior Design (BSID)

BSID is a four-year study program leading to a professional degree in Interior Design. An interdisciplinary approach is used in interior design, combining expertise in technology, art, environmental psychology, and architecture. With its solid foundations, existing industry ties, and alumni networks, the Department of Architecture will take the lead in encouraging interdisciplinary partnerships and adding a comprehensive perspective on the built environment to the interior design curriculum.

Only students who are ready to dedicate themselves to extensive study sessions are advised to enroll in this rigorous program. Students must visit building sites, do field surveys, and take part in research tours outside of the city as part of a large section of the curriculum that incorporates fieldwork. After completing the sixth semester, students pursuing a BSID degree must also do a 6- to 8-week internship at a professional organization during the summer.

BSID Program Objectives

Lahore is a swiftly growing metropolitan hub with a rising demand for proficient interior designers to facilitate residential, commercial, and public sector developments. A specialized program can provide students with the professional competencies required to fulfill this demand. Interior design is a specialist discipline necessitating formal education in aesthetics, spatial organization, sustainability, and cultural awareness. A Bachelor of Science in Interior Design degree would bridge the skills gap, equipping Lahore with qualified experts who comprehend both local requirements and international design trends. The curriculum fosters economic growth by educating students in interior design, hence promoting entrepreneurship and employment creation. Graduates can enhance the architecture and building sectors and establish their own design enterprises, thereby strengthening Lahore's creative economy.

Lahore possesses a profound cultural and architectural legacy. An interior design program can prioritize ecological practices and culturally informed design, fostering interiors that honor heritage while incorporating modern practicality, which is especially pertinent in the local environment. Presently, there exists a paucity of degree programs in interior design in Pakistan, with a minimal number available in Public Sector Universities. Initiating a program at UET in Lahore will furnish prospective designers with affordable, high-caliber education that previously necessitated studying overseas, so enabling a greater number of students to embark on professions in design.

Department of Architecture Facilities

In addition to its esteemed faculty, the Department of Architecture offers a conducive and intimate working atmosphere. The Department of Architecture has design studios, lecture halls, an internal library, and a well-equipped computer laboratory. Students allocate considerable time in design studios that foster substantial interaction between students and instructors. The expansive inside courtyard functions as a communal area for design and sketching activities, fostering student relationships. The departmental pedagogy asserts that university education must transcend mere vocational training to expand intellectual perspectives and cultivate informed, progressive societal members. Teaching approaches seek to accomplish these goals by delivering a robust knowledge foundation via the official curriculum and fostering a stimulating social and intellectual atmosphere through informal and co-curricular activities. Students are urged to engage in national and provincial events.

Bachelor of Science In Interior Design (BSID)

Year 1

Semester 1

| Course No | Subject (Pre-requisites) | Credit Hours | |
		Th	Pr
ID:100L	Foundation Studio – I	0	6
ID:120L	Visual Communication - I	0	3
Arch:180	Introduction to World Art	2	0
CSC-100	Applications of Information and Communication Technologies	2	1
HU-111L	Communication Skills	0	1
QT-101	Translation of the Holy Quran – I	1	0

Semester 2

| Course No | Subject (Pre-requisites) | Credit Hours | |
		Th	Pr
ID:110L	Foundation Studio – II	0	6
ID:120	Spatial Perception: Light & Colour	2	0
ID:121L	Visual Communication – II	0	3
PHY-102	Physics for Architectural Engineers	2	1
HU-003	International Language	0	0
IS-102	Islamic Studies/Theology/Ethics for Non-Muslims	3	0

Year 2

Semester 3

| Course No | Subject (Pre-requisites) | Credit Hours | |
		Th	Pr
ID:200L	Interior Design Studio – I Pre-Requisite: Foundation Studio – II	0	6
ID:220	History of Interior Design	2	0
ID:221	Materiality in Interior Environments	1	1
ID:222L	Computer Applications in Interior Design - I	0	3
MA-154	Quantitative Reasoning – I	3	0
QT-201	Translation of the Holy Quran - II	1	0

Semester 4

| Course No | Subject (Pre-requisites) | Credit Hours | |
		Th	Pr
ID:210L	Interior Design Studio – II Pre-Requisite: Interior Design Studio	0	6
ID:226L	Computer Applications in Interior Design - II	0	3
ID:ABC	Elective - I	2	0
IS-202	Ideology and Constitution of Pakistan	3	0
MA-259	Quantitative Reasoning – II	3	0

Year 3

Semester 5

| Course No | Subject (Pre-requisites) | Credit Hours | |
		Th	Pr
ID:300L	Interior Design Studio – III Pre-Requisite: Interior Design Studio – II	0	6
ID:320	Interior Lighting & Acoustics	2	1
ID:321	Indoor Landscaping	1	1
ID:ABC	Elective - II	3	0
QT-301	Translation of the Holy Quran– III	1	0
DD ABC	Interdisciplinary Elective – I	3	0
ID 330L	Summer Internship	0	3

Semester 6

| Course No | Subject (Pre-requisites) | Credit Hours | |
		Th	Pr
ID:310L	Interior Design Studio – IV Pre-Requisite: Interior Design Studio – III	0	6
ID:322L	Working Set	0	2
ID:ABC	Elective - III	3	0
HU-200	Technical Report Writing	3	0
DD ABC	Interdisciplinary Elective – II	3	0

Year 4

Semester 7

| Course No | Subject (Pre-requisites) | Credit Hours | |
		Th	Pr
ID:400L	Interior Design Studio – V Pre-Requisite: Interior Design Studio – IV	0	6
ID:401	Design Research Strategies	2	1
ID:421	Interior Urbanism	2	1
QT-401	Translation of the Holy Quran– IV	1	0
DD ABC	Interdisciplinary Elective – III	3	0

Semester 8

| Course No | Subject (Pre-requisites) | Credit Hours | |
		Th	Pr
ID:499L	Interior Design Studio – Thesis Pre-Requisite: Interior Design Studio – V	0	6
MGT-349	Entrepreneurship	2	0
HU-212	Civics and Community Engagement	2	0
DD ABC	Interdisciplinary Elective – IV	3	0

Interior Design Electives

	Pool of Courses for Elective: I	Cr. Hrs Th	Cr. Hrs. Pr
ID:160	Interior Architecture in Pakistan	2	0
ID:161	Contemporary Issues in Design	2	0
ID:260	History of Design in Non-western Cultures	2	0
ID:261	History of Design in Western Cultures	2	0
ID:262	Futuristic Interiors	2	0
ID:263	Evolving Issues in Interior Design	2	0
	Pool of Courses for Elective: II & III		
ID:380	Interior Architectural Design for Adaptive Reuse	1	2
ID:381L	Designed Objects for Interiors - Studio	0	3
ID:382	Thermal Design for Interior Environments	2	1
ID:383	Scenography	1	2
ID:384	Photography for Architectural Interiors	0	3
ID:385L	Prototyping for Furniture	0	3
ID:386	Sustainability in Interior Design	1	2
ID:387	Hospitality Design Seminar	1	2
ID:388	Building Systems and Services	2	1
Interdisciplinary Electives Pool* (UET Courses from other Departments & Programs)			
		Cr. Hrs Th	Cr. Hrs. Pr
Arch:321	Building Services	2	1
Arch:360L	Immersive Technologies Studio	0	3
Arch:361L	Introduction to Grasshopper	0	3
Arch:362L	BIM Scripting	0	3
Arch:363L	Architectonics	0	3
Arch:380	Environmental Psychology	3	0
Arch:443	Climate Change and the Built Environment	3	0
Arch:450	Intelligent System Design	3	0
Arch:451	Computational Scripting in Architecture	3	0
Arch:452	Advanced Visual Scripting	3	0
Arch:560L	Architectural Photography	0	3
Arch:561L	Digital Design Studio	0	3
Arch:562L	Architecture and Digital Fabrication	0	3
Arch:580	Theories of Digital Design	3	0
Arch:581	Housing Issues in Pakistan for Architects	3	0
Arch:582	Universal Design Principles	3	0
Arch:583	Earthquake Architecture	3	0
Arch:584	Sustainable Architecture	3	0
Arch:585	Anthropology	3	0
Arch:586	Disaster Resilient Architecture	3	0
IME:253	Work, Study and Ergonomics	2	2
PID-216	Aesthetics	2	0
PID:403	3. Furniture Design / 4. Digital Interactive Design / 7. Additive Manufacturing / 8. Game Design	2	2
GeoE-353	Introduction to GIS and Remote Sensing	2	1
CSC102	Programming Fundamentals	3	1
CS103	Introduction to Computer Programming for Data Science	2	1
CSC103	Object Oriented Programming (Pre-Req CSC102)	3	1
CSC250	Applications of Artificial Intelligence (Pre-Req CS103)	2	1
CSC491	3D Game Development	3	0
ES-204	Ecology & Environment	3	0
ES-310	Biodiversity & Conservation	2	1
ES-402	Environmental Impact Assessment	2	1

* Courses offered under Interdisciplinary Electives will be selected by the Department from this pool

Bachelor's of Architecture

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
Arch:100	Foundation Studio – I	0	6
Arch:121L	Visual Communication -I	0	3
Arch:180	Introduction to World Art	2	0
MA-234 / MA-114	Quantitative Reasoning 1 / Applied Mathematics	3	0
HU-102	Functional English	3	0
QT-101	Translation of the Holy Quran	1	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
Arch:110	Foundation Studio – II	0	6
Arch:122	History of Architecture – I	2	0
Arch:120	Materials and Construction – I	1	1
Arch:124L	Visual Communication – II	0	3
PHY-102	Physics for Architectural Engineers	2	1
IS-102	Islamic Studies	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
Arch:200	Architectural Design Studio – I	0	6
Arch:220	Structural Systems – I	1	1
Arch:221	Environmental Control Systems	2	0
Arch:222L	Computer Applications in Architecture – I	0	3
Arch:223	Materials and Construction – II	1	1
MA-259 / MA-141	Quantitative Reasoning 2 / Applied Statistics	3	0
QT-201	Translation of the Holy Quran	1	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
Arch:210	Architectural Design Studio – II	0	6
Arch:224	History of Architecture – II	2	0
Arch:225	Structural Systems – II	1	1
Arch:226L	Computer Applications in Architecture – II	0	3
IS-202	Ideology and Constitution of Pakistan	3	0
CS103 / CE-150A	Introduction to Computer Programming for Data Science Computer Programming and Applications of ICT	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
Arch:300	Architectural Design Studio –III	0	6
Arch:320	Energy Efficient Architecture	2	0
Arch:321	Building Services	2	1
Arch::xxx	Elective – I	0	3
DD ABC	Interdisciplinary Elective – I	2	1
QT-301	Translation of the Holy Quran	1	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
Arch:310	Architectural Design Studio –IV	0	6
Arch:322L	Construction Drawings	0	2
Arch:323	Interior Design	2	1
Arch:xxx	Elective – II	0	3
HU-221	Technical Writing and Presentation Skills	3	0
Arch:324L	Internship		3

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
Arch:400	Architectural Design Studio – V	0	6
Arch:420	Architectural Theory and Criticism	3	0
Arch:421	Urban Design	2	0
Arch:xxx	Elective – III	3	0
DD ABC	Interdisciplinary Elective – II	2	1
QT-401	Translation of the Holy Quran	1	0

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
Arch:410	Architectural Design Studio –VI	0	6
Arch:422	Urban Design Studio	0	2
Arch:xxx	Elective – IV	3	0
DD ABC	Interdisciplinary Elective – III	3	0
Arch:423	Conservation of Historic Buildings	2	0

Year 5

Semester 9

Course No	Subject (Pre-requisites)	Th	Pr
Arch:500	Thesis Design – I	0	4
Arch:520	Architectural Research Methods & Report Writing	2	0
Arch:521	Landscape Architecture	2	1
Arch:xxx	Elective – V	0	3
DD ABC	Interdisciplinary Elective – IV	3	0
MGT-318	Entrepreneurship and Management	2	0

Semester 10

Course No	Subject (Pre-requisites)	Th	Pr
Arch:599A	Thesis Design – II	0	0
Arch:xxx	Elective – VI	3	3
Arch:523	Architectural Practice and Management	2	2
MGT-110/ HU-212	Social Responsibility / Civics and Community Engagement	2	2

DEPARTMENT OF CITY & REGIONAL PLANNING

Dean
Prof. Dr. Rizwan Hameed

Chairman
Prof. Dr. Shaker Mahmood Mayo

Assistant Professors
Dr. Humaira Tabassum
Ms. Saima Rafique

Professors
Dr. Rizwan Hameed
Dr. Obaidullah Nadeem
Dr. Shaker Mahmood Mayo
Dr. Ijaz Ahmad
Dr. Amer Aziz

Associate Professors
Dr. Muhammad Asim

Visiting Faculty
Ms. Hania Arif
Ms. Aleeza Zia
Ms. Aisha Aziz
Mr. Zain ul Abdin
Mr. Nadeem
Mr. Murad Ali
Dr. Kashif Ali
Dr. Nadeem Feroze
Dr. Muhammad Farooq

Introduction
The Department of City and Regional Planning (DCRP) has been contributing to nation building through its graduates since 1962. It is an advanced planning institution in Pakistan, offering top quality education. The teaching here focuses on equipping the students with all essential skills to prepare them for higher education and ethical professional practice. The faculty is highly educated with many members holding foreign qualifications. They actively conduct research to find innovative solutions to plan and manage human settlements in a sustainable manner. The Department attracts international students due to its inclusive and vibrant environment. The detail of the department and the faculty can be accessed through university weblink https://crp.uet.edu.pk/.

National and International Recognition
The Department aspires to rise as one of the best and world-renowned centers of excellence in City and Regional Planning education, research, and advisory services. In this context it is worth mentioning that the B.Sc., M.Sc., and Ph.D. degrees offered by the Department are recognized and accredited by the Higher Education Commission (HEC), Pakistan Council of Architects and Town Planners (PCATP), and Institute of Planners Pakistan (IPP). In addition, the Department has long-established and time-honored recognition by International Institutes of City and Regional Planning and the associated

professional bodies all over the world such as Asian Planning Schools Association (APSA). The graduates of this Department are also eligible to get registered with international bodies of professional planners such as, American Planning Association (APA), Royal Town Planning Institute (RTPI), International Society of City and Regional Planners (ISOCARP) etc. This has also enabled several of our graduates to work as city planning, development, and management experts in various countries of the developed and developing world.

International Linkages and Collaborations

The Department has established academic links with other institutions of related fields within Pakistan and abroad. Our master's degree courses are developed through foreign link programs. The Department has signed various Memorandum of Understandings with national and international organizations and universities, seeking collaboration in the areas of research, teaching and exchange of students and teachers. The DCRP, in collaboration with Technische Universität Dortmund, Germany, has entered a 3-years (2022-24) project entitled "Planning in Germany and Pakistan, Responding Challenges of Climate Change through Intercultural Dialogue" funded by DAAD (German Academic Exchange Service). In the continuation of this collaboration, faculty, and students of DCRP attended summer school in Technical University of Dortmund, Germany from 12th to 21st August 2022, from 15th to 22nd June 2023, and from 11th to 18th May 2024.

DCRP organized winter school and international conference in collaboration with Technical University Dortmund, Germany from 19th to 23rd December 2022, on 21st to 26th November 2023, and again from 16th to 24th November 2024. The events were attended by international delegates of Technical University Dortmund Germany, and University of Philippines, Philippines and faculty members and students of three national level universities i.e. University of Engineering and Technology (UET), Lahore, Lahore College for Women University (LWCU), Lahore and National University of Science & Technology (NUST), Islamabad.
Some institutions who have collaborated with the Department in the past are:

Technische Universität Dortmund, Germany	Parliamentary SDGs Secretariat, National Assembly of Pakistan
Northumbria University, UK	Government College University, Lahore
International Emergency Team, UK	University of Liverpool, UK
Punjab Emergency Services, Government of Punjab	Heriot Watt University, Edinburgh, UK
Technische Universität Berlin, Germany	University of Edinburgh, United Kingdom (UK)
Trier University, Germany	University of Philippines, Philippines

Courses of Study
Undergraduate Programs
- B.Sc. City and Regional Planning (CRP)

Postgraduate Programs
- M.Sc. City and Regional Planning (CRP)
- M.Sc. Community Development and Environmental Management (CDEM)
- M.Sc. Disaster Management (DM)
- Ph.D. City & Regional Planning (CRP)

B.Sc. City & Regional Planning Course
The curriculum for the eight semesters of B.Sc. course in City & Regional Planning is designed to produce professionals who can serve as development managers of urban and rural areas. Several new courses are introduced, considering the market demands, entrepreneurial skills, and cutting-edge technologies.

The graduates of this Department are trained not only in planning and engineering subjects but also in management and social sciences. City and Regional Planning is an interdisciplinary field which deals with the social, economic, and physical aspects of society and the built environment. Accordingly, the department offers related subjects such as Active Citizenship and Development Planning, Sociology, Entrepreneurship, Finance Planning and Management, Development Economics, Climate Change Adaptation and Disaster Management, Urban Regeneration and Conservation, Master Planning, Estate Management, Transportation Planning, Housing and Urban Development, and Urban Design. Moreover, the students are equipped with related software techniques including ArcGIS, AutoCAD, SPSS, Sketchup, 3D Max, Photoshop, Primavera, EPANET, HCS, TransCAD, Vissim and languages such as Python and C++. Along with these teaching communication skills, survey planning and dealing with people are a crucial part of the training in the department.

Practical Work
Cities and regions are the real field laboratories for Town Planners and proper functioning of urban planning contributes towards better life standards. Therefore, practical work is included in the course work of four years to train students to deal with real world planning issues.
The assignments consist of data collection from different institutions and public, statistical, and theoretical analysis, and preparation of policies and plans for improvement of people's life . Notable practical works include preparation of Master Plans, Housing Scheme Planning and Development, Transportation Plans, Urban Regeneration and Conservation Planning, Environmental Planning, Urban Design, Planning for New Towns, Industrial Estate Planning, and Landscape Design. These also involve extensive use of spatial and planning data analysis software. Overall, the students are equipped with necessary analytical and presentation skills demanded by the public and private sector employers.

Opportunities for Field Knowledge
In order to enable our students to understand complexities of human settlements and strike a balance between the environment and development, academia and field experts from technologically advanced countries like Germany, England and the New Zealand etc. are invited to deliver extension lectures.

Moreover, seasoned Town Planners and allied professionals from various Government departments and private consultancies are also invited to deliver guest

lectures both at campus as well as online. The Department also arrange 6-8 weeks internship for 3rd and final year undergraduate students to gain hands-on practice in the field of town planning and to become viable and experienced job applicants when seeking employment opportunities after graduation.

Where are Our Graduates Working?

During recent years, City and Regional Planning has emerged as a popular discipline and a profession with very high employment rate. Some of the recruiting agencies in the government sector include:

- Universities offering City & Regional Planning programs
- Planning Commission of Pakistan
- Cantonment Boards
- Ministry of Housing, Environment and Urban Affairs
- The Urban Unit, Punjab & Khyber Pakhtunkhwa
- Punjab Housing and Town Planning Agency
- Federal Government Employees Housing Authority
- Armed Forces (Pakistan Army, Military Engineer Services and Design Directorates)
- Estate Management Directorates of Civil Aviation Authority and Pakistan Railways
- NDMA, PDMAs and Punjab Emergency Services
- Rescue 1122
- Development Authorities (LDA, CDA, MDA, GDA, KDA, GDA, SDA, RDA, RUDA, LCBDDA and the like)
- Local Government and Community Development Department (Metropolitan/Municipal Corporations, and District Councils)

Furthermore, there are numerous employment opportunities with the local, national, and international NGO's, private planning consultancy firms and land developers. Our graduates are also extensively working in the real estate sector with the private entities such as Graana.com, Zameen.com, Behria Town, DHAs, and other land developers. The City & Regional Planning professionals hold key portfolios at the local, provincial, and national level institutions.

Learning Space Facilitation at the Department

The department comprises of all necessary facilities which include seminar hall, lecture theatre, drawing studio, computer lab, conference room, research room and library. All the lecture rooms/ design studios are equipped with modern audio-visual aid such as interactive smart boards with ultra-short throw multimedia projectors and public address systems. A state-of-the-art GIS laboratory is recently established with latest desktop computers having Core i7 processors to facilitate use of satellite imageries for spatial data analysis and planning. The computers are connected with a high-speed server based local network and internet facility. The laboratory is also equipped with modern scanning and printing facilities. The department conference room has also been equipped with a video camera to hold the online lectures and meetings.

Library and Allied Facilities

The Department has a well-stocked library with over 3,300 books including a wide range of latest books, international journals, reports, and other documents related to the field of City & Regional Planning. The Departmental library was established with the assistance of the British Government. Several new books are added every year. The Department has also got the latest mapping/ planning and survey equipment such as global positioning systems and total station, digital planimeters, pantographs, color plotters, laser jet printers and scanners. In addition, equipment like noise level meters for noise pollution studies, Spectro photometer for chemical testing of water and flue gas analyzer for automotive and industrial emissions testing are also available. The Department has established state-of-the-art seminar and conference rooms. Both rooms are air-conditioned and equipped with smart boards. Symposia and extension lectures of world-renowned research scholars, professional planners and students' discussion forums are held in these rooms.

B.Sc. City & Regional Planning

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CRP-101	Introduction to City and Regional Planning	3	0
CRP-102	Technical Drawing	0	2
HU-001	Functional English	3	0
CRP-103	Computer Aided Design and Modeling	0	2
CE-101	Elementary Surveying	3	1
MA-114	Applied Mathematics	3	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CRP-104	Mapping and Remote Sensing	1	2
CRP-105	History of Urban Planning	2	0
CRP-106	Transportation Engineering	2	1
IS-101	Islamic and Pakistan Studies-I /Ethics and Pakistan studies –I	3	0
MA-141	Applied Statistics	3	0
CY-131/ PHY110	Environmental Chemistry I / Applied Physics*	2	1
QT-101	Translation of The Holy Quran - 1	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CRP-201	Environmental Planning and Management	3	1
CRP-202	Architectural Design	1	2
CRP-203	Applied Geography	2	0
CRP-204	Information Technology and Database Management	0	3
HU-200	Technical Report Writing	3	0
CRP-205	Development Economics	2	0
PID-207	Workshop Practice (Model Making)	0	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CRP-206	Sociology	2	0
CRP-207	Housing and Urban Development	2	1
CRP-208	Transportation Planning	2	1
CRP-209	Introduction to GIS	1	1
IS-201	Islamic and Pakistan Studies/Ethics and Pakistan Studies-II	3	0
HU-111	Communication skills	0	1
CRP-210	Planning Surveys	1	2
QT-201	Translation of The Holy Quran - 2	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EnE-308	Environmental Engineering	3	1
CRP-304	Planning Law	3	0
CRP-305	Urban Regeneration and Conservation	2	1
CRP-306	Planning of New Towns	2	2
CRP-307	GIS Analysis and Applications	1	1
CRP-308	Climate Change Adaptation and Disaster Management	2	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CRP-309	Research Methods	2	1
CRP-310	Industrial Estate Planning and Design	1	1
CRP-311	Landscape Design	1	1
CE-301	Building Construction Technology	2	1
CRP-313	Urban Design	2	1
CRP-314	Active Citizenship and Development Planning	2	0
QT-301	Translation of The Holy Quran - 3	1	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CRP-401	Master Planning – I	2	2
MGT-402	Finance Planning and Management	2	1
CRP-403	Project Planning and Management	1	1
CRP-404	Professional Planning Practice	1	2
CRP-405	Rural Development Planning	2	0
CRP-406	Project –I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CRP-407	Project-II	0	3
CRP-408	Master Planning – II	1	2
CRP-409	Estate Management	1	1
CRP-410	Land use and Building Control	2	1
CRP-411	Regional Planning	2	1
MGT-413	Entrepreneurship	3	0
QT-401	Translation of The Holy Quran - 4	1	0

DEPARTMENT OF PRODUCT AND INDUSTRIAL DESIGN

Dean
Prof. Dr. Rizwan Hameed

Chairman
Dr.-Ing. Atif Bilal Aslam

Assistant Professor
Ms. Fariha Saeed
Ms. Asma Khalid
Dr. Salman Asghar
Ms. Mona Gulzar
Ms. Anum Shamshad

Lecturers
Ms. Aisha Hameed
Ms. Uroosa Naz
Ms. Neyalish Aman
Ms. Aiman Amjad

Introduction

The Department of Product & Industrial Design was established in the year of 2006 with the aim of generating professionals in the field of Product Design with technological, managerial, and entrepreneurial skills for the emerging needs of the industry. The department provides standard Product Design education at the bachelor level and commenced postgraduate program in the year 2016. The offered courses equip students with skills and knowledge necessary not only for industrial designing but also for the students who can pursue various choices of career after graduation; the graduates will be industrial / product designers, design managers, entrepreneurial, designers for product manufacturers, and trading companies' product design consultancies.

Broadly speaking, the role of the product designer combines art, science, and technology to create tangible three-dimensional goods. Master Program in Product and Industrial Design involves the research and design of the whole range of consumer and capital products. These are as diverse as telephones and transportation, kitchen appliances exhibition systems. Ideally, the industrial designer works as part of a multidisciplinary team involving engineering, production, and marketing.

Inspiring Innovation, Delivering Success

The program is likely to be of interest to students who:

- Have abilities, such as drawing and making that support design activity, as well as the capability to work with technical information.
- Have an interest in the way products and systems relate to people and societies.
- Are interested in technology but want to develop their design creativity and wish to be involved in the whole product development process.
- Are considering marketing but wish to develop new products as part of a marketing strategy.
- Seeking flexibility in their career path.

Product & Industrial Design Curriculum

The curriculum in Product & Industrial Design provides education in three—dimensional design for commercial and artistic production. The curriculum combines Industrial design courses with Art and Design foundation courses, Art History Courses, Design Electives, General Electives, and General Education Units required by the university. The Bachelor of Product and Industrial Design (B.PID) is an innovative four years full-time undergraduate program of study. The Bachelor of Product and Industrial Design may be awarded with honors based on the quality of performance in the program and current Faculty regulations.

The Bachelor of Product Design provides the skills for a career as a professional product designer. It brings together the creative 3D design culture of design, advanced technologies of engineering, and the entrepreneurial spirit of business. The program is designed to appeal to the aspirations of the new generation of young multi-skilled and multi-talented creative entrepreneurs who seek a creative career.

Career Opportunities

The graduates in PID can work as Product & Industrial Designers, graphic designers, packaging designers, project coordinators in Product designers, product merchandisers, art installation designers, and design managers.

Laboratories

The department has the following well-equipped labs to meet the academic needs of the students and teachers:

- Computer
- Digital Graphics
- Wood
- Postgraduate Research

Besides, students use the labs in different subjects of engineering discipline for respective experiments. Also, the department has a library with recent books and periodicals available for the students.

B.Sc. Product & Industrial Design

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
PID-121	Fundamentals of Design -I	2	2
PID-110L	Visual Communication	0	2
PID-114	Materials and Technology – I	1	1
PID-108	History of Creative Arts and Design – I	2	0
CSC-100	Applications of Information and Communication Technologies	2	1
IS-102	Islamic Studies / Ethics (for Non-Muslims Students)	2	0
HU-111L	Communication Skills	3	0
		12	06
	Sub Total	18	

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
PID:122	Fundamentals of Design -II	2	2
PID-123L	Technical Drawing	0	2
PID-119	Materials and Technology – II	1	1
PID-120L	Digital Graphics	0	3
ME-100L	Workshop Practice	0	1
MA-154	Quantitative Reasoning -I	3	0
QT-101	Translation of the Holy Quran -I	1	0
HU-214	Psychology	2	0
		09	09
	Sub Total	18	

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
PID-210	Product Design-I	2	3
PID-202	Ergonomics	2	1
PID-208	History of Creative Art & Design-II	2	0
PID-209L	Computer Aided Design	0	3
HU-221	Technical Writing & Presentation Skills	3	0
HU-003	International Language	0	0
HU-212	Civics and Community Engagement	2	0
		11	7
	Sub Total	18	

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
PID-218	Product Design-II	2	3
IME-253	Work Study & Ergonomics	2	1
PID-221L	Computer Modeling & Rendering	0	3
MA-259	Quantitative Reasoning -II	3	0
IS-202	Ideology and Constitution of Pakistan	2	0
QT-201	Translation of the Holy Quran - II	1	0
		10	07
	Sub Total	17	

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
PID-306	Design Integration-I	2	3
PID-310L	Prototyping	0	3
PID-312	Product Photography	1	2
PID-309L	Product Visualization & Animation	0	3
PHY-301	Packaging Physics	2	1
IS- 101	Fehem-e-Quran I	0	1
		05	13
	Sub Total	18	

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
PID-319	Design Integration-II	2	3
PID-317	Graphic Design	1	2
PID-314	Research Methodology	2	1
PID-318	Introduction to Project Management	1	1
PID-320	Aesthetics	1	1
ME-229	Mechanics of Materials and Machine Design	3	0
QT-301	Translation of the Holy Quran - III	1	0
		11	08
	Sub Total	19	

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
PID-404	Industrial Design	1	3
PID-498	Final Year Project -I	0	4
PID-403	Electives 1. Video production 2. Advanced Ceramics 3. Furniture Design 4. Digital Interactive Design 5. Product Development & Manufacturing 6. Interior Design 7. Additive manufacturing 8. Game Design	2	2
MGT-318	Entrepreneurship and Management	2	0
QT-401	Translation of the Holy Quran - IV	01	0
PID-406L	Internship	0	3
–		6	12
	Sub Total	18	

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
PID-499	Final Year Project -II	0	8
PID-412	Professional Practice	2	1
PID-413	Sustainable Design Practices	2	0
IS- 104	Fehem-e- Quran - II	0	1
		4	10
	Sub Total	14	

DEPARTMENT OF CHEMISTRY

Dean
Prof. Dr. Muhammad Shoaib

Professor Emeritus
Dr. Fazeelat Tahir

Chairperson
Prof. Dr. Farhat Yasmeen

Professor
Dr. Aneela Anwar
Prof. Dr. Farhat Yasmeen

Associate Professor
Dr. Humayun Ajaz
Dr. Arjumand Iqbal Durrani
Dr. Aisha Munawar
Dr. Zahoor Ahmad

Assistant Professor
Ms. Hina Saleem
Dr. Ashi Rashid
Dr. Iqra Muneer

Lecturer
Mr. Asad Abbas

Introduction

The history of Department of Chemistry is as old as 1923. It was known as "Science Department" in the days of Maclagan Engineering College Lahore, which offered the subjects of Chemistry, Physics and Mathematics to Engineering disciplines. However, an independent Department of Chemistry was established in 1961, when Maclagan College of Engineering was upgraded to University, presently University of Engineering and Technology, Lahore. It was a supporting department for teaching applied chemistry courses to engineering disciplines until 1994.

The Department started M.Sc. Applied Chemistry program in 1995. While the M.Phil. program in Chemistry was started in 2001. The Ph.D. program was started in 2004. In 2020, BS Chemistry program started with almost 35 in first intake.

There are several well-equipped laboratories having a number of modern instruments like UV-Visible Spectrophotometer, FTIR, Atomic Absorption Spectrophotometer, GC-FID, GC-FPD, GC-MS, HPLC-UV, High Temperature Furnaces, Polarimeters, Potentiometer, EDAC, Incubator Shaker, High Speed Control Centrifuge, Low Temperature Incubators Vacuum Pumps, Kjehldahl Apparatus, Soxhlet Apparatus, Schilink Lines, some Electrochemical Instruments, Fluorescence Spectrophotometer (cary eclipse),ATR (cary 630 FTIR), Refractometer (Abbemat 500), Polarimeter (MCP 500), Potentiostat, Ultra-Low Temperature Freezer (U360 Innova), Thermo Scientific Barnstead Smart 2 Pure water (2 No.), Eliza Reader Laminar Flow Hoods, Cool Incubators, Dry Incubators, Oven, Freezer, Orbital Shaker, Spectrophotometer, Antibacterial and Antifungal facility, Colony Counter etc. In addition, there is a well-stocked Library and I.T, Computer Laboratory to facilitate the students.

B.Sc. Chemistry

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
HU-111	Communication Skills	0	1
IS-101	Islamic Studies/Pak studies I	3	0
Math-101	Calculus I	3	0
CS-101L	Computing Fundamentals	0	1
Phys-101	Mechanics	3	1
CY- 101	Introduction to Physical Chemistry	2	1
CY-121	Introduction to Inorganic Chemistry	2	0
QT-101	Translation of the Holy Qur'ān-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
HU-221	Technical Writing and Presentation Skills	3	0
IS-201	Islamic Studies/Pak studies II	3	0
Math-105	Statistics	3	0
CY-141	Biochemistry and Biotechnology	3	0
MGT-100	Introduction to Business	3	0
CY-111	Introduction to Analytical Chemistry	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
Math-203	Scientific Programming	2	1
CY-252	Physical Chemistry – I	2	1
CY-222	Inorganic Chemistry – I	2	1
CY-261	Organic Chemistry-I	2	1
CY-201	Environmental Sciences	3	0
CY-205	Analytical Chemistry-I	2	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CY-253	Physical Chemistry – II	2	1
CY-213	Analytical Chemistry II	2	1
---	Any Course of Management Science from Table 1	2	0
CY-262	Organic Chemistry-II	2	1
QT-201	Translation of the Holy Qur'ān-II	1	0
MGT-110	Social Responsibility	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CY-302	Inorganic Chemistry-III	3	1
CY-303	Organic Chemistry-III	3	1
CY-304	Physical Chemistry-III	3	1
QT-301	Translation of the Holy Qur'ān-III	1	0
HU-204	Foreign Languages (Any)	1	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CY-325	Inorganic Chemistry-IV	3	1
CY-364	Organic Chemistry-IV	3	1
CY-315/CY-331	Analytical Chemistry-IV/ Applied Chemistry	3	1
CY-301	Workplace hazardous materials information	2	0
CSC-250	Introduction to Artificial Intelligence	2	1

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CY-4--*	Advanced Paper I	3	0
CY-4--*	Advanced Paper II	3	0
CY-4--*	Experimental Methods	3	0
CY-491	Scientific Report Writing	3	0
QT-401	Translation of the Holy Qur'ān-IV	1	0
CY-492	Internship and Report Writing	0	3
---	Any Course of Social Science from Table 2	2	0

*Three Courses from the field of specialization (Two Theory and one Experimental Methods)

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CY-4--*	Advanced Paper IV	3	0
CY-4--*	Advanced Paper V	3	0
CY-4--*	Experimental Methods	3	0
CY-4--*	Elective Course (Other than the field of specialization)	3	0
CY-499	Capstone Project	0	3
MGT- 318	Entrepreneurship and Management	2	0

*Three Courses from the field of specialization (Two theory and one experimental) Elective Course I (Other than the field of specialization (3 Cr Hrs.)

Table 1: Courses to be offered for Management Science

Course No	Subject (Pre-requisites)
MGT-202	Principles of Management
MGT-203	Principles of Marketing

Table 2: Courses to be offered for Social Science

Course No	Subject (Pre-requisites)
MGT-104	World Today
MGT-105	Introduction to Economics
MGT-106	Economy of Pakistan
MGT-107	Business and Society
HU-214	Psychology

Final Year Subject Specializationn

Final Year Specialization	
Course No.	Specialization Subjects
1&2	Inorganic and Analytical Chemistry
3, 7 & 8	Industrial, Environmental and Polymer Chemistry
4 & 0	Biochemistry and Microbiology
5	Physical and Electrochemistry
6	Organic Chemistry (Organic, Food and Biochemistry)

Inorganic & Analytical Chemistry	
Course No.	Specialization Subjects
CY-411	Spectroscopic Techniques
CY-412	Thermal Analysis
CY-413	Electroanalytical Techniques
CY-414	Statistical Data Handling and Spreadsheets
CY-415	Vacuum Techniques In Analytical Chemistry
CY-416	Physicochemical Methods of Analysis
CY-418	Experimental Methods in Analytical Chemistry I
CY-419	Experimental Methods in Analytical Chemistry II
CY-421	Introduction to Organometallic Chemistry
CY-422	Inorganic Catalysis
CY-423	Principles of Bioinorganic Chemistry
CY-424	Inorganic Chemistry of Main Group Elements
CY-425	Special Topics in Inorganic Chemistry
CY-426	Experimental Methods in Inorganic Chemistry I
CY-427	Experimental Methods in Inorganic Chemistry II

Inorganic & Analytical Chemistry	
Course No.	Specialization Subjects
CY-431	Organic Based Industries
CY-432	Agro Based Industries and Pollution Control
CY-433	Industrial Process Projects of Applied
CY-434	Chemistry Experimental
CY-435	Methods in Industrial Chemistry I
CY-436	Experimental Methods in Industrial Chemistry II
CY-481	Fundamentals of Environmental Chemistry
CY-482	Environmental Toxicology
CY-483	Green Chemistry
CY-484	Environmental Chemistry
CY-485	Environmental Law
CY-486	Projects of energy resources of Pakistan and its management
CY-487	Experimental Methods in Environmental Chemistry
CY-471	Polymer Chemistry

CY-472	Polymer Blends and Composites
CY-473	Degradable Polymeric Materials
CY-474	Polymer Analysis and Characterization
CY-475	Functional Polymeric Materials
CY-476	Experimental Methods in Polymer Chemistry

Organic and Food Chemistry	
Course No.	Specialization Subjects
CY-461	Organic Spectroscopy
CY-462	Heterocyclic and Organometallic Compounds
CY-463	Reaction Mechanism And Reactive Intermediates
CY-464	Natural Products
CY-465	Advance Food Chemistry and Technology
CY-466	Food Laws and Regulations
CY-467	Food Technology in Dairy
CY-468	Experimental Methods in Organic Chemistry
CY-469	Experimental Methods in Food Chemistry
CY-401	Essentials of Microbiology
CY-402	Introduction to Microbiology
CY-403	Chemical Microbiology
CY-441	Structural Biochemistry
CY-442	Biochemistry of Metabolism
CY-443	Informational Macromolecules
CY-444	Bioenergetics
CY-445	Nutritional Biochemistry
CY-446	Advance Protein Chemistry
CY-447	Enzymes and Enzymology
CY-448	Metabolism and Related Diseases
CY-449	Experimental Methods in Biochemistry
CY-404	Experimental Methods in Microbiology

Physical & Electrochemistry	
Course No.	Specialization Subjects
CY-451	Solid State and Material Chemistry
CY-452	Thermodynamics
CY-453	Electrochemistry and Clean Energy
CY-454	Applied Electrochemistry
CY-455	Electro-Kinetics Phenomenon
CY-456	Electrochemical Industrial Processes
CY-457	Quantum Chemistry
CY-458	Physical and Electrochemistry Chemistry Lab I
CY-459	Physical and Electrochemistry Chemistry Lab II

DEPARTMENT OF MATHEMATICS

Dean
Prof. Dr. Muhammad Shoaib

Chairman
Prof. Dr. Muhammad Mushtaq

Professors
Dr. Asma Rashid Butt
Dr. Sabir Hussain
Dr. Qasim Ali Ch.

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Dr. Mustafa Habib
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Dr. Saadia Farid

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Ms. Saima Nazir
Ms. Samina Saeed Khan
Dr. Shamaila Samreen
Dr. Kashif Ali Khan
Dr. Muhammad Shabbir
Dr. Taimoor Iqbal

Lecturers
Mr. Abdur Rehman Khan Salari
Dr. Ali Ovais
Teaching Fellows
Dr. Kanwal Jabeen
Ms. Irfa Elahi
Ms. Rameen Aslam
Ms. Iram Yaqoob
Mr. Rizwan Khalid
Ms. Nimra
Mr. Abdul Manan

Introduction
The Department of Mathematics is one of the oldest departments of the University of Engineering and Technology, Lahore. It was established in 1961. The Department of Mathematics not only runs its own programs like BS Mathematics, M. Phil in Applied Mathematics and Ph.D in Mathematics, but also provides its services to all disciplines of engineering and technology, and business to make their students capable enough to apply the tools of Mathematics for solving the problems occurring in their respective areas of study.

In order to match with emerging trends and future requirements, now the department feels pleasure to the **inclusion of BS Mathematics Program with new specializations Data Science, Artificial Intelligence and Information Technology from Fall-2025.**

Program Educational Objectives (PEOs)
- **PEO-1:** Establish the base for lifelong education by creating essential concepts and equipping the student with necessary techniques, need to start a carrier of research, development, teaching or applications involving mathematics.
- **PEO-2:** Enable them to use the equations of Mathematics describing general laws applying, mainly, inductive logic.
- **PEO-3:** Modeling of Engineering Problems from the Fundamental Laws to create practical system.
- **PEO-4:** Graduates will be capable to critically analyze mathematical problems, taking them from various stages of concept building with problem-solving skills.

Research Extension & Advisory Services
Research is an essential component of the academic pursuits of the faculty members and the postgraduate students. The work of the faculty is published in national and international journals. The Department has a computer laboratory equipped with latest computers along with the internet facility. The Department also offers Mechanics Lab at undergraduate level to various engineering departments. This not only improves the practical training of the students but also develops the skill of viva voce, etc.

BS Mathematics

Year 1

Semester 1					Semester 2			

Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
MATH-101	Calculus-I	3	0		MATH-104	Calculus-II	3	0
MATH-102	Elements of Set Theory and Mathematical Logic	3	0		MATH-105	Statistics	3	0
CSC-100 & 100L	Applications of Information and Communication Technologies	2	1		HU-214 / MGT-105	Psychology / Introduction to Economics	2	0
HU-111	Communication Skills	3	0		CS-103 & 103L	Introduction of Computer Programming for Data Science	2	1
IS-102	Islamic Studies / Ethics for Non-Muslims	2	0		HU-200	Technical Report Writing	3	0
PHYS-101 &101L	Mechanics	3	1		IS-202	Ideology and Constitution of Pakistan	2	0
QT-101	Translation of the Holy Qur'an-I	1	0					

Year 2

Semester 3					Semester 4			

Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
MATH-201	Calculus-III	3	0		MATH-205	Ordinary Differential Equations	3	0
MATH-203	Scientific Programming	2	1		MATH-206	Discrete Mathematics	3	0
MATH-204	Linear Algebra	3	0		MATH-211	Operation Research-I	3	0
PHYS-201 & 201L	Waves and Oscillations	3	1		CSC-250 & 250L	Applications of Artificial Intelligence	2	1
HU-212	Civics and Community Engagement	2	0		PHYS-202	Heat and Thermodynamics	3	0
HU-204	Any Foreign Language	1	0		QT-201	Translation of the Holy Qur'an-II	1	0

Year 3

Semester 5					Semester 6			

Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
MATH-301	Real Analysis-I	3	0		MATH-307	Classical Mechanics	3	0
MATH-302	Vector and Tensor Analysis	3	0		MATH-308	Partial Differential Equations	3	0
MATH-303	Probability	3	0		MATH-309	Complex Analysis	3	0
MATH-304	Topology	3	0		MATH-310	Differential Geometry	3	0
MATH-312	Operation Research-II	3	0		MATH-311	Real Analysis-II	3	0
MATH-305	Modern Algebra-I	3	0		QT-301	Translation of the Holy Qur'an-III	1	0
					MGT-349	Entrepreneurship	2	0
					MATH-312	Internship*	0	0

* Six to Eight Week Internship will be compulsory for degree requirement.

Year 4 (Applied Mathematics)

Semester 7					Semester 8			

Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
MATH-401	Numerical Analysis	3	0		MATH-404	Fluid Mechanics-II	3	0
MATH-402	Fluid Mechanics-I	3	0		MATH-405	Integral Equations	3	0
MATH-403	Mathematical Physics	3	0			Elective – 3	3	0
	Elective -1	3	0			Elective – 4	3	0
	Elective -2	3	0		MATH-460	Project	3	0
					QT-401	Translation of the Holy Qur'an-IV	1	0

* Elective Subjects (Applied Mathematics)

- ❖ MATH-406   Electromagnetism
- ❖ MATH-407   Analytical Dynamics
- ❖ MATH-408   Quantum Mechanics
- ❖ MATH-409   General Relativity
- ❖ MATH-410   Special Relativity
- ❖ MATH-411   Elastic Theory

Fourth Year 7th Semester (Computational Mathematics)

Course Code	Course Title	Credit Hours
MATH-401	Numerical Analysis	3
MATH-403	Mathematical Physics	3
MATH-416	Optimization Theory	3
	Elective-1	3
	Elective-2	3
	Total:	15

Fourth Year 8th Semester (Computational Mathematics)

Course Code	Course Title	Credit Hours
MATH-405	Integral Equations	3
MATH-412	Numerical Solutions of Differential Equations	3
	Elective-3	3
	Elective-4	3
MATH-460	Project	3
QT-401	Translation of the Holy Qur'an-IV	1
	Total:	16

* Elective Subjects (Computational Mathematics)

- ❖ MATH-417   Mathematical Modeling and Simulation
- ❖ MATH-418   Dynamical Systems
- ❖ MATH-419   Mathematical Biology
- ❖ MATH-420   Computational Fluid Dynamics

Fourth Year 7th Semester (Pure Mathematics)

Course Code	Course Title	Credit Hours
MATH-400	Number Theory	3
MATH-401	Numerical Analysis	3
MATH-403	Mathematical Physics	3
	Elective-1	3
	Elective-2	3
	Total:	15

Fourth Year 8th Semester (Pure Mathematics)

Course Code	Course Title	Credit Hours
MATH-405	Integral Equations	3
MATH-441	Functional Analysis	3
	Elective-3	3
	Elective-4	3
MATH-460	Project	3
QT-401	Translation of the Holy Qur'an-IV	1
	Total:	16

* Elective Subjects (Pure Mathematics)

- ❖ MATH-442   Measure Theory
- ❖ MATH-443   Algebraic Topology
- ❖ MATH-444   Convex Analysis
- ❖ MATH-445   Modern Algebra II (Rings and Modules)
- ❖ MATH-446   Advanced Group Theory
- ❖ MATH-447   Axiomatic Set Theory
- ❖ MATH-448   Riemannian Geometry
- ❖ MATH-449   Galois Theory

BS Mathematics
Specializations with Data Science, Artificial Intelligence and Information Technology

Year 1							
Semester 1				**Semester 2**			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr			Th	Pr
MATH-101	Calculus-I	3	0	MATH-104	Calculus-II	3	0
MATH-102	Elements of Set Theory and Mathematical Logic	3	0	MATH-105	Statistics	3	0
CSC-100 & 100L	**Applications of Information and Communication Technologies**	**2**	**1**	HU-214 / MGT-105	Psychology / Introduction to Economics	2	0
HU-111	Communication Skills	3	0	**CSC-102&102L**	**Programming Fundamentals**	**3**	**1**
IS-102	Islamic Studies / Ethics for Non-Muslims	2	0	HU-200	Technical Report Writing	3	0
PHYS-101 &101L	Mechanics	3	1	IS-202	Ideology and Constitution of Pakistan	2	0
QT-101	Translation of the Holy Qur'an-I	1	0				

Year 2							
Semester 3				**Semester 4**			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr			Th	Pr
MATH-201	Calculus-III	3	0	MATH-205	Ordinary Differential Equations	3	0
CSC-103&103L	**Object Oriented Programming**	3	1	MATH-206	Discrete Mathematics	3	0
MATH-204	Linear Algebra	3	0	MATH-211	Operation Research-I	3	0
PHYS-201 & 201L	Waves and Oscillations	3	1	**CSC-200 & 200L**	**Data Structures and Algorithms**	3	1
HU-212	Civics and Community Engagement	2	0	PHYS-202	Heat and Thermodynamics	3	0
HU-204	Any Foreign Language	1	0	QT-201	Translation of the Holy Qur'an-II	1	0

Year 3							
Semester 5				**Semester 6**			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr			Th	Pr
MATH-301	Real Analysis-I	3	0	MATH-307	Classical Mechanics	3	0
MATH-302	Vector and Tensor Analysis	3	0	MATH-308	Partial Differential Equations	3	0
MATH-303	Probability	3	0	MATH-309	Complex Analysis	3	0
MATH-304	Topology	3	0	MATH-311	Real Analysis-II	3	0
MATH-441	Functional Analysis	3	0	MGT-349	Entrepreneurship	2	0
CSC-202 & 202L	**Artificial Intelligence**	2	1	QT-301	Translation of the Holy Qur'an-III	1	0
				Elective -1		3	0
				MATH-312	Internship *	0	0

* Six to Eight Week Internship will be compulsory for degree requirement.

Year 4 (Applied Mathematics)							
Semester 7				**Semester 8**			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr			Th	Pr
MATH-401	Numerical Analysis	3	0	MATH-404	Fluid Mechanics-II	3	0
MATH-402	Fluid Mechanics-I	3	0	MATH-405	Integral Equations	3	0
MATH-403	Mathematical Physics	3	0	**Elective – 4**		3	0
Elective -2		3	0	MATH-460	Project	3	0
Elective -3		3	0	QT-401	Translation of the Holy Qur'an-IV	1	0

*Elective Courses for Data Science, Artificial Intelligence and Information Technology

Data Science	Artificial Intelligence	Information Technology
DS370 Data Mining	CSC-351 Machine Learning	CSC-415 Web Technologies
DS 371 Data Visualization	CSC-104 Database Systems	CSC-203 Computer Networks
DS-377 Artificial Neural Networks and Deep Learning	CSC-354 Computer Vision and Image Processing	CSC-204 Software Program Management
CSC-370 Fundamentals of Cyber Security	CSC-422 Management Information Systems	CSC-410 Mobile Application Development
CSC-354 Computer Vision and Image Processing	CSC-451 Natural Language Process	CSC-413 E-Commerce
CSC-422 Management Information Systems	DS-377 Artificial Neural Networks and Deep Learning	CSC-414 Enterprise Application Development
CSC-481 Cloud Computing	CSC-201 Information Security	CSC-422 Management Information Systems

DEPARTMENT OF PHYSICS

Dean
Prof. Dr. Muhammad Shoaib

Chairman
Prof. Dr. Muhammad Shahid Rafique

Professors
Prof. Dr. Rehana Sharif
Prof. Dr. Khurram Siraj

Associate Professors
Dr. Rashid Jalil
Dr. Ibtsam Riaz
Dr. Abdul Waheed Anwar

Assistant Professors
Dr. Umber Kalsoom
Dr. Usman Ilyas
Dr. Muneeb Irshad
Dr. Saba Majeed Gondal
Dr. Amina Afzal
Dr. Jaweria Zartaj Hashmi
Dr. Saima Shaukat
Dr. Haamid Jamil
Dr. Sofia Siddique
Dr. Khadija tul Kubra

Laser and Optronics Centre
Director
Prof. Dr. Muhammad Shahid Rafique

Centre for Nanotechnology and Advanced Materials Research (CNAMR)
Director
Prof. Dr. Muhammad Shahid Rafique

Courses of study
Undergraduate programs
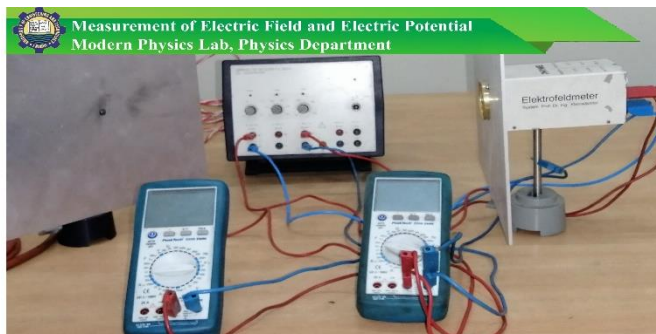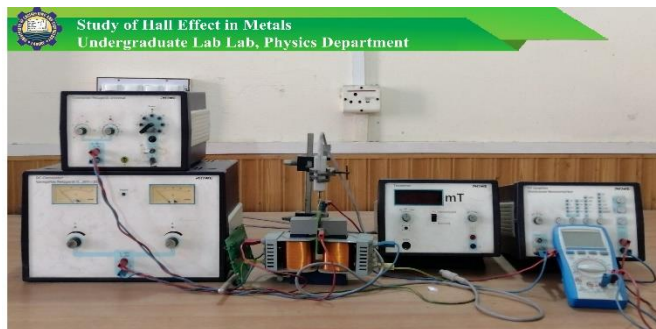- Bachelor of Science (B.S.) Physics (4 Years Program)

Postgraduate programs
- M.Phil. Applied Physics
- M.Phil. Nano Science and Technology
- Ph.D. Physics

The faculty is highly qualified and motivated including eighteen (18) members with Ph.D. degrees. The interdisciplinary curriculum draws on faculty expertise in many areas of Applied Physics which includes advanced coursessuch as Laser Physics, Plasma Physics, Nanotechnology, Health & Medical Physics, Photonics & Optoelectronics, Applied Optics, Applied Atomic & Nuclear Physics, Solid State Physics, Electronics, Computer Science and its applications, etc.

The Department has produced **37** Ph.D., **627** M.Phil.,and **466** M.Sc. Physics students so far, who are serving in different R & D Organizations like PAEC, PINSTECH, National Centre for Physics, NESCOM, OPTICS Lab., NILOP, KANUPP etc. and in the field of Medical Physics in INMOL, Jinnah Hospital, Mayo Hospital, Children Hospital, Shaukat Khanum Hospital, etc. and different educational institutes like Lahore College for Women University, G.C. University Lahore and Faisalabad, F.C. College University, COMSATS, PIEAS, etc. Many graduates are serving in foreign universities and research institutions. There are seven well equipped Laboratories in the Department. The Research work is backed up by the state-of-the-art equipment where students have the opportunity to perform experiments of advanced level with the special emphasis on the applied concepts of Physics.

The Department offers a challenging Bachelor of Science (B.S. Physics) 4 years program that prepares students in all core areas of physics and aspires to develop them into versatile critical thinkers. This program is designed to provide a strong foundation of the fundamental principles of Physics. Faculty is highly engaged in experimental and theoretical research. Highly equipped undergraduate laboratories (mechanics, electricity and magnetism, waves and oscillations, electronics, modern physics, laser and optics, advanced electronics) are available for students to understand the practical applications of theoretical concepts. There are several other opportunities for undergraduate students which provide them more conducive learning environment to have hands-on experience by actively engaging in curricular and extra curricular activities. This enables our students to have a fantastic career in their particular field.

B.S. Physics

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PHYS-101	Mechanics &Lab	3	1
IS-102	Islamic studies/Ethics (for non-Muslims)	3	0
MATH -101	Calculus-I	2	0
CS-103	Introduction to Computer Programming for Data Science &Lab	2	1
CY-151	Introduction to Physical Chemistry &ab		1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU-221	Technical Writing and Presentation Skills	3	0
MATH-104	Calculus-II	3	0
PHYS-102	Electricity and Magnetism & Lab	3	1
CY-111	Introduction to Analytical Chemistry& Lab	2	1
QT–101	Translation of the Holy Quran–I	1	0
MATH-105	STATISTICS	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PHYS-201	Wavesand Oscillations &Lab	3	1
PHYS-202	Heatand Thermodynamics	3	0
PHYS-203	SolidState Physics I	3	0
MATH-204	Linear Algebra	3	0
HU-204	Foreign Language (Any)	3	0
IS-201	Ideology & Constitution of Pakistan	3	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU-111L	Communication Skills	1	0
PHYS-204	Electronics-I &Lab	3	1
MATH-205	OrdinaryDifferential Equations	3	0
PHYS-206	Classical Mechanics	3	0
MGT-102	Sociology	3	0
QT-201	Translation of theHoly Quran-II	1	0
CS-250	Applications of Artificial Intelligence	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PHYS-311	Concept of Modern Physics	3	1
PHYS-312	Mathematical Methods of Physics-I	3	0
PHYS-313	Nuclear Physics-I	3	0
PHYS-314	Electrodynamics-I	3	0
PHYS-315	Quantum Mechanics-I	3	0
PHYS-316	INTERNSHIP	3	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PHYS-321	Mathematical Methods of Physics-II	3	0
PHYS-322	Nuclear Physics-II	3	0
PHYS-323	Electrodynamics-II	3	0
PHYS-324	Quantum Mechanics-II	3	0
PHYS-325	Electronics-II	3	0
Qt-301	Translation of the Holy Quran-III	1	0
MGT-110	Social Responsibility	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PHYS-442	Laser Physics &Laser Optics Lab	3	1
PHYS-443	Thermal and Statistical Physics	3	0
PHYS-444	Computational Physics	3	0
PHYS-445	Semiconductor Optoelectronics	3	0
MGT-413	Entrepreneurship	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PHYS-446	Solid State Physics-II	3	0
PHYS-447	Health and Medical Physics	3	0
PHYS-448	Plasma Physics	3	0
QT-401	Translation of the Holy Quran-IV	1	0

Elective Subjects

Course No	Subject	Th	Pr
PHYS-491 PHYS-492 PHYS-493 PHYS-494	i) Advanced Electronics ii) Atmospheric Science and Meteorology iii) Physics At Nanoscale iv) Quantum Plasmas	3	0
PHYS-499	CAPSTONE PROJECT	3	0

Courses offered to Engineering and Non-Engineering Disciplines.

Course Code	Subject	Credit Hours		Disciplines
		Th	Pr	
PHY-123	Mechanics and Wave Motion	2	1	Electrical Engineering & Computer Engineering
PHY-132	Electricity and Magnetism	2	1	Electrical Engineering & Computer Engineering
PHY-111	Applied Physics	2	1	Computer Science
PHY-119	Engineering Physics	2	0	Mechanical Engineering
PHY-119	Engineering Physics	2	1	Automotive Engineering
PHY-118	Applied Physics	2	1	Mechatronics & Control Engineering
PHY-122	Basic Mechanics	2	1	Civil Engineering & Transportation Engineering
PHY-113	Applied Physics	2	1	Chemical Engineering
PHY-102	Physics for Architectural Engineering	2	1	Architectural Engineering
PHY-112	Applied Physics	2	1	Environmental Engineering
PHY-211	Environmental Physics	2	1	Environmental Science
PHY-116	Applied Physics	2	1	Mining Engineering
PHY-117	Applied Physics	2	1	Geological Engineering
PHY-114	Applied Physics	2	1	Metallurgical and Material Engineering
PHY-115	Applied Physics	2	1	Pet & Gas Engineering
PHY-301	Packaging Physics	2	1	Product and Industrial Design Engineering
PHY-102	Applied Physics	2	1	City and Regional Planning Engineering
PHYS-101	Mechanics	3	1	BS Mathematics & BS Chemistry
PHYS-201	Waves and Oscillations	3	1	BS Mathematics
PHYS-202	Heat & thermodynamics	3	0	BS Mathematics
PHY-001	Basic Physics	2	1	Zero Semester (For Foreign Students)
PHY-124	Applied Physics & Electro-Mechanical Fundamentals	2	1	Civil Engineering Department

The Department has also **Three fully** equipped Advanced Research Centers:

(i) **Centre for Nanotechnology and Advanced Material Research (CNAMR)** University of Engineering and Technology established a modern and state of the art Centre for Nanotechnology and Advanced Materials Research (CNAMR) at its Main Campus. This centre has latest Field Emission Scanning Electron Microscope (FESEM), High-Resolution Transmission Electron Microscope (HRTEM), X-Ray Diffractometer, Ion Beam Milling, Nanoindenter/AFM, Sample Preparation Lab. etc.

(ii) **Laser & Optronics Centre**
This centre provides research facilities in lasers, laser material interactions, laser produced plasma, Optoelectronics and photonics, etc. The main equipment includes high power femto-second Ti-Sapphire Laser, Nitrogen Laser, Nd: YAG Laser, Diode Lasers, KrF& XeCl Excimer Laser, high resolution three stage optical microscope, heating furnace, Nanodiamond Fabrication Facility, Solid Oxide Fuel Cell Fabrication Facility and much other equipment related to above mentioned fields.

(iii) **Nanotechnologies Research Centre**
The Nanotechnologies Research Centre (NRC) was established in 2008 in Department of Physics to focus on precision engineering or tailoring of materials at nano scale. In addition to provide the nano scale research facilities, the NRC also has created programs to attract researchers and to facilitate the scientists.Nanotechnology Research Centre (NRC) has the following state-of-the-art laboratories
(i) Nanofabrication
(ii) Diagnostic & Characterization

The labs are equipped with Atomic Force Microscope (AFM), Raman Spectrometer, AC Electrodeposition set up, DC Electrodeposition set up, Magnetic Field Annealing System, Multifunctional Generator and Magnetic Stirrer with hot plate etc.

DEPARTMENT OF HUMANITIES, MANAGEMENT AND SOCIAL SCIENCES

Chairperson
Dr. Mehvish Riaz

Associate Professors
Dr. Mehvish Riaz
Dr. Amna Niazi

Assistant Professors
Ms. Alia Naushahi
Ms. Sadia Gondal

Lecturers
Ms. Sadia Khan
Ms. Sadaf Qureshi
Ms. Sadia Usman Khan
Ms. Sara Khan
Ms. Hina Samar

Introduction

The general objective of the courses in the Department of Humanities and Management Sciences is to groom the students and broaden their perspectives in accordance with the requirements of modern times. The department offers courses, such as Communication Skills, Functional English, Technical Writing, Chinese language, Psychology, and Civics and Community Engagement. As engineers, scientists, and entrepreneurs are responsible members of commercial enterprises and technical associations of relatively high caliber, these subjects help them perform better in their workplaces and become high achievers in their respective fields. Chinese as an international language is also taught to students at UET. International students are taught special courses in Functional English and Urdu.

In addition, the Department of Humanities, Social Sciences, and Modern Languages is set to launch a four-year BS in English Language and Literature program starting from September 2025, for the first time in UET's history spanning over a century. The program aims to combine the study of literary texts from various periods and genres with a rigorous exploration of linguistic principles, language acquisition, and the practical application of language skills. Students will engage with both classic and contemporary literary works, gaining a comprehensive understanding of linguistics, developing critical thinking and analytical abilities, and enhancing their written and spoken communication in English. This program aims to prepare graduates for diverse career paths in education, publishing, media, communication, research, and other fields requiring strong English proficiency and cultural literacy.

Program Objectives:
1. To expose students to a wide range of literary works across different historical periods, genres, and cultural backgrounds.
2. To cultivate students' ability to critically analyze literary texts, identify themes, interpret meanings, and evaluate literary techniques.
3. To provide students with a strong foundation in the principles of linguistics, including phonetics, phonology, morphology, syntax, semantics, and pragmatics.
4. To equip students with the research skills necessary to conduct independent literary and linguistic analysis, write scholarly papers, and engage in academic discourse.
5. To prepare students for a variety of career opportunities in fields such as education, publishing, journalism, media, communication, translation, and research.

Eligibility Criteria
- 12 years of education (FA/F.Sc or equivalent)
- Minimum **50% marks** in intermediate or equivalent
  No entrance test or interview for admission
  For Details: https://humanities.uet.edu.pk/bs-english-language-and-literature/

Program Duration & Structure
- **Duration:** Four Years (8 Semesters)
- **Credit Hours:** 122
- **Mode:** Full-time, Morning Classes
- **Medium of Instruction:** English
- **Number of Courses:** 40 + Internship + Project + workshops & seminars
- **Seats:** 50

What Students Will Learn:
- English and World Literatures
- Application of Information and Communication Technology
- Applied Linguistics
- Creative and Academic Writing
- Literary Theory and Criticism
- Clinical Linguistics
- AI Powered Research Methodologies

Career Pathways
A degree in English Language and Literature prepares graduates for diverse career paths, including:
- Teaching and Education
- Journalism and Media
- Content Writing, Translation and Editing
- Civil Services
- Publishing and Communication
- Research
- Administration

DEPARTMENT OF ISLAMIC STUDIES

Dean
Prof. Dr. Muhammad Shoaib

Chairman
Prof. Dr. Muhammad Shoaib

Associate Professors
Dr. Atiq ur Rahman
Dr. Hafiz Zahid Latif

Assistant Professors
Dr. Muhammad Nadeem Shah
Ms. Gul Saria Ashraf
Dr. Tanveer Qasim
Dr. Hafiz Qudratullah

The curricula in the University include compulsory and optional subjects. Islamic & Pakistan studies are included in the compulsory subjects. The underlying purpose of teaching this subject to the students of engineering disciplines is to impress upon them the richness of Islamic culture, heritage and civilization and the role played by Islamic ideology in guiding the Muslims of the sub-continent towards their most cherished goal of an independent home land, Pakistan. After inculcating in them the Cultural, Social, Economic, Political and historical aspects of Islamic civilization, the students would be able to protect and promote Islam, not only as a religion but as a system in Pakistan and in the world as well. For the realization of these objectives, the Islamic Studies was introduced in the University as an optional subject in 1961. In the subsequent years, due to its importance this subject was made compulsory for all the Muslim students and its scope was progressively enlarged. Now the Department teaches Islamic Studies to all undergraduate programs. In 1982 the Government of Pakistan prescribed Pakistan Studies as an essential component of the syllabi at all levels of education. Since then the Department is teaching this subject also. The University welcomed the idea of the Governor of Punjab to teach Qur'anic translation to the students of bachelor's degree programs. So the subject "Translation of the Holy Qur'an", one credit hour course per year, is being taught to the undergraduate students since 2020. The Department has a computer lab and a library rich with high quality research books. In addition to all these activities, some faculty members of the Department have been delivering Friday Sermon in Jamia Mosque UET.

Year 1							
Semester 1				Semester 1			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr			Th	Pr
HU-201	Functional English	3		IS-105	Arabic Language and Literature	3	
IS-102	Islamic Studies	2		QT-101	Translation of The Holy Quran–I	1	
CSC-100	Application of Information & Communication Technologies (ICT)	2	1	CSC-104	Data base systems	3	1
IS-103	Topics of the Holy Quran	2		IS-106	Uloom ul-Quran-I	2	
IS-104	Arabic Language	2		IS-107	Uloom al-Hadith–I	2	
CSC-102	Programming fundamentals	3	1	CSC-103	Object orientated Programming	3	
HU-300	Technical Report writing	3		HU-201	Functional English	3	

Year 2							
Semester 3				Semester 4			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr			Th	Pr
MA-259	Quantitative Reasoning - II	3		IS-206	Ideology and Constitution of Pakistan	3	
IS-201	Islamic Faith	2		DS-270	Introduction to data science	2	1
QT-201	Translation of The Holy Quran–II	1		HU-212	Civics and community engagement	2	
IS-202	Pakistan Studies			IS-207	Uloom ul-Quran-II	2	
IS-203	Study of Seerah - I	2		IS-208	History of non - revealed religions	3	
IS-204	Uloom al-Hadith–II	2		IS-209	History and significance of Hadith	3	
IS-205	History of revealed religion	3					
CSC-200	Data Structures and Algorithms	3	1				

Year 3							
Semester 5				Semester 6			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr			Th	Pr
CSC-202	Artificial Intelligence	2	1	IS-306	Study of Seerah - II	2	
QT-301	Translation of The Holy Quran–III	1		IS-307	Principles of Tafseer and introduction of Tafaseer	3	
IS-301	Fiqh and Usool-ul-Fiqh	3		MA-154	Quantitative Reasoning - I	3	
IS-302	Ethics of disagreement in Islam	3		QT-401	Translation of The Holy Quran–IV	1	
IS-303	Islam and Science	3		IS-308	Dawal-wal-Irshad	2	
IS-304	Intellectual Tradition of Islam	2		IS-309	Criminal Law and Principle of Islamic Jurisprudence	3	
IS-305	Islamic History - I	2		CSC-415	Web Technologies	3	

Year 4							
Semester 7				Semester 8			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr			Th	Pr
IS-401	Islamic History - II	2		IS-407	Interfaith Harmony and Seerah	2	
IS-402	Research Methodology	3		IS-408	Textual Study of Quran - II	2	
IS-403	Contemporary challenges to Islamic Thoughts	3		IS-409	Textual study of fiqh	2	
MGT-318	Entrepreneurship and management	2		IS-410	Thesis / Research Project	6	
IS-404	Textual Study of Quran - I	2		PHY-001	Basic Physics	2	1
IS-405	Textual Study of Tafseer	2					
IS-406	Textual Study of Hadith	2					

INSTITUTE OF BUSINESS AND MANAGEMENT

Dean
Prof. Dr. Muhammad Shoaib

Director
Prof. Dr. Muhammad Nasir Malik

Assistant Professors
Dr. Amir Ikram
Dr. Asma Abdul Rehman
Dr. Farah Samreen
Dr. Farman Afzal

Dr. Mehreen Waheed
Dr. Mishal Ahmad
Dr. Muhammad Shoaib Farooq
Dr. Naeem Akhtar
Dr. Rabia Naseem

Lecturers
Dr. Maria Khan
Dr. Quratulain Akhtar
Dr. Rizwana Hameed
Dr. Sadaf Razzaq

Ms. Aeisha Altaf
Mr. Aftab Shoukat
Ms. Anum Liaquat
Mr. Farid Pervez Shami
Ms. Saamia Muntaha
Ms. Zunaira Iftikhar

IB&M was established in 2009 to facilitate a community of responsible citizens and aspiring management professionals who can inspire the business landscape through their creativity, integrity, and commitment to excellence and sustainability. The Institute leverages UET's 100 years of academic excellence in innovation, professional expertise, and industry-oriented education. IB&M provides a combination of a robust curriculum, highly qualified faculty with remarkable research contributions, well-equipped business school premises, and a myriad of student support services that synergize into a memorable and rewarding learning experience.

Mission
To educate the next generation of responsible citizens in a collaborative environment that promotes transformational learning, inspires creativity & solution orientation, and to make a meaningful contribution to business and society through research.

Undergraduate Degree Programs

For all undergraduate programs offered at IB&M, our philosophy is to impart contemporary knowledge with an equal emphasis on personality and professional development so that our graduates are nurtured to realize their full potential. Our graduates are well-placed in leading national and multinational organizations and provide a strong alumni network base for future graduates. The Institute offers the following undergraduate degree programs:

Bachelor of Business Administration (BBA)

BBA program prepares its participants for careers in business and non-profit organizations as management professionals by enhancing their intellectual capacity, personal and professional development, and personality transformation. The graduates will be able to synthesize knowledge of functional business areas for effective management in a dynamic business environment.

Bachelor of Business Information Technology (BBIT)

BBIT program prepares technology-conversant professionals with business and information technology knowledge funneled into a coherent strategic whole for effective management in a disruptive business landscape. It offers a unique blend of business management and information technology tools to be implemented in the IT leveraged management of conventional businesses.

Bachelor of Science in Business Analytics (BSBA)

BSBA program equips business students with the knowledge and skills required to navigate and excel in the modern data-driven business landscape. Students develop competencies in business intelligence & analytics, learn how to interpret data for business applications and acquire skills to make data-driven business decisions. Graduates are prepared to meet the growing demand for professionals who can harness data to drive innovation and solve complex business problems.

Facilities

- IB&M has always relied on technology-intensive methods for teaching and learning. At IB&M, a state-of-the-art computer laboratory provides a vibrant and high-tech environment that caters to the learning needs of our students.
- The library at IB&M offers a wide array of advanced educational services. It is equipped with over 6,000 books related to curricula, general knowledge, and periodic journals to promote scholarly interests and research activities.
- IB&M organizes demand-driven professional activities, such as training programs, international conferences, seminars, workshops, business idea competitions, industrial tours, and recreational trips. The blend of curricular and extra-curricular activities enables the students to perform extra-ordinarily in their professional and personal lives.
- Business Incubation Center is designed to help young startups innovate, grow and create an impact on the societal level by solving some problems. We support these promising ventures to commercialize, gain traction and connect them with industry and investors. Our startups achieve success as we provide continuous guidance, mentoring, and monitoring for sustained growth.

Bachelor of Business Administration (BBA)

Year 1							
Semester 1					**Semester 2**		
Course No	Subject (Pre-requisites)	Credit Hours			Course No	Subject (Pre-requisites)	Credit Hours	

Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
HU 102	Functional English	3	0		HU 211	Business Communication	3	0
CSC100 BIT 101	Applications of Information and Communication Technologies **OR** Digital Toolbox for Business	2 3	1 0		BUS 102	Macroeconomics	3	0
BUS101	Microeconomics	3	0		BUS 112	Financial Accounting	3	0
BUS 111	Principles of Accounting	3	0		BUS 131	Principles of Management	3	0
BUS 162	Business and Society	3	0		IS XXX	Islamic Studies / Ethics	2	0
BUS 161	Academic and Professional Development-I	1	0		QT 101	Translation of Holy Quran-I	1	0

Year 2							
Semester 3					**Semester 4**		

Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
MA 154 MA 151	Quantitative Reasoning-I **OR** Business Mathematics	3	0		MA 259 MA 257	Quantitative Reasoning-II **OR** Business Statistics	3	0
HU 200	Technical Report Writing	3	0		BUS 212	Cost Accounting	3	0
BUS 262	World Today	3	0		BUS 232	Organizational Behavior	3	0
BUS 231	Human Resource Management	3	0		BUS 241	Principles of Marketing	3	0
IS XXX	Ideology and Constitution of Pakistan	2	0		BUS 263	Law and Society	3	0
BUS 261	Academic and Professional Development-II	1	0		QT 201	Translation of Holy Quran-II	1	0

Year 3							
Semester 5					**Semester 6**		

Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
BUS 321	Business Finance	3	0		BIT 301	Management Information Systems	3	0
BUS 342	Marketing Management	3	0		BUS 322	Financial Management	3	0
BUS 351	Production and Operations Management	3	0		BUS 343	Digital Marketing	3	0
BUS 362	Research Methods for Social Sciences	3	0		BUS 352	Supply Chain Management	3	0
	Free Elective-I (Natural Science Domain)	3	0			Free Elective-II		
BUS 361	Academic and Professional Development-III	1	0		QT 301	Translation of Holy Quran-III	1	0

Year 4							
Semester 7					**Semester 8**		

Course No	Subject (Pre-requisites)	Th	Pr		Course No	Subject (Pre-requisites)	Th	Pr
BUS 411	Taxation Management	3	0		HU 400	International Language	3	0
BUS 471	Entrepreneurship	3	0		BUS 431	Strategic Management	3	0
	Elective-I	3	0			Elective -III	3	0
	Elective-II	3	0			Elective -IV	3	0
BUS 498	Experiential Learning-I (Internship)	3	0		BUS 499	Experiential Learning-II (Project)	3	0
BUS 461	Academic and Professional Development-IV	1	0		QT 401	Translation of Holy Quran-IV	1	0

- Free Elective-I (Natural Science Domain) must be minimum 3 credit hours.
  Free Elective-II must be minimum 1 credit hour.

Bachelor of Business Information Technology (BBIT)

	Year 1							

Year 1

	Semester 1	Credit Hours			Semester 2	Credit Hours	
Course No	Subject (Pre-requisites)	Th	Pr	Course No	Subject (Pre-requisites)	Th	Pr
HU 102	Functional English	3	0	HU 211	Business Communication	3	0
MA 154 MA 151	Quantitative Reasoning-I **OR** Business Mathematics	3	0	MA 259 MA 257	Quantitative Reasoning-II Business Statistics	3	0
CSC 100 BIT 101	Applications of Information and Communication Technologies **OR** Digital Toolbox for Business	2 3	1 0	BIT 172 CS 103	Introduction to Programming **OR** Introduction of Computer Programming for Data Science	2	1
BUS 101	Microeconomics	3	0	BUS 102	Macroeconomics	3	0
BUS 162	Business and Society	3	0	BUS 131	Principles of Management	3	0
BUS 161	Academic and Professional Development-I	1	0	IS XXX	Islamic Studies / Ethics	2	0
QT 101	Translation of Holy Quran-I	1	0				

Year 2

	Semester 3	Credit Hours			Semester 4	Credit Hours	
Course No	Subject (Pre-requisites)	Th	Pr	Course No	Subject (Pre-requisites)	Th	Pr
HU 200	Technical Report Writing	3	0	BIT 272	Database Systems	2	1
BIT 271	Object Oriented Programming	2	1	BIT 277	Data Structures and Algorithms	3	0
BIT 275	Data Communication and Computer Networking	3	0	BUS 262	World Today	3	0
BUS 111	Principles of Accounting	3	0	BUS 211	Managerial Accounting	3	0
BUS 231	Human Resource Management	3	0	BUS 232	Organizational Behavior	3	0
BUS 261	Academic and Professional Development-II	1	0	IS XXX	Ideology and Constitution of Pakistan	2	0
QT 201	Translation of Holy Quran-II	1	0				

Year 3

	Semester 5	Credit Hours			Semester 6	Credit Hours	
Course No	Subject (Pre-requisites)	Th	Pr	Course No	Subject (Pre-requisites)	Th	Pr
BUS 362	Research Methods for Social Sciences	3	0	BIT 302	Enterprise Systems	3	0
BIT 366	Web Development	3	0	BIT 303	E-Commerce	3	0
BIT 361	Software Engineering	3	0	BUS 322	Financial Management	3	0
BUS 321	Business Finance	3	0	BUS 342	Marketing Management	3	0
BUS 241	Principles of Marketing	3	0	BUS 352	Supply Chain Management	3	0
BUS 361	Academic & Professional Development-III	1	0	BUS 263	Law and Society	3	0
QT 301	Translation of Holy Quran-III	1	0				

Year 4

	Semester 7	Credit Hours			Semester 8	Credit Hours	
Course No	Subject (Pre-requisites)	Th	Prt	Course No	Subject (Pre-requisites)	Th	Prt
	Elective-I	3	0	BUS 431	Strategic Management	3	0
	Elective-II	3	0	HU 400	International Language	3	0
BUS 471	Entrepreneurship	3	0		Elective-III	3	0
	Free Elective-I (Natural Science Domain)				Free Elective(s)-II		
BUS 461	Academic & Professional Development-IV	1	0	BIT 499	Experiential Learning-II (Project)	3	0
QT 401	Translation of Holy Quran-IV	1	0				
BIT 498	Experiential Learning-I (Internship)	3	0				

- Free Elective-I (Natural Science Domain) must be minimum 3 credit hours.
- Free Elective-II must be minimum 1 credit hour.

Bachelor of Science in Business Analytics (BSBA)

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
HU 102	Functional English	3	0
MA 154	Quantitative Reasoning-I *	3	0
CSC 100	Applications of Information and Communication Technologies **	2	1
BUS 101	Microeconomics	3	0
BUS 162	Business and Society	3	0
BUS 161	Academic and Professional Development-I	1	0
QT 101	Translation of Holy Quran-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
HU 211	Business Communication	3	0
MA 259	Quantitative Reasoning-II ***	3	0
BIT 172	Introduction to Programming	2	1
BUS 102	Macroeconomics	3	0
BUS 131	Principles of Management	3	0
IS XXX	Islamic Studies / Ethics	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
HU 200	Technical Report Writing	3	0
MA 234	Linear Algebra	3	0
BIT 272	Database Systems	2	1
BUS 111	Principles of Accounting	3	0
BUS 231	Human Resource Management	3	0
BUS 261	Academic and Professional Development-II	1	0
QT 201	Translation of Holy Quran-II	1	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
BA 201	Fundamentals of Business Analytics	3	0
BUS 362	Research Methods for Social Sciences	3	0
BUS 262	World Today	3	0
BUS 211	Managerial Accounting	3	0
	Natural Science Elective	3	0
IS XXX	Ideology and Constitution of Pakistan	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
BA 301	Advanced Business Analytics	3	0
BIT 302	Enterprise Systems	3	0
BUS 263	Law and Society	3	0
BUS 321	Business Finance	3	0
BUS 241	Principles of Marketing	3	0
BUS 361	Academic & Professional Development-III	1	0
QT 301	Translation of Holy Quran-III	1	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
BA 302	Machine Learning for Business Analytics	3	0
BIT 489	Business Intelligence	3	0
BIT 303	E-Commerce	3	0
BUS 322	Financial Management	3	0
BUS 342	Marketing Management	3	0
BUS 352	Supply Chain Management	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
	Elective-I	3	0
	Elective-II	3	0
BUS 471	Entrepreneurship	3	0
BA 401	Decision Modeling and Analysis	3	0
BUS 461	Academic & Professional Development-IV	1	0
QT 401	Translation of Holy Quran-IV	1	0
BUS 498	Experiential Learning-I (Internship)	3	0

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
BUS 431	Strategic Management	3	0
HU 400	International Language	3	0
	Elective-III	3	0
BUS 499	Experiential Learning-II (Project)	3	0

* or MA 151 Business Mathematics or an equivalent course.
'* or BIT 101 Digital Toolbox for Business or an equivalent course.
'** or MA 257 Business Statistics or an equivalent course.

List of Elective Courses for BBA/BBIT/BSBA

Human Resource Management
HRM 401 Recruitment and Selection (3,0)
HRM 402 Training and Development (3,0)
HRM 403 Performance Management (3,0)
HRM 404 Cross Cultural Management (3,0)

Marketing
MKT 401 Retail Management (3,0)
MKT 402 Services Marketing (3,0)
MKT 403 Consumer Behavior and Marketing (3,0)
MKT 404 Selling and Sales Management (3,0)
MKT 405 Integrated Marketing Communication (3,0)

Finance
FIN 401 Financial Analysis and Reporting (3,0)
FIN 402 Financial Markets and Institutions (3,0)
FIN 403 Commercial and Islamic Banking (3,0)
FIN 404 International Finance (3,0)
FIN 405 Credit Management (3,0)
FIN 406 Insurance and Risk Management (3,0)
FIN 407 Investment Analysis (3,0)

Business Analytics
BA 451 Marketing Analytics
BA 452 HR Analytics
BA 453 Supply Chain Analytics
BA 454 Financial Analytics
BA 411 Generative AI and Intelligent Agents
DS 375 Big Data Analytics
DS 472 Text Mining
CSC 352 Introduction to Deep Learning
DS 473 Topics in Data Science

Business Information Technology for BBA
BIT 302 Enterprise Systems (3,0)
BIT 487 Data Science (3,0)
BIT 489 Business Intelligence (3,0)
BIT 411 Search Engine Optimization (3,0)
BIT 414 Information Systems Audit and Control (3,0)
Any other IT course with approval of Program Head and Director

Business Information Technology for BBIT
BIT 487 Data Science (3,0)
BIT 489 Business Intelligence (3,0)
BIT 373 Software Quality Assurance (3,0)
BIT 478 Artificial Intelligence (3,0)
BIT 411 Search Engine Optimization (3,0)
BIT 486 E-procurement (3,0)
BIT 412 Database Administration and Management (3,0)
BIT 413 System and Network Administration (3,0)
BIT 480 Internetworking with Unix TCP/IP (3,0)

BIT 414 Information System Audit and Control (3,0)
BIT 415 Cyber Security (3,0)
BIT 416 Mobile Application Development (3,0)
BIT 417 Digital Marketing and Web Analytics (3,0)
Any other IT course with approval of Program Head and Director

Business Information Technology for BSBA
BIT 487 Data Science (3,0)
BIT 478 Artificial Intelligence (3,0)
BIT 415 Cyber Security (3,0)
BIT 417 Digital Marketing and Web Analytics (3,0)
BIT 411 Search Engine Optimization (3,0)
BIT 486 E-procurement (3,0)
BIT 414 Information System Audit and Control (3,0)
BIT 412 Database Administration and Management (3,0)
BIT 416 Mobile Application Development (3,0)
BIT 373 Software Quality Assurance (3,0)
Any other IT course with approval of Program Head and Director

List of Free Elective-I (Natural Science)

PHY-113 Applied Physics (2,1)
EnE-104 Environmental Chemistry (2,1)
ES-101 Introduction to Environmental Science (3,0)
ES-103 Introduction to Earth Sciences (2,1)
CY-151 Introduction to Physical Chemistry (2,0)
CY-121 Introduction to Inorganic Chemistry (2,0)
ES-203 Basics of Environmental Pollution (3,0)
GeoE-110 Physical Geology (3,1)
MinE-110 Applied Geology (3,1)
Any other course in Natural Science domain with approval of Program Head and Director

List of Free Elective-II

CS 103 Introduction of Computer Programming for Data Science (2,1)
BIT 414 Information System Audit and Control (3,0)
Arch 106 History of Civilizations (2,0)
Arch 107 Free Hand Sketching (0,2)
CRP 101 Introduction to City and Regional Planning (3,0)
PPE 209 Chemical & Petrochemical Industries (3,0)
CHE 104 Health and Safety at Workplace (2,0)
CHE 109 Chemical Process Industries (2,1)
CHE 252 Environmental Health and Safety (3,0)
ENE 103 Environmental Laws and Policies (2,0)
EnE-105 Ecological Management (2,0)
ES 405 Environmental Governance (2,0)
ES 308 Cleaner Production Techniques (3,0)
PID-101 Fundamentals of Design -I (2,2.5)
ES 411 Ecotourism (2,0)

PID-102L Visual Communication – I (0,2)
PID-115L Digital Graphics (0,2.5)
Math-211 Operations Research-I (3,0)
Math-312 Operation Research-II (3,0)
Math-416 Optimization Theory (3,0)
MA-346 Numerical Methods (3,0)
BIT 487 Data Science (3,0)
BIT 489 Business Intelligence (3,0)
BUS 311 Audit and Assurance (3,0)
BUS 363 Project Management (3,0)
BUS 364 Local Markets (3,0)
BIT 411 Search Engine Optimization (3,0)
BIT 486 E-procurement (3,0)
Any other course with approval of Program Head and Director

List of Pre-Requisite Courses

Course(s)	Pre-Requisites
Research Methods for Social Sciences	Business Statistics
Financial Accounting, Cost Accounting, Managerial Accounting	Principles of Accounting
Business Finance, Financial Management	Principles of Accounting
Marketing Management	Principles of Marketing
Human Resource Management, Organizational Behavior, Production & Operations Management, Supply Chain Management	Principles of Management
Finance Electives	Financial Management
Marketing Electives	Marketing Management
Human Resource Management Electives	Human Resource Management, Organizational Behavior
IT Electives for BBA	Introduction of Computer Programming for Data Science
Object Oriented Programming	Introduction of Computer Programming for Data Science
Data Structures and Algorithms, Web Development	Object Oriented Programming

NEW CAMPUS
(KSK)

- Department of Electrical, Electronics & Telecommunication Engineering
- Department of Energy Engineering
- Department of Bio-Medical Engineering
- Department of Mechanical, Mechatronics & Manufacturing Engineering
- Department of Chemical, Polymer & Composite Material Engineering
- Department of Food Engineering and Bio-Technology
- Department of Basic Sciences and Humanities
- Department of Management
- Department of Computer Sciences

Campus Coordinator
Prof. Dr. Shahid Imran

STEM education is fuelling the new industrial revolution. UET Lahore, New Campus, provides a great mix of science and engineering programs. From conventional programs such as Mechanical Engineering, Chemical Engineering, and Electrical Engineering to multidisciplinary programs such as Biomedical Engineering, Energy Science and Management, Food Science, and Technology, and emerging programs such as computer sciences, software engineering, and emerging programs such as computer sciences, software engineering, and environmental sciences, we offer a wide variety of programs. To cater to the growing needs of the business community in the country, the BBA program is also offered at the campus. Highly qualified faculty and well-equipped labs at the campus distinguish us from other institutions offering such programs. Our students stand out at national competitions like the Engineering Capstone Project Expo hosted by the Pakistan Engineering Council. Creativity, diversity, empathy, and transparency are our core values, and we strive hard to foster these values in our students through a very well-designed tea ching-learning process. We believe in the parallel development of head, hand, and heart while the students progress through their degrees.

Department of Electrical, Electronics & Telecommunication Engineering

Chairman
Dr. Faheem Gohar Awan

Associate Professor
Dr. Ali Raza
Dr. Muhammad Ali

Assistant Professor
Dr. Umar Rashid

Dr. Farrukh Arsalan
Dr. Haris Anwaar
Mr. Rafay Chughtai
Mr. Bilal Anwar

Lecturer
Mr. Fahad Ijaz
Dr. Ifrah Liaqat
Dr. Muhammad Salim Butt

Mr. Farhan Ahmed Butt
Mr. Rizwan Khan
Mr. Syed Muhammad Furqan
Mr. Ammar Naseer
Ms. Iqra Farhat

The Department was inaugurated in 2007 as a mean to further enhance engineering developments in the region. Equipped with the most prestigious and ambitious labs, an incredibly well-equipped library, state-of-the-art equipment and the latest research material to enable the students to form a firm grip on the leading technological and scientific innovations. The Department stands at the pinnacle of technological innovation and creativity designed to drive the world further in this field. The Department is involved in developing cleaner, safer, more sustainable energy sources which will help bring a quantum leap to the world. It also has a department library, a faculty room, a semester cell, industrial liaison office, a conference room, girl's common room, IEEE & IET student sections. The Department is working in close collaboration with industries and Chamber of Commerce.

Program Offered
B.Sc. Electrical Engineering
B.Sc. Computer Engineering
M.Sc. Electrical Engineering

Mission
To generate electrical engineering professionals with knowledge, skills, ethics and innovation to contribute in socio-economic & environmental betterment of society.

Program Educational Objectives (PEOs)
PEO-01: Graduates will exhibit their proficiency of applying the knowledge (mathematics, science and engineering) and skills (modern tools) to solve complex engineering problems related to electrical engineering
PEO-02: Graduates will exhibit effective communication, teamwork, leadership as complements to technical competence.
PEO-03: Graduates will incorporate economic, environmental and sustainability considerations into the practice of electrical engineering and are contributors to society through their problem-solving capabilities.
PEO-04: Graduates will demonstrate professionalism and uphold ethical values with integrity and commitment to continue their life-long technical and professional development

Laboratories
- Circuit Analysis
- Digital Logic Design
- Electric Machines
- Semiconductor
- Power System Simulation
- Control Systems and Automation
- Microprocessors and Computer
- Advanced Project Lab
- Microwave and Antenna
- Project Lab

Specializations Offered
Electrical Engineering with Specialization in Power System.
Electrical Engineering with Specialization in Computer and Embedded System.
Electrical Engineering with Specialization in Electronics and Telecommunication

Department of Energy Engineering

Chairman/Associate Professor
Dr. Hasan Erteza Gelani

Assistant Professor
Dr. Harris Mehmood Khan

Mr. Umair Furqan
Ms. Isra Nazir

Lecturers
Ms. Anam Anwar

From a global perspective, the United Nations (UN) adopted 17 Sustainable Development Goals (SDGs), also termed as Global Goals as a universal call to action, in order to put an end to poverty and promote sustainability. Among these goals, the goal number 07 (Affordable and Clean Energy) addresses the access to affordable, modern, reliable and sustainable energy. From national perspective; fortunately and unfortunately, Pakistan has been blessed with almost all kinds of renewable energy resources, still more than 01 billion people are deprived of electricity and the country is struggling to achieve the targets set by UN till 2030. Harvesting energy for utilization at various levels (domestic, industrial etc) requires technical knowledge and skill.The Higher Education Commission (HEC) of Pakistan sensed the need of time and launched the program in 2014-15. The revised curriculum of which was presented in 2018. The program was named as Energy Systems Engineering (ESE), which was aimed to provide knowledge related to energy and power, mechanical and chemical technologies mixed with energy economics and policy.

Mission:
To dispense leading-edge knowledge and skill amalgamated with modern tools which serve as a pathway for the community/country towards energy sustainability.

Program Educational Objectives (PEOs)
PEO-01: To apply knowledge of engineering in devising solution for energy related problems remaining within environmental constraints.
PEO-02: To develop skills for design, formulation and analyses of efficient systems for extraction and processing of clean energy.
PEO-03: To cultivate effective communication skills as well as knowledge of social implications of energy engineering.

Career Opportunities:
The curriculum of ESE has been designed to adjust the energy system engineers in field as well as office based jobs. From the perspective of field jobs, energy system engineers find career opportunities in various energy based firms, particularly those dealing with extraction of energy from various sources inside or outside Pakistan. Whereas, from the perspective of office based jobs, the energy system engineers can find career opportunities in energy management and policy. The program attracts male as well as female candidates due to wide scope of jobs.

In line with the case of Pakistan and UET, China Pakistan Economic Corridor, CPEC is a pilot project of Belt and Road initiative of China which has been touted by many as a gateway to economic prosperity and stability in Pakistan. It accompanies great potential in terms of solving the ongoing energy crisis and eventually leading Pakistan towards energy security. CERAD functions to provide energy solutions to the government and the graduates from UET in ESE can serve the government of Pakistan on CPEC.

Programs Offered:
B.Sc. Energy Systems Management

B.Sc. Energy Systems Management

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr	Course No	Subject (Pre-requisites)	Th	Pr
CS-103	Introduction to Computer Programming for Data Science	2	1	ME-238	Thermodynamics	2	1
PHY-101	Applied Physics	3	1	MA-225	Differential Equations and Transforms	3	0
ESM-112	Electric Circuits	3	1	MGT-102	Sociology	3	0
HU-102	Functional English	3	0	IS-102	Islamic Studies	3	0
MA-114	Applied Mathematics	3	0	IS-101	Islamic/Pak Studies	3	0
QT-101	Translation of Holy Quran	1	0	CS-162	Object Oriented Programming	3	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr	Course No	Subject (Pre-requisites)	Th	Pr
ESM-211	Electronics Devices and Circuits	2	1	ESM-214	Electric Machinery	2	1
HU-xxx	Technical Writing	3	0	ESM-215	Heat and Mass Transfer	3	1
QT-201	Translation of Holy Quran	1	0	MGT-220	Human Resource Management	3	0
HU-101L	Communication Skills	1	0	ESM-216	Fundamentals of Energy Systems	3	0
IS-202	Ideology and Constitution of Pakistan	3	0	MGT-210	Organizational Psychology	3	0
IS-201	Islamic/Pak Studies	2	3	HU-212	Civic and Community Engagement GE	2	0
MGT-211	Principles of Management	3	0				
BIT-277	Data Structures and Algorithms	3	1				

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr	Course No	Subject (Pre-requisites)	Th	Pr
ESM-311	Control Systems	3	1	ESM-316	Heating, Ventilation and Air Conditioning Systems	3	0
ESM-312	Renewable Energy Systems	3	0	ESM-319	Power Electronics for Energy Systems	1	1
EE-202L	Occupational Health and Safety	1	0		Elective I	3	0
ESM-315	Power Transmission, Distribution and Utilization	3	1	ESM-322	Energy Economics, Policy and Management	3	0
ESM-321	Energy Conservation & Auditing	3	0	BIT-272	Database System	2	1
ES-309	Environmental Management Systems	2	1	ESM-324	Energy Finance	3	0
				QT-301	Translation of Holy Quran		1

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr	Course No	Subject (Pre-requisites)	Th	Pr
MGT-413	Entrepreneurship	2	0		Elective III	3	0
MGT-410	Project Management	3	0	MGT-370	Management Information System	3	0
BIT-487	Data Science	2	1	MGT-310	Production and Operations Management	3	0
QT-401	Elective II	3	0	ESM-401b	Internship/Capstone Project	3	3
ESM-401a	Translation of Holy Quran	1	0				
	Internship/Capstone Project	3	0				

Elective I	
ESM-318	Energy System Planning and Operation
ESM-313	Power System Analysis and Design (Pre-requisite: Power Transmission, Distribution and Utilization)
ESM- 315	Smart Grid Systems
Elective II	
ESM-412	Clean Fuel Technology
ESM-413	Fuel Cells and Hydrogen Energy
ESM-414	Biofuels and Bio Refineries
Elective III	
MGT-313	Total Quality Management
MGT-420	Conflict Management
MGT-426	Performance Management
MGT-427	Training and Development
MGT-424	Leadership Strategies
MGT-315	Technology Management

Department of Bio-Medical Engineering

Dean:
Prof. Dr. Muhammad Shoaib

Chairperson:
Dr. Nida Iqbal

Associate Professors:
Dr. Nida Iqbal

Assistant Professors:
Dr. Farooq Mukhtar
Dr. Asad-Ullah
Mr. Adnan Rauf

Lecturers:
Ms. Affifa Barakullah
Mr. Muhammad Abdullah
Mr. Farhan Yousaf
Ms. Eman Shahid

Teaching Fellows:
Ms. Meezan Hamid

Program Description:
The Bachelor of Science (BS) in Biomedical Sciences program at New Campus, UET, Lahore, is designed to equip students with a strong foundation in the principles of biology, chemistry, physics, and healthcare sciences. The program integrates theoretical knowledge with practical skills, preparing graduates to address complex biomedical challenges and contribute to advancements in healthcare.

Program Mission:
To become a leading program in biomedical sciences by providing a rigorous and innovative education that equips our students with the knowledge, skills, and critical thinking abilities necessary to become ethical, socially responsible, and innovative biomedical scientists and healthcare professionals.

Program Educational Objectives (PEOs):
PEO 1: Our Graduates will establish themselves as competent biomedical scientists, apply fundamental concepts of biomedical sciences to solve healthcare problems.
PEO 2: Our Graduates will work ethically and responsibly to contribute to society and environment by addressing healthcare needs in research, academia and industry.
PEO 3: Our graduates will work effectively as a team member and lead multidisciplinary teams while demonstrating interpersonal and managerial skills and ethical responsible

Eligibility Criteria:
Required Qualifications: Intermediate (pre-medical/ pre-engineering)/ A-level or equivalent.

Laboratories:
Latest equipment has been inducted in the following labs and students are encouraged to utilize these lab facilities.
1. **Bioengineering Laboratory:**
   The vision of Bioengineering Lab is to help the students in learning how they can engineer biomolecules and living systems including bacteria and animal cells to improve health.
2. **Human Anatomy & Physiology Laboratory:**
   In this Lab, students will learn about the structure and functioning of human body with the help of models & software-based lab tutor systems.
3. **Biomaterials Laboratory:**
   Focus of Biomaterials Lab is to advance the understanding of students about preparation, designing, synthesis and evaluation of Biomaterials. This is one of newly developed Lab and houses latest equipment.
4. **Biomedical Instrumentation Laboratory:**

Students will learn how to record and analyze signals associated with cardiovascular, neuromuscular and respiratory systems with the help of computer-based acquisition system. The lab includes different analog signal acquisition systems along with ELVIS.

5. **Simulation/Signal Processing Laboratory:**
Simulation serve as an alternative to real problems and patients. In this Lab, artificial representation of a real-world processes & clinical scenarios are created to introduce students with normal physiology and functioning of body.

6. **Biomechanics Laboratory:**
In this Lab, students will be introduced to basic concepts related to measurement and investigation of human body movement and forces applicable at joints during sports, disease and rehabilitation.

7. **Bioelectronics Laboratory:**
Owing to the significance of electronics in biomedical equipment, this lab is dedicated for the understanding of basics of electrical engineering. The lab is furnished with advanced electrical equipment such as oscilloscopes, power supplies, function generators and digital multimeters.

Biomedical Sciences

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BMS-101	Introduction to Biomedical Sciences	2	0
CS-101	Computing Fundamentals	2	1
CY-100	Applied Chemistry	2	1
MA-110/ BMS-141	Basic Mathematics/ Basic Biology	3/2	0/1
IS-102	Islamic Studies	3	0
QT-101	Translation of the Holy Quran - I	1	0

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PHY-111	Applied Physics	2	1
BMS-142	Biochemistry	2	1
BMS-105	Human Anatomy	3	1
BMS-143	Cellular & Molecular Biology	2	1
HU-206	Civics and Community Engagement	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BMS-201	Microbiology	2	1
BMS-202	Human Physiology	3	1
BMS-203	Introduction to Biotechnology	3	1
BMS-204	Biostatistics	3	0
IS-202	Ideology and constitution of Pakistan	3	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
ES-105	Psychology & Ethics	2	0
BMS-205	Pathology	2	1
BMS-206	Biomaterials	3	1
HU-111L	Communication Skills	0	1
BMS-207	Bioinformatics	3	0
QT-201	Translation of the Holy Quran - II	1	0
BMS-208	Nutritional Sciences	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BMS-301	Hematology	2	1
BMS-302	Biomedical Techniques	3	1
BMS-303	Biomechanical Sciences	3	1
BMS-304	Hospital Waste Management	2	0
BMS-305	Applied Forensic Science	3	0
QT-301	Translation of the Holy Quran - III	1	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BMS-306	Tissue Engineering	3	1
BMS-307	Rehabilitation Sciences	2	1
BMS-308	Regulatory Affairs in Biomedical science	3	0
BMS-309	Healthcare Management	3	0
HU-200	Technical Report Writing	3	0
	International Language	0	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BMS-XXX	Elective 1	3	0
BMS-401	3D Printing & Bioprinting	3	0
BMS-XXX	Elective 2	3	0
BMS-402	Medical Imaging	3	1
BMS-450	Capstone Project	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BMS-XXX	Elective 3	3	0
BMS-403	Neurosciences	3	0
BMS-XXX	Elective 4	3	0
MGT-318	Entrepreneurship and Management	2	0
BMS-404	Biosensor	2	1
QT-401	Translation of the Holy Quran - IV	1	0

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List of Electives:

Code	Course Title	Credit Hrs
BMS-461	Advanced Biochemistry	3+0
BMS-462	Infectious diseases	3+0
BMS-463	Biosafety & Bioethics	3+0
BMS-464	Nano biotechnology	3+0
BMS-465	Recombinant DNA Technology	3+0
BMS-466	Bio-signals and Image Processing	3+0
BMS-467	Medical Devices and Diagnostics	3+0
BMS-468	Medical Genetics	3+0
BMS-469	Vaccine Development	3+0

BMS-470	Stem Cell Biology	3+0
BMS-471	Medical Virology	3+0
BMS-472	Cancer Biology	3+0
BMS-473	Pharmacology	3+0
BMS-474	Biophysics	3+0
BMS-475	Wearable Health Technology	3+0
BMS-476	Drug delivery systems	3+0
BMS-477	Prosthetics & Implants	3+0
BMS-478	Biophotonics	3+0

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B.Sc. Bio-Medical Engineering

Year 1			
Semester 1			
Course No	Subject (Pre-requisites)	**Credit Hours**	
		Th	Pr
PHY-111	Applied Physics	2	1
CS-101	Computing Fundamentals	2	1
EE-100	Electric Circuits	3	1
BME-104/ MA-110	Basic Biology/Basic Mathematics International Language	2,3	1,0
BME-101	Introduction of Biomedical Engineering	1	0
IS-102	Islamic Studies and Ethics	3	0

Year 1			
Semester 2			
Course No	Subject (Pre-requisites)	**Credit Hours**	
		Th	Pr
BME-105	Human Physiology & Anatomy 1	2	1
MA-113	Calculus & Analytical Geometry	3	0
QT-101	Translation of the Holy Quran - I	1	0
EE-110	Circuit Analysis & Design	3	1
CS-103	Intro. to computer programming for data science	2	1
HU-212	Civic and Community Engagement	2	0
HU-111L	Communication Skills	0	1

Year 2			
Semester 3			
Course No	Subject (Pre-requisites)	**Credit Hours**	
		Th	Pr
MA-116	Linear Algebra & Differential Equations	3	0
BME-205	Human Physiology & Anatomy 2	2	1
BME-214	Biochemistry	2	1
EE-212	Semiconductor Devices	3	1
QT-201	Translation of the Holy Quran - II	1	0
ME-100L	Workshop Practice	0	1
IS-202	Ideology & Constitution of Pakistan	3	0

Year 2			
Semester 4			
Course No	Subject (Pre-requisites)	**Credit Hours**	
		Th	Pr
BME-213	Biomedical Electronics	2	1
CMPE-222	Digital Logic Design	3	1
MA-221	Complex Variable & Transform	3	0
BME-243	Cellular & Molecular Biology	3	1
BME-251	Biomaterials & Design	3	1

Year 3			
Semester 5			
Course No	Subject (Pre-requisites)	**Credit Hours**	
		Th	Pr
BME-301	Biomedical Instrumentation	3	1
EE-320	Applied Probability & Statistics	3	0
BM E-400	Summer Internship / Biomechanics	2	1
EE-273	Microprocessor Systems	3	1
EE-220	Signals & Systems	3	0

Year 3			
Semester 6			
Course No	Subject (Pre-requisites)	**Credit Hours**	
		Th	Pr
BME-302	Clinical Lab Instrumentation	3	1
BME-311	Biomedical Signal Processing	2	1
EE-340	Control Systems	3	1
BME-244	Biomedical Modeling & Simulation	2	1
BME-417	Medical Imaging Techniques	2	1
QT-301	Translation of the Holy Quran - III	1	0

Year 4			
Semester 7			
Course No	Subject (Pre-requisites)	**Credit Hours**	
		Th	Pr
MGT-XXX	Management Elective 1	2	0
BME-420	Medical Image Processing	2	1
BME-XXX	Technical Elective 1	3	0
BME-XXX	Technical Elective 2	3	0
HU-200	Technical Report Writing	3	0
BME-442a	Capstone Project - I	0	3

Year 4			
Semester 8			
Course No	Subject (Pre-requisites)	**Credit Hours**	
		Th	Pr
BME-XXX	Technical Elective 3	3	0
ES-105	Psychology and Ethics	2	0
BME-XXX	Technical Elective 4	3	0
MGT-318	Entrepreneurship	2	0
BME-442b	Capstone Project - II	0	3
QT-401	Translation of the Holy Quran - IV	1	0
BME-441	Bio safety in Healthcare Environment	2	0

Department of Mechanical, Mechatronics and Manufacturing Engineering

Chairman
Dr. Muhammad Farhan

Professors
Dr. Shahid Imran
Dr. Zahid Anwar
Dr. Fahad Noor

Associate Professors
Dr. Muhammad Farooq
Dr. Muhammad Amjad
Dr. Saad Nawaz

Assistant Professors
Dr. Rabia Shaukat
Dr. Adnan Qamar
Dr. Muhammad Mujtaba Abbas
Mr. Hafiz Muhammad Shahid Akbar
Mr. Muhammad Moeen Sultan

Lecturers
Dr. Adeel Munir
Mr. Gulzar Ahmad
Ms. Samina Ishaq
Mr. Sheeraz Ali
Ms. Tamseela Habib
Mr. Syed Mohammad Sannan

Introduction

Mechanical Engineering is one of the oldest and broadest engineering disciplines. The Department was established in 2007. The Department has procured latest laboratory equipment in order to conduct laboratory work of engineering classes. The Department is growing, and the leadership is committed to making it an excellent engineering education department. The Department has very active International Student Societies Chapters of the American Society of Mechanical Engineers (ASME) and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers(ASHRAE). The Department hosted the international students' professional development conference (SPDC) in 2014. Students from national as well as international universities participated in the Conference. A group of students represented the Asia Pacific section of the ASME in Houston, USA in November 2015. The department hosted the International Conference on Mechanical Engineering (ICME-2020)'' in 2020 and the International Conference on Energy Water and Environment (ICEWE-2021)'' in 2021. The Department has a fully functional research laboratory, department library, Semester Cell, Quality Enhancement Cell (QEC), Industrial Liaison Office, a Conference Room, a Girls' Common Room, and a Prayer Hall. The faculty members and students of the department frequently participate in National and International events. All the details and events related to the department are regularly updated on the departmental official website: https://medksk.uet.edu.pk/

Mission

To produce mechanical engineers equipped with knowledge and skills to carry on lifelong learning through quality teaching and training. Our graduates shall be able to serve for the sustainable development of society while demonstrating professional ethics and responsible social conduct.

Programs Offered

- B.Sc. Mechanical Engineering
- M.Sc. Thermo-Fluid Engineering
- Ph.D. Mechanical Engineering

Program Educational Objectives (PEOs)

PEO-01: Apply the knowledge to solve analytical and practical mechanical engineering problems.
PEO-02: Work for continuous professional and sustainable socio-technical development.
PEO-03: Demonstrate professional ethics, effective communication, and managerial skills.

Laboratories

- Thermodynamics
- Fluid Mechanics
- Hydraulic Machinery
- CAD
- Mechanical Workshops
- CNC
- Refrigeration and Air Conditioning
- Heat and Mass Transfer
- Mechanics of Machines
- Mechanics of Materials

Department of Chemical, Polymer and Composite Materials Engineering

Dean
Prof. Dr. Naveed Ramzan

Chairman
Prof. Dr. S. Mohsin Ali Kazmi

Professor
Prof. Dr. Tanveer Iqbal

Associate Professor
Dr. Hamayoun Mahmood
Dr. Muhammad Imran Rashid
Dr. Asif Nadeem Tabish
Dr. Ch. Haider Ali
Dr. –Ing. Izzat Iqbal Cheema

Assistant Professor
Dr. Samreen Hameed
Dr. Muhammad Asif Jamil
Dr. Zohaib Atiq Khan
Dr. Muhammad Irfan
Dr. Muhammad Waqas Iqbal
Dr. Muhammad Sulaiman
Dr. Muhammad Raashid

Lecturer
Mr. Ahmed Hassam Khan
Dr. Fahad Ali Rabbani
Mr. Ansar Javaid
Mr. Muhammad Zia-ul-Haq
Ms. Nazia Baig

Introduction

The department of Chemical, Polymer, and Composite Materials Engineering was established in 2007. The department was primarily designed to build on current activities and to provide a nucleus for the University's rapidly expanding industrially oriented research training and consultancy in Chemical Engineering. Since then, more than 1000 students have been graduated who are currently working in the reputed international and national organizations and institutes. The department has developed considerably in terms of undergraduate lab and postgraduate research facilities, interacted with the local industry with a specific focus on the local needs and indigenous solutions to their problems. Students are trained to use specialist scientific knowledge, analytical skills, and innovative thinking to come up with creative solutions to real-world problems. They design new chemical processes and products, as well as improving the performance of existing ones. They are also involved in developing cleaner and more sustainable energy sources and developing new wonder-drugs to cure the world's diseases. Core strengths of department are its qualified and dedicated faculty; up-to-date laboratories with essential equipment; well-equipped and upgraded library; strong Industrial links and well-equipped research labs.

Mission

The mission statement the department encompasses three key aspects:
1. **Education**: To offer an outstanding academic program to enable graduates master process synthesis, design, and operations knowledge and develop excellent technical, technological and leadership skills.
2. **Research**: To provide a vibrant interdisciplinary research program in engineering science, creating novel and sustainable solutions to serve public interests in areas such as health, energy and environment.
3. **Social Responsibility**: To promote inclusive, safe, collaborative and respectful community for learning and work with integrity.

Program Educational Objectives (PEOs)

PEO-01: Apply the knowledge, principles, and skills in process industry, academia, and complementary fields to meet the stakeholder requirements.
PEO-02: Graduates achieve professional success by practicing ethical behavior, social responsibility, and diversity, both as individuals and in team environments with effective communication.
PEO-03: Graduates pursue innovative approaches and career growth through professional practice, graduate studies, and other training programs in engineering sciences and management.

Courses of Study

Undergraduate Programs
- B.Sc. Chemical Engineering

Postgraduate Programs
- M.S. Safety, Health and Environment

Laboratories

- Mass Transfer
- Fluid Mechanics
- Process Heat Transfer
- Particle Technology
- Unit Processes
- Computers & Computation
- Chemical Reaction Engineering
- Energy Engineering
- Instrumentation and Control
- Chemical Engineering Thermodynamics
- Environmental Engineering
- Research Lab

Department of Food Engineering and Biotechnology

Dean	**Assistant Professor**	**Lecturer**
Prof. Dr. Naveed Ramzan	Dr. Asma Khan	Ms. Zoufishan Latif
	Dr. Adeel Anwar	
Chairman	Dr. Momna Rubab	
Prof. Dr. Sikandar Rafiq		

Introduction

Department of Food Engineering and Biotechnology at new campus is fully functional and established at university in a state-of-the-art purpose-built building since 2022. That is envisioned to aspire learning, innovation, research and values of potential food technologists. It currently offers BSc Food Science and Technology and BSc Food Science and Human Nutrition and intends to offer MS/M. Phil., and Ph. D. programs in near future. B.Sc. is a four-year undergraduate program that provides a strong foundation in all food technology areas. The program encompasses courses related to food chemistry, human nutrition, sustainable agriculture, fluid mechanics, plant pathology, food processing, food preservation, food analysis, occupational safety, health and environment, entomology, food biotechnology, sustainable food production, post-harvest technologies, food product development and quality management. This provides our graduates with a unique opportunity to develop networks and gain an understanding of technical areas in line with their career aspirations and entrepreneurial ventures. The program also focuses on holistic personality transformation of the students through general education, extra curricular activities and participative learning activities.

Course of Study

Undergraduate Programs
- B.Sc. Food Science and Technology
- B.Sc. Food Science and Human Nutrition

Mission

The aim of the both offered programs is to provide an educational environmental where quality education can be imparted to the youth and to produce graduates capable to solve problems related to food industry and environment, to provide opportunity to focus on education and research, create direct linkages with industry at national and international level for technological and socio-economic development.

Program Educational Objectives (PEOs) Food Science and Technology

PEO-01: Apply food science and biotechnology knowledge to identify and address the technical and societal problems.

PEO-02: Enhance students' intellectual and analytical abilities in taking initiative and/or developing innovative ideas for technological and professional growth in the field of food science and biotechnology.

PEO-03: Work effectively as a team member or lead multidisciplinary teams while demonstrating the interpersonal and management skills and ethical responsibilities.

Program Educational Objectives (PEOs) Food Scienceand Human Nutrition

PEO-01: Apply foundational knowledge of food science and human nutrition to address health, safety, and food-related challenges in diverse communities.

PEO-02: Enhance critical thinking and problem-solving skills to innovate and advance practices in food technology, nutritional assessment, public health, and dietetics.

PEO-03: Demonstrate leadership and teamwork in multidisciplinary environments while upholding professional ethics, cultural sensitivity, and effective communication in nutrition and food-related fields.

B.Sc. Food Science and Technology

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
FST-101	Introduction to Food Science and Technology	3	0
CY-221	Inorganic and Organic Chemistry	2	1
MA-110	Basic Mathematics	3	0
HU-111	Communication Skills	0	1
FST-203(24)	Basic Biology	2	1
IS-102	Islamic Studies Ethics (For non-Muslim students and alternative subject)	3	0
ES-105	Psychology & Ethics	2	0
QT-101 Or SE-101	Translation of Holy Quran-I Or Social Ethics-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
FST-103	Principles of Human Nutrition	3	0
HU-111L	Communication Skills	0	1
FST-104	Food Chemistry	2	1
CSC-100	Application of Information and Communication Technologies	2	1
CS-165	Applied Mathematics and Statistics	3	0
PHY-113	Applied Physics	2	1
QT-102 Or SE-102	Translation of Holy Quran-II Or Social Ethics-II	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
FST-201	Occupational Safety, Health & Environment	2	0
FST-202	Sustainable Agriculture	2	1
FST-204	Food Microbiology	2	1
FST-205	Fluid Mechanics	2	1
MGT-318	Entrepreneurship and Management	2	0
IS-202	Ideology and Constitution of Pakistan Ethics (For non-Muslim students and alternative subject)	3	0
QT-103 Or SE-103	Translation of Holy Quran-III Or Social Ethics-III	1	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
FST-206 (24)	Food Biochemistry	2	1
HU-212	Civics and Community Engagement	2	0
FST-208	Food Processing & Preservation	2	1
FST 306(24)	Food Biotechnology-I	2	1
FST-210	Unit Operations in Food Processing	2	1
HU-300	Technical Report Writing	3	0
QT-401 Or SE-401	Translation of Holy Quran -IV Or Social Ethics-IV	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
FST-207	Plant Pathology	2	0
FST-301	Food Plant Layout	2	0
FST-302	Food Technologies I	3	1
FST-303	Food Processing-I	2	1
FST-304	Sustainable Food Production	2	0
FST-305	Fruit and Vegetable Processing	2	0
FST 306	Food Biotechnology-II	2	1

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
FST-307	Food Analysis	2	1
FST-308	Food Toxicology and Safety	2	0
FST-309	Community Nutrition and Dietetics	2	0
FST-310	Post-harvest Technologies	2	0
FST-311	Food Technologies- II	3	1
FST-312	Food Processing – II	2	0
FST-313	Internship (Community/Research Project)	0	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
FST-401	Food Technologies III	3	1
FST-402	Food Product Development	3	0
FST-403	Food Extrusion Technology	2	0
FST-404	Food Preservation and Packaging	2	0
FST-405	Research Projects and Scientific Writing	1	1
HU-003	International Language	0	0
FST-406	Final Year Project-I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
FST-407	Sensory Evaluation of Foods	2	1
FST-408	Food Laws and Regulations	2	0
FST-409	Marine Food Processing Technology	2	1
FST-410	Milk and Meat Hygiene and Public Health	2	1
FST-411	Food Quality Management	2	0
FST-412	Final Year Project-II	0	3

B.Sc. Food Science and Human Nutrition

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
FSHN-101	Introduction to Food Science and Human Nutrition	3	0
CY-221	Inorganic and Organic Chemistry	2	1
MA-110	Basic Mathematics	3	0
HU-111	Communication Skills	0	1
FST-203(24)	Basic Biology	2	1
IS-102	Islamic Studies / Ethics (For non-Muslim students and alternative subject)	3	0
ES-105	Psychology & Ethics	2	0
QT-101 Or SE-101	Translation of Holy Quran-I Or Social Ethics-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
FST-103	Principles of Human Nutrition	3	0
HU-111L	Communication Skills	0	1
FST-104	Food Chemistry	2	1
CSC-100	Application of Information and Communication Technologies	2	1
CS-165	Applied Mathematics and Statistics	3	0
PHY-113	Applied Physics	2	1
QT-102 Or SE-102	Translation of Holy Quran-II Or Social Ethics-II	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
FST-201	Occupational Safety, Health & Environment	2	0
FSHN-201& FSHN-201L	Dietetics-I	2	1
FST-204	Food Microbiology	2	1
FSHN-202	Nutrition through Lifecycle	3	0
MGT-318	Entrepreneurship and Management	2	0
IS-202	Ideology and Constitution of Pakistan / Ethics (For non-Muslim students and alternative subject)	3	0
QT-103 Or SE-103	Translation of Holy Quran-III Or Social Ethics-III	1	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
FST-206 (24)	Food Biochemistry	2	1
HU-212	Civics and Community Engagement	2	0
FST-208	Food Processing & Preservation	2	1
FST 306(24)	Food Biotechnology-I	2	1
FSHN-203 & FSHN-203L	Dietetics-II	2	1
HU-300	Technical Report Writing	3	0
QT-401 Or SE-401	Translation of Holy Quran -IV Or Social Ethics-IV	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
FSHN-301 & FSHN-301L	Human Physiology	2	1
FSHN-302	Sports Nutrition	2	0
FSHN-303& FSHN-303L	Principles of Nutritional Assessment	2	1
FSHN-304	Functional Foods and Nutraceuticals	3	0
FSHN-305	Nutritional Immunology	3	0
FST 306& FST-306L	Food Biotechnology-II	2	1

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
FST-307	Food Analysis	2	1
FSHN-306 & FSHN-306L	Fundamentals of Meal Management	2	1
FST-309	Community Nutrition and Dietetics	2	0
FSHN-307& FSHN-307L	Principles of Therapeutic Diet	2	1
FST-308	Food Toxicology and Safety	3	0
FSHN-308 & FSHN-308L	Nutritional Pathology	2	1
FSHN-309	Internship (Community/Research Project)	0	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
FSHN-401	Proteomics and Genomics	3	0
FSHN-402 & FSHN-402L	Infant and Young Child Feeding	2	0
FSHN-403	Nutrition and Psychology	3	0
FSHN-404	Global Food Issues		
FST-405 & FST-405L	Research Projects and Scientific Writing	1	1
HU-003	International Language	0	0
FSHN-405	Final Year Project-I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
FST-407	Sensory Evaluation of Foods	2	1
FST-408	Food Laws and Regulations	2	0
FSHN-406	Nutrition in Emergencies	3	0
FSHN-407 & FSHN-407L	Public Health Nutrition	2	1
FST-411	Food Quality Management	2	0
FSHN-408	Final Year Project-II	0	3

Department of Natural Sciences and Humanities

Chairman
Prof. Dr. Kashif Rehan

Professor
Dr. Kashif Rehan

Associate Professor
Dr. Ahmed Shuaib
Dr. Faisal Nawaz
Dr. Masood Ul Hassan Farooq

Dr. Nisar Ali
Dr. Ayesha Riasat
Dr. Umm-i-Kalsoom

Assistant Professor
Dr. Rashid Munir
Dr. Maryam Imtiaz
Dr. ZulfiqarAli
Dr. Imran Sajid

Dr. Anam Sajid
Dr. Shahid Ch.

Lecturer
Ms. SabaAjmal
Mr. Muhammad Usman
Mr. Habib-ur-Rehman
Mr. Hassan Imtiaz

Introduction
In consonance with the vision of HEC and PEC, the doyens of the university agreed on allocating 30% of curriculum to these epistemological domains which, in turn, gave rise to the Department of Natural Sciences and Humanities. With an aim to forge sound roots in modes of rational inquiry and to introduce students with scientific, socio-cultural, aesthetic and oratory convictions the Department offers comprehensive array of subjects.

Programs Offered
The Department of Natural Sciences and Humanities has been offering the wide variety of programs to form a bridge between the realms of engineering and natural sciences & humanities. These programs are given below.

- Ph.D. Chemistry
- Ph.D. Physics
- Ph.D. Mathematics
- M.Phil. Chemistry
- B.Sc. Mathematics
- B.Sc. Physics
- B.Sc. Chemistry

Laboratories
The Department possesses and takes care of five undergraduate state-of-the-art laboratories including Applied Chemistry, Applied Physics, Engineering Physics, Mechanics and Computer Labs. These laboratories are equipped with cutting edge equipment to enrich the learning experience of young minds along with the flavor of practical work. These laboratories also render invaluable technical support to the projects undertaken by other departments.

Advanced Research Lab
An Advanced Research Laboratory was established in the Department of Natural Sciences and Humanities at UET NEW Campus in 2017 to initiate the multifaceted research activities and projects in the campus. This laboratory brings together scientists and engineers not only from different departments of UET but also from other institutes of Pakistan to collaborate on research and development. The major instruments which are available in this advanced research lab include UV-spectrophotometer, FTIR, HPLC, GC-MS and Atomic Absorption. This advanced research lab has been serving research scholars not only of NEW campus but also the research scholars of other UET campuses. We are expecting successful applications of this research lab to develop a globally competitive research program with a wide vision to address and help in solving national and international problems in addition to addressing fundamental questions in science & technology.

Electrochemistry lab
The Electrochemical Laboratory, directed by Dr Samina Akbar, is equipped with a number of unique, sophisticated, custom-made apparatuses for electrochemical deposition, characterization, and conventional electrochemical measurements. The unique electrochemical methodologies combined with the advanced research facilities allowed lab scientists to lead research in fastest growing energy sector and hot technological areas, attracting collaborators from the universities and private industries. The electrochemistry lab fosters interdisciplinary research on fuel cell technologies, corrosion, electrochemical kinetics, transport processes, chemical thermodynamics, and other fundamental areas of electrochemistry. The lab also offers paid research program for undergraduate and postgraduate students. The lab hosts all necessary capabilities for template assisted electrochemical fabrication of metals/metal oxide/composite nonmaterial's, complete electrochemical characterization, and performance tests for both fuel cells and batteries.

Physics Research Lab (PRL)

Basic facilities for the fabrication of nanoparticles and deposition of thin films are available in PRL. Apparatus is available for the synthesis of nanoparticles through hydrothermal land co-precipitate method (DC Sputtering). Deposition of thin film by spin coater and magnetron sputtering is going to be installed soon in the lab. Recently PRL has won the NRPU funding to the tune of 7.2 million rupees for the development of new photoactive materials for degradation of pollutants. Lab is open for students of M.Phil. and Ph.D. from main campus to make use of the available facilities to promote and advance in the field of research.

- Advance Nano-material Research
- Applied Chemistry
- Bio-material / Nano ceramics
- Nano-material / Electro-Catalysis
- Environmental Science
- Applied Physics

- Engineering Physics
- Physics Research (Nanoparticles Synthesis)
- Physics Research
- Applied Mechanics
- Mathematics Computer

Faculty

The Department is privileged to have the gamut of highly qualified, experienced and specialized faculty with postgraduate and research degrees from the world-renowned Universities. This dedicated faculty keeps themselves abreast of the latest developments in their respective disciplines. The faculty has regularly been participating in and carrying out seminars and symposia on national and international levels and has carved out a significant niche for themselves in their respective fields.

Department of Management Sciences (DMS)

Dean
ProfessorDr. Muhammad Shoaib

In-charge
Dr. Abdul Aziz Khan Niazi

Assistant Professor
Dr. Abdul Aziz Khan Niazi
Dr. Kanwal Iqbal Khan
Dr. Bilal Aziz

Teaching Fellows
Mr. Muhammad Usman Mubarik
Ms. Hira Tanweer Butt
Ms. Sara Atif Syed

Introduction:

The Department of Management Sciences (DMS) established in 2022 at New Campus of UET, Lahore. DMS is dedicated to nurturing future leaders, entrepreneurs, and business professionals through high-quality education, innovative research, and industry engagement. As a multidisciplinary academic unit, the department offers a range of undergraduate that integrate core principles of business, economics, and organizational behavior. With a focus on analytical thinking, ethical leadership, and practical skills, the department prepares students to excel in the dynamic global business environment. Our faculty comprises experienced academics and industry experts who bring real-world insights into the classroom, fostering a learning environment that encourages critical thinking, collaboration, and innovation.

Mission:

The mission of the Department of Management Sciences is to deliver high-quality education and foster research in the fields of business, management, and entrepreneurship through academic excellence, industry collaboration, and a commitment to lifelong learning, we strive to empower students with the knowledge, skills, and mindset needed to make meaningful contributions to business and society.

Courses of Study

The department offers a degree program under the name and style of:

- **Bachelors of Business Administration (BBA)**

  BBA is a four-year undergraduate program that provides a strong foundation in all functional business areas. The students complete their business administration majors and can choose minors in human resource management, marketing, or finance with an opportunity to study free electives from engineering and other disciplines offered at UET. This provides our graduates with a unique opportunity to develop networks and gain an understanding of technical areas in line with their career aspirations and entrepreneurial ventures. The program also focuses on the holistic personality transformation of the students through general education, extra-curricular activities, and participative learning activities.

- **Bachelors of Business Information Technology (BBIT)**

  BBIT is an interdisciplinary degree that integrates business management principles with information technology. BBIT designed to train students in how IT solutions can support and improve business operations, decision-making, and strategy. It includes courses in programming, databases, systems analysis, and business analytics, alongside core business subjects. BBIT is increasingly vital in today's digital economy, where businesses rely heavily on technology for operational efficiency, customer engagement, and innovation. This degree equips students with both technical and managerial skills, enabling them to act as a bridge between IT teams and business stakeholders. It fosters a unique profile capable of driving digital transformation and technological innovation in organizations. Graduates of BBIT can pursue careers as business analysts, IT project managers, systems analysts, digital transformation consultants, and data analysts. BBIT has scope across sectors including finance, healthcare, manufacturing, e-commerce, and government departments etc. BBIT also provides a strong foundation for further studies in IT management, data science, or business analytics.

Facilities

- The department owns and cares for a state-of-the-art computer lab equipped with the latest statistical/mathematical/analytical software to support undergraduate business programs. The lab is equipped with cutting-edge research-related software to enrich the learning experience of young minds along with the flavor of practical research work.

- DMS organizes demand-driven professional activities, such as training programs, international conferences, seminars, workshops, business idea competitions, industrial tours, and recreational trips. The blend of curricular and extra-curricular activities enables the students to perform extraordinarily in their professional and personal lives.

Programs Educational Objectives (PEOs)

PEO-01: To develop critical thinking skills through keen observation, free inquiry, and logical reasoning for creative problem solving.

PEO-02: To facilitate deep-rooted transformation based on adherence to high ethical standards, social responsibility, and business professionalism.

PEO-03: To produce graduates who can synthesize knowledge of functional business areas for effective management in a dynamic business environment.

Degree Awarding Criteria

Candidate shall qualify for the award of BBA degree if s/he:

- Has passed the prescribed courses with a minimum CGPA of 2.0.
- Has completed six weeks of internship.

Bachelors of Business Administration (BBA)Courses

Year 1

Semester 1

Course No	Subject	Th	Pr
HU 102	Functional English	3	0
BIT 101	Digital Toolbox for Business	3	0
BUS 101	Microeconomics	3	0
BUS 111	Principles of Accounting	3	0
BUS 162	Business and Society	3	0
BUS 161	Academic and Professional Development-I	1	0

Semester 2

Course No	Subject	Th	Pr
HU 211	Business Communication	3	0
BUS 102	Macroeconomics	3	0
BUS 112	Financial Accounting	3	0
BUS 131	Principles of Management	3	0
IS 101	Islamic and Pakistan Studies-I	3	0
QT 101	Translation of Holy Quran-I	1	0

Year 2

Semester 3

Course No	Subject	Th	Pr
HU 221	Technical Writing & Presentation Skills	3	0
MA 151	Business Mathematics	3	0
BUS 262	World Today	3	0
BUS 231	Human Resource Management	3	0
IS 201	Islamic and Pakistan Studies-II	3	0
BUS 261	Academic and Professional Development-II	1	0

Semester 4

Course No	Subject	Th	Pr
MA 257	Business Statistics	3	0
BUS 212	Cost Accounting	3	0
BUS 232	Organizational Behavior	3	0
BUS 241	Principles of Marketing	3	0
BUS 263	Law and Society	3	0
QT 201	Translation of Holy Quran-II	1	0

Year 3

Semester 5

Course No	Subject	Th	Pr
BUS 321	Business Finance	3	0
BUS 342	Marketing Management	3	0
BUS 351	Production and Operations Management	3	0
BUS 362	Research Methods for Social Sciences	3	0
	Free Elective-I	3	0
BUS 361	Academic and Professional Development-III	1	0

Semester 6

Course No	Subject	Th	Pr
BIT 301	Management Information Systems	3	0
BUS 322	Financial Management	3	0
BUS 343	Digital Marketing	3	0
BUS 352	Supply Chain Management	3	0
	Free Elective-II	3	0
QT 301	Translation of Holy Quran-III	1	0

Year 4

Semester 7

Course No	Subject	Th	Pr
BUS 411	Taxation Management	3	3
BUS 471	Entrepreneurship	3	1
	Minor-I	3	0
	Minor-II	3	0
BUS 498	Final Year Project-I	3	0
BUS 461	Academic and Professional Development-IV	1	0

Semester 8

Course No	Subject	Th	Pr
HU 400	International Language	3	3
BUS 431	Strategic Management	3	0
	Minor-III	3	0
	Minor-IV	3	0
BUS 499	Final Year Project-II	3	0
QT 401	Translation of Holy Quran-IV	1	0

Bachelors of Business Information Technology (BBIT) Courses

Year1

Semester1				Semester2			
Course No	**Subject(Pre-requisites)**	**Th**	**Prt**	**Course No**	**Subject(Pre-requisites)**	**Th**	**Prt**
HU102	Functional English	3	0	HU211	Business Communication	3	0
MA151	Business Mathematics	3	0	MA257	Business Statistics	3	0
BIT101	Digital Tool box for Business	3	0	CS103	Introduction of Computer Programming for Data Science	2	1
BUS101	Microeconomics	3	0	BUS102	Macroeconomics	3	0
BUS162	Business and Society	3	0	BUS131	Principles of Management	3	0
BUS161	Academic and Professional Development-I	1	0	IS101	Islamic and Pakistan Studies-I	3	0
QT101	Translation of Holy Quran-I	1	0				

Year2

Semester3				Semester4			
Course No	**Subject(Pre-requisites)**	**Th**	**Prt**	**Course No**	**Subject(Pre-requisites)**	**Th**	**Prt**
HU221	Technical Writing & Presentation Skills	3	0	BIT272	Database Systems	2	1
BIT271	Object Oriented Programming	2	1	BIT277	Data Structures and Algorithms	3	0
BIT275	Data Communication and Computer Networking	3	0	BUS262	World Today	3	0
BUS111	Principles of Accounting	3	0	BUS211	Managerial Accounting	3	0
BUS231	Human Resource Management	3	0	BUS232	Organizational Behavior	3	0
BUS261	Academic and Professional Development-II	1	0	IS201	Islamic and Pakistan Studies-II	3	0
QT201	Translation of Holy Quran-II	1	0				

Year3

Semester5				Semester6			
Course No	**Subject(Pre-requisites)**	**Th**	**Prt**	**Course No**	**Subject(Pre-requisites)**	**Th**	**Prt**
BUS362	Research Methods for Social Sciences	3	0	BIT302	Enterprise Systems	3	0
BIT366	Web Development	3	0	BIT303	E-Commerce	3	0
BIT361	Software Engineering	3	0	BUS322	Financial Management	3	0
BUS321	Business Finance	3	0	BUS342	Marketing Management	3	0
BUS241	Principles of Marketing	3	0	BUS352	Supply Chain Management	3	0
BUS361	Academic & Professional Development-III	1	0	BUS263	Lawand Society	3	0
QT301	Translation of Holy Quran-III	1	0				

Year4

Semester7				Semester8			
Course No	**Subject(Pre-requisites)**	**Th**	**Prt**	**Course No**	**Subject(Pre-requisites)**	**Th**	**Prt**
	Elective-I	3	0	BUS431	Strategic Management	3	0
	Elective-II	3	0	HU400	International Language	3	0
BUS471	Entrepreneurship	3	0		Elective-III	3	0
	Free Elective-I(Natural Science Domain)				Free Elective-II		
BUS461	Academic & Professional Development-IV	1	0	BIT499	Experiential Learning-II(Project)	3	0
QT401	Translation of Holy Quran-IV	1	0				
BIT498	Experiential Learning-I(Internship)	3	0				

List of Elective Courses for BBA/BBIT

Human Resource Management	Business Information Technology for BBIT	List of Free Elective-II
HRM401RecruitmentandSelection(3,0)	BIT487DataScience(3,0)	CS 103 Introduction of Computer Programming for Data Science(2,1)
HRM402TrainingandDevelopment(3,0)	BIT489BusinessIntelligence(3,0)	BIT 414 Information System Audit and Control (3,0)
HRM403PerformanceManagement(3,0)	BIT373SoftwareQualityAssurance(3,0)	Arch106HistoryofCivilizations(2,0)
HRM404CrossCulturalManagement(3,0)	BIT478ArtificialIntelligence(3,0)	Arch107FreeHandSketching(0,2)
	BIT411SearchEngineOptimization(3,0)	CRP 101 Introduction to City and Regional Planning (3,0)
Marketing	BIT486E-procurement(3,0)	PPE 209 Chemical & Petrochemical Industries (3,0)
MKT401RetailManagement(3,0)	BIT 412 Database Administration and Management (3,0)	CHE104 Health and Safety at Workplace(2,0)
MKT402ServicesMarketing(3,0)	BIT 413 System and Network Administration (3,0)	CHE 109 Chemical Process Industries (2,1)
MKT 403 Consumer Behavior and Marketing (3,0)	BIT480InternetworkingwithUnixTCP/IP(3,0)	CHE 252 Environmental Health and Safety (3,0)
MKT 404 Selling and Sales Management (3,0)	BIT 414 Information System Audit and Control (3,0)	ENE 103 Environmental Laws and Policies (2,0)
MKT405IntegratedMarketingCommunication(3,0)	BIT415CyberSecurity(3,0)	EnE-105 Ecological Management (2,0)
	BIT 416 Mobile Application Development (3,0)	ES405EnvironmentalGovernance(2,0)
Finance	BIT 417 Digital Marketing and Web Analytics (3,0)	ES 308 Cleaner Production Techniques (3,0)
FIN 401 Financial Analysis and Reporting (3,0)	Any other course in Natural Science domain withapproval of Program Head and Chairman	PID-101 Fundamentals of Design -I (2,2.5)
FIN 402 Financial Markets and Institutions (3,0)		ES411 Ecotourism(2,0)
FIN 403 Commercial and Islamic Banking (3,0)	**List of Free Elective-I (Natural Science)**	PID-102LVisualCommunication–I (0,2)
FIN 404 International Finance (3,0)	PHY-113 Applied Physics(2,1)	PID-115L Digital Graphics (0,2.5)
FIN405Credit Management(3,0)	EnE-104Environmental Chemistry (2,1)	Math-211 Operations Research-I (3,0)
FIN 406 Insurance and Risk Management (3,0)	ES-101 Introduction to Environmental Science (3,0)	Math-312 Operation Research-II (3,0)
FIN 407 Investment Analysis (3,0)	ES-103 Introduction to Earth Sciences (2,1)	Math-416 Optimization Theory (3,0)
	CY-151 Introduction to Physical Chemistry (2,0)	MA-346 Numerical Methods (3,0)
Business Information Technology for BBA	CY-121 Introduction to Inorganic Chemistry (2,0)	BIT487 Data Science (3,0)
BIT302Enterprise Systems (3,0)	ES-203 Basics of Environmental Pollution (3,0)	BIT489 Business Intelligence (3,0)
BIT487Data Science (3,0)	GeoE-110 Physical Geology (3,1)	BUS311 Auditand Assurance (3,0)
BIT489Business Intelligence (3,0)	MinE-110 Applied Geology (3,1)	BUS363 Project Management (3,0)
BIT411SearchEngineOptimization (3,0)	Any other course in Natural Science domain with approval of Program Head and Chairman	BUS364 Local Markets (3,0)
BIT 414 Information Systems Auditand Control (3,0)		BIT411Search Engine Optimization (3,0)
Any other IT course with approval of Program Head and Chairman		BIT486E-procurement (3,0)
		Any other course with approval of Program Head and Chairman

List of Pre-Requisite Courses

Course(s)	Pre-Requisites
Research Methods for Social Sciences	Business Statistics
Financial Accounting, Cost Accounting, Managerial Accounting	Principles of Accounting
Business Finance, Financial Management	Principles of Accounting
Marketing Management	Principles of Marketing
Human Resource Management, Organizational Behavior, Production & Operations Management, Supply Chain Management	Principles of Management
Finance Electives	Financial Management
Marketing Electives	Marketing Management
Human Resource Management Electives	Human Resource Management, Organizational Behavior
IT Electives for BBA	Introduction of Computer Programming for Data Science
Object Oriented Programming	Introduction of Computer Programming for Data Science
Data Structures and Algorithms, Web Development	Object Oriented Programming

Department of Computer Sciences

Chairman
Prof. Dr. Shahzad Asif

Professor
Prof. Dr. Muhammad Umar Qasim

Assistant Professor
Dr. Farah Adeeba
Dr. Muhammad Irfan Yousuf
Dr. Qurat-ul-Ain

Lecturer
Dr. Zeeshan Ramzan
Ms. Anam Iftikhar
Ms. Drakhshan Bokhat
Mr. Nadeem Iqbal
Mr. Aizaz Akmal
Ms. Namra Sheikh
Ms. Alina Munir
Mr. Danish Mohsin
Mr. Usman Ghani
Ms. Rimsha Noreen
Mr. Muzammil Dilawar
Ms. Sana Afzal

Teaching Fellow
Ms. Mairah Farooq
Ms. Rida

Graduate Assistant
Noman Munir
Ali Raza

Teaching Assistant
Ms. Shanfa Irum
Ms. Zoha
Ms. Ghazala

Introduction
The Department of Computer Science at the University of Engineering and Technology (UET) is one of the most prominent and oldest centers of computer education in the country. To meet the growing demand for computer science education, UET established a Computer Science Department at its New Campus located in Kala Shah Kaku in 2016. The Department of Computer Science at the New Campus offers B.Sc. degree programs in Computer Science and Software Engineering, M.Sc. degree program in Computer Science, and Ph.D. degree program in Computer Science. The Department is home to modern technologies and highly skilled faculty to prepare students for future jobs.

Courses of Study
The Department offers the following degree programs.
- B.Sc. Computer Science
- B.Sc. Software Engineering
- M.Sc. Computer Science
- Ph.D. Computer Science

B.Sc. Computer Science
Mission
To impart high quality computing education to the students in order to develop critical thinking, analytical skills and abilities to solve real-world problems for the technological and socio-economic development.

Program Educational Objectives (PEOs)
The Program Educational Objectives (PEOs) of the Computer Science program are to produce graduates who are ready to:
PEO-01: Graduates demonstrate theoretical and practical knowledge and skills of computer science tosolve real-world complex problems.
PEO-02: Graduates demonstrate professionalism, leadership qualities and engage in continuous learning of new developments in diverse fields of computing.
PEO-03: Graduates communicate effectively work in a multidisciplinary team environment and exhibitan awareness of the professional and social responsibility by making an impact on the society in an ethical manner.

Year 1							
Semester 1				**Semester 1**			
Course No	Subject	Credit Hours		Course No	Subject	Credit Hours	
		Th	Pr			Th	Pr
CSC102	Programming Fundamentals	3	1	CSC103	Object Oriented Programming	3	1
CSC100	Application of Information and Communication Technologies	2	1	CSC104	Database Systems	3	1
CSC101	Discrete Mathematics	3	0	CSC105	Digital Logic Design	2	1
MA-123	Calculus	3	0	MA-104	Calculus II	3	0
PHY-111	Applied Physics	2	1	MA-205	Applied Statistics and Probability	3	0
				HU-111L	Communication Skills (Lab)	0	1
				QT-101	Translation of the Holy Quran-I	1	0

Year 2							
Semester 3				**Semester 4**			
Course No	Subject	Credit Hours		Course No	Subject	Credit Hours	
		Th	Pr			Th	Pr
CSC200	Data Structures and Algorithms	3	1	CSC205	Computer Organization and Assembly Language	2	1
MA-234	Linear Algebra	3	0	CSC201	Information Security	2	1
HU-102	Functional English	3	0	CSC202	Artificial Intelligence	2	1
CSC203	Computer Networks	2	1	CSC206	Theory of Automata	3	0
CSC204	Software Engineering	3	0	CSC208	Design and Analysis of Algorithms	3	0
IS-XXX	Islamic Studies	3	0	CSC207	Advanced Database Management Systems	2	1
				QT-201	Translation of the Holy Quran-II	1	0

Year 3							
Semester 5				**Semester 6**			
Course No	Subject	Credit Hours		Course No	Subject	Credit Hours	
		Th	Pr			Th	Pr
CSC300	Operating Systems	2	1	CSC303	Compiler Construction	2	1
CSC301	Introduction to Human Computer Interaction	3	0	CSC304	Parallel and Distributed Computing	2	1
CSC302	Computer Architecture	3	0	CSCXXX	Domain Elective 3	3	0
CSCXXX	Domain Elective 1	3	0	CSCXXX	Domain Elective 4	3	0
CSCXXX	Domain Elective 2	3	0	XX-XXX	Elective Supporting Course (e.g. Introduction to Marketing/ Financial Accounting)	3	0
HU-XXX	Social Science (e.g. HU-240 Psychology/ Or Any one of Anthropology/Economics/Sociology/Social Work/International Relations/Political Science)	2	0	HU-XXX	Expository Writing	3	0
				QT-301	Translation of the Holy Quran-III	1	0

Year 4							
Semester 7				**Semester 8**			
Course No	Subject	Credit Hours		Course No	Subject	Credit Hours	
		Th	Pr			Th	Pr
CSC401	Final Year Project – I	0	2	CSC402	Final Year Project – II	0	4
CSCXXX	Domain Elective 5	3	0	CSCXXX	Domain Elective 7	3	0
CSCXXX	Domain Elective 6	3	0	IS-XXX	Ideology and Constitution of Pakistan	3	0
HU-XXX	Civics and Community Engagement	2	0	CSC403	Professional Practices in Software Development	2	0
HU-XXX	Technical Report Writing	3	0	QT-401	Translation of the Holy Quran-IV	1	0
MGT-XXX	Entrepreneurship	2	0	HU-XXX	International Language	0	0

B.Sc. Software Engineering

Mission

The mission of the Bachelor of Science degree in Software Engineering is to educate students how to engineer and maintain software systems within constraints and prepare them for lifelong learning. The program will produce successful professionals and entrepreneurs who can define, design, develop and deliver high quality software solutions while adhering to ethical and professional standards.

Program Educational Objectives (PEOs)

The Program Educational Objectives (PEOs) of the Software Engineering program are to produce graduates who are ready to:

PEO-01: be successful professionals in the field with sound knowledge of software engineering.

PEO-02: be lifelong learners who are ready to enhance their software engineering knowledge through self-education and/or further studies.

PEO-03: exhibit strong leadership, management, communication and interpersonal skills in multi-disciplinary environments as well as demonstrate higher standards of professional integrity and moral values with positive impact on society and environment.

B.Sc. Software Engineering

Year 1

Semester 1					Semester 1			
Course No	**Subject**	**Th**	**Pr**		**Course No**	**Subject**	**Th**	**Pr**
CSC102	Programming Fundamentals	3	1		CSC103	Object Oriented Programming	3	1
CSC100	Application of Information and Communication Technologies	2	1		CSC104	Database Systems	3	1
CSC101	Discrete Mathematics	3	0		CSC105	Digital Logic Design	2	1
MA-123	Calculus	3	0		MA-104	Calculus II	3	0
PHY-111	Applied Physics	2	1		MA-205	Applied Statistics and Probability	3	0
					HU-111L	Communication Skills (Lab)	0	1
					QT-101	Translation of the Holy Quran-I	1	0

Year 2

Semester 3					Semester 4			
Course No	**Subject**	**Th**	**Pr**		**Course No**	**Subject**	**Th**	**Pr**
CSC200	Data Structures and Algorithms	3	1		CSC205	Computer Organization and Assembly Language	2	1
MA-234	Linear Algebra	3	0		CSC201	Information Security	2	1
HU-102	Functional English	3	0		CSC202	Artificial Intelligence	2	1
CSC203	Computer Networks	2	1		SE-211	Software Requirement Engineering	3	0
CSC204	Software Engineering	3	0		CSC208	Design and Analysis of Algorithms	3	0
IS-XXX	Islamic Studies	3	0		SE-222	Software Design & Architecture	2	1
					QT-201	Translation of the Holy Quran-II	1	0

Year 3

Semester 5					Semester 6			
Course No	**Subject**	**Th**	**Pr**		**Course No**	**Subject**	**Th**	**Pr**
CSC300	Operating Systems	2	1		SE-341	Software Project Management	3	0
SE-323	Software Construction and Development	2	1		CSC304	Parallel and Distributed Computing	2	1
SE-331	Software Quality Engineering	3	0		CSCXXX	Domain Elective 3	3	0
CSCXXX	Domain Elective 1	3	0		CSCXXX	Domain Elective 4	3	0
CSCXXX	Domain Elective 2	3	0		XX-XXX	Elective Supporting Course (e.g. Introduction to Marketing/ Financial Accounting)	3	0
HU-XXX	Social Science (e.g. HU-240 Psychology/ Or Any one of Anthropology/Economics/Sociology/Social Work/International Relations/Political Science)	2	0		HU-XXX	Expository Writing	3	0
					QT-301	Translation of the Holy Quran-III	1	0

Year 4

Semester 7					Semester 8			
Course No	**Subject**	**Th**	**Pr**		**Course No**	**Subject**	**Th**	**Pr**
CSC401	Final Year Project – I	0	2		CSC402	Final Year Project – II	0	4
CSCXXX	Domain Elective 5	3	0		CSCXXX	Domain Elective 7	3	0
CSCXXX	Domain Elective 6	3	0		IS-XXX	Ideology and Constitution of Pakistan	3	0
HU-XXX	Civics and Community Engagement	2	0		CSC403	Professional Practices in Software Development	2	0
HU-XXX	Technical Report Writing	3	0		QT-401	Translation of the Holy Quran-IV	1	0
MGT-XXX	Entrepreneurship	2	0		HU-XXX	International Language	0	0

FAISALABAD CAMPUS

- Department of Electrical, Electronics & Communication Engineering
- Department of Mechatronics and Control Engineering
- Department of Chemical and Polymer Engineering
- Department of Textile Engineering
- Department of Computer Science
- Department of Humanities, Basic Sciences and Islamic Studies

Campus Coordinator
Prof. Dr. Muhammad Mohsin

Faisalabad, the Manchester of Pakistan contributing major portion of Pakistan's GDP holds a campus of University of Engineering and Technology (UET) Lahore since 2004. Faisalabad being the third largest metropolis and a major industrial centre in the heart of Pakistan are the main reasons for choosing Faisalabad city for establishing a campus of UET. The campus has a spacious dedicated area of more than 228 acres of land provided by the Government of Punjab.

Healthy academic environment with highly qualified faculty members, state of the art laboratories, dedicated academic and administrative staff, industrial collaboration, co-curricular activities; all add to the development of competent and professional engineers and graduates at the campus. All the engineering programs of the campus are accredited by PEC as Level-2 (Washington accord-OBE based).

Other than many industries, Faisalabad is renowned for its textile industry. There was no department offering degree in the field of Textile at UET. To cope up with this, Department of Textile Engineering was established at Faisalabad. Following are the departments at the Faisalabad Campus:

- Department of Electrical, Electronics and Communication Engineering
- Department of Mechanical, Mechatronics and Manufacturing Engineering
- Department of Chemical and Polymer Engineering
- Department of Textile Engineering
- Department of Computer Science
- Department of Basic Sciences and Humanities

Following undergraduate degrees are offered in the above stated departments:

- B.Sc. Computer Engineering
- B.Sc. Electrical Engineering
- B.Sc. Mechatronics and Control Engineering
- B.Sc. Chemical Engineering
- B.Sc. Textile Engineering
- B.Sc. Computer Science
- B.Sc. Environmental Science
- B.Sc. Chemistry
- B.Sc. Mathematics
- Bachelor of Business Administration (BBA)

Department of Electrical, Electronics & Telecommunication Engineering

Chairman
Prof. Dr. Muhammad Akram

Professor
Dr. Muhammad Akram

Associate Professor
Dr. Faizan Dastgeer
Dr. Aashir Waleed

Assistant Professors

Dr. Muhammad Nasir
Dr. Yasir Jamal
Dr. Haseeb Hussain

Lecturers
Dr. Zia ur Rahman
Engr. Muhammad Ahsan ul Haq
Engr. Asia Rafiq
Engr. Waseem Arshad
Engr. Rameez Javed
Engr. Azeem Iqbal

Engr. M. Ali Raza
Engr. Munazza Sadaf
Engr. Zeeshan Ali Akbar
Engr. Rimsha Ch.

Teaching Fellow
Engr. Abdullah Bilal

Introduction

The advancing theoretical and practical research in the field of electrical engineering has called for the production of highly competent engineers. The department of electrical engineering at Faisalabad campus offers its students mature academic facilities so that they can compete with the world's pace of advancement. The first two years of study comprise of basic electrical engineering courses along with the courses from basic sciences. The third year offers core electrical engineering courses that help students to make up their choice for fourth year where they have the liberty to adopt between advance courses of Power, Electronics and Communications. The department offers 100% same curriculum as that of Electrical department main campus, UET Lahore.

The department of Electrical, Electronics & Telecom Engineering is established in Fall 2004. All of its graduated batches are accredited with PEC. The most recent graduates, from intake batch 2018 to intake batch 2023, are PEC accredited under Level-II, the highest standard of accreditation. Our graduates are not only part of all kind of Pakistan industry, (Power Houses, WAPDA, NTDC, Telecom, PTCL, Textile, Chemical, Software etc) but also placed internationally in countries like USA,UK, Europe, Australia, Singapore, Middle East. Some of our graduates are CEO's of their own companies and some are part of international academia after completing Ph.D.'s from highly ranked world universities.

Courses of Study

The department offers:
- B.Sc. Electrical Engineering
- B.Sc. Computer Engineering
- M.Sc. Electrical Engineering
- Ph.D. Electrical Engineering

B.Sc. Electrical Engineering

The department offers four years degree program under PEC Level-II accreditation. PEC has awarded its accreditation for 03 years in the latest evaluation.

Mission

To ensure understanding and application of electrical engineering fundamentals by inculcating analysis and design skills for the betterment of humanity and to become a center of excellence in the field of electrical engineering.

Program Educational Objectives (PEOs)

PEO-01: Graduate should acquire and demonstrate their proficiency of electrical engineering knowledge by inculcating analysis and design skills using modern tools.

PEO-02: Graduate should possess the knowledge translation ability and contribute as an effective team member to reinforce their engineering competency.

PEO-03: Graduates should acquire strong moral values, ethical values, interpersonal and project management skills.

PEO-04: Graduates should build entrepreneurial and innovative mindset to address real world problems.

B.Sc. Computer Engineering

The department offers four year degree program under the accreditation of National Computing Education Accreditation Council (NCEAC).

Program Educational Objectives (PEOs)

PEO-01: Graduates demonstrate theoretical and practical knowledge and skills of computer science to solve real-world complex problems.

PEO-02: Graduates demonstrate professionalism, leadership qualities and engage in continuous learning of new developments in diverse fields of computing

PEO-03: Graduates communicate effectively work in a multidisciplinary team environment and exhibit an awareness of the professional and social responsibility by making an impact on the society in an ethical manner.

Laboratories

The following laboratory facilities are available at the department

- Electric Circuits
- Computer
- Semiconductor Devices
- Electric Machines
- Micro Processor Systems
- Antenna and Micro-Wave
- Analog Electronics
- Digital Electronics
- Communication Systems
- Power Electronics
- Power Systems
- Project Lab
- Control Systems
- Digital logic Design

Further details and curriculum is available on department's webpages: https://eetfsd.uet.edu.pk/undergraduate-program

Department of Mechanical, Mechatronics and Manufacturing Engineering

Chairman
Dr. Hafiz Farhan Maqbool

Associate Professor
Dr. Hafiz Farhan Maqbool
Dr. Asif Ishfaque

Assistant Professors

Dr. Nasir Ahmad
Dr. Ahmad Ali
Dr. Muhammad Awais Hafeez
Dr. Hashim Iqbal
Dr. Muhammad Usman
Dr. Imran Mahmood
Dr. Imran Ali
Dr. Asim Ghaffar

Dr. Ammara Kanwal

Lecturers
Dr. Aamir Mehmood
Dr. Shoaib Aslam
Engr. Dilruba Siddiqi
Engr. Umar Siddique Virk
Engr. Syed Muhammad Umer

Introduction

Mechatronics and Control Engineering is an inter-disciplinary field that integrates the domains of Mechanical Engineering, Electrical Engineering, Computer Science, and Information Technology. This hybrid-engineering program was established to fulfill the ever-growing demands of industry and research sectors to tackle the problems associated to the control, automation, artificial intelligence, robotics and/or related areas. The department at Faisalabad Campus is equipped with state-of-the-art laboratories and highly qualified faculty to provide the students with a great learning environment. The department offers 100% the same curriculum as that of Mechatronics and Control Engineering department main campus, UET Lahore.

Courses of Study

The department offers:

- B.Sc. Mechatronics and Control Engineering
- M.Sc. Mechatronics Engineering
- Ph.D. Mechatronics Engineering

Laboratories

- Instrumentation and Measurement
- Industrial Automation
- Mechanics of Materials
- Circuits and Devices
- Fluid Mechanics
- Control Systems
- Engineering Mechanics
- Mechanisms
- Robotics
- Thermal Sciences
- Computer (Simulation)
- Engineering Workshop

- Hydraulics and Pneumatics

Mission

The department, through quality education and enabling environment, aims to nurture the professional engineers with the capability of designing complex mechatronic systems, serving current industrial needs and developing innovative technologies.

Program Educational Objectives (PEOs)

To nurture Mechatronics engineer who

PEO-01: Can skilfully design and implement integrated solutions to general Mechatronics engineering problems

PEO-02: Is capable of developing professional skills, while adhering to high ethical values, to excel in industry, research organizations and succeed in entrepreneurial ventures

PEO-03: Can innovate and embark on new directions in advancing the Mechatronics technologies which have direct national and international relevance.

PEO-04: Is capable of contributing to diversity, socioeconomic growth, and sustainable development as a team member.

Department of Chemical and Polymer Engineering

Chairman
Prof. Dr. Syed Waqas Ahmad

Associate Professors
Dr. Faisal Saleem
Dr. Muhammad Danish
Dr. Haji Ghulam Qutab

Dr. Abdul Rehman
Dr. Khalid Mehmood
Dr. Rabia Sharif

Assistant Professors
Dr. Shahzad Zafar
Dr. Faisal Rehman

Lecturers
Ms. Iqra Saleem
Ms. Saba Gul
Mr. Aiman Shabbir
Mr. Muhammad Imran
Mr. Muhammad Mudassir
Mr. Atif Khan

Introduction

Chemical industry requires highly qualified and competent professionals for its growth. The department at Faisalabad campus with its highly qualified and professionally trained faculty members maintains excellent repute of producing engineers with professional abilities. The department holds well equipped laboratories to coordinate the theoretical knowledge with practical skills in quite a successful fashion. The course of study starts with the first two years focusing on the basics of Chemical Engineering. The third year holds the importance of backbone, where in depth knowledge of Chemical Engineering is given to the students. The fourth year is specialization year in which students specialize in different fields of Chemical Engineering. The BSc program in the chemical Engineering is currently accredited on Level-II.

Courses of Study

The Department offers:
- B.Sc. Chemical Engineering
- M.Sc. Chemical Engineering
- Ph.D. Chemical Engineering

The Department follows the Mission and PEOs of the Chemical Engineering Department Lahore.

Laboratories

- Chemical Process Industries
- Heat Transfer
- Fluid Flow
- Environmental Engineering

- Thermodynamics
- Mass Transfer
- Particle Technology
- Energy Engineering

- Chemical Reactor Design
- Chemistry
- Unit processes
- Simultaneous Heat and Mass Transfer

Department of Textile Engineering

Chairman
Prof. Dr. Muhammad Mohsin

Professor
Dr. Muhammad Mohsin

Associate Professor
Dr. Shaheen Sardar

Assistant Professors
Dr. Aamir Abbas

Lecturers
Dr. Haris Ameer
Dr. Faiza Safdar
Engr. Sidra Ghaffar

Engr. Muhammad Ahsan
Engr. Khurram Shehzad Akhtar
Engr. Wardah Anam

Courses Offered:
- B.Sc. Textile Engineering
- M.Sc. Textile and Materials Engineering
- Ph.D. Textile Engineering

The textile sector in Pakistan has an overwhelming impact on the economy, contributing 60% to the country's exports and 46% of the total industrial production. This sector also provides employment opportunities to 45% of country's workforce, which is one of the highest. In today's highly competitive global environment, the textile sector needs to upgrade its processes, machinery, supply chain, improve productivity, sustainability and maximize the value-addition for its survival; which cannot be realized without competent professionals in the relative field. Faisalabad campus is privileged over other campuses of UET for holding a degree awarding department in the field of Textile Engineering.

The course of study is the composite one and cover all four section of textile which include:
- Spinning (Yarn Manufacturing)
- Weaving (Fabric Manufacturing)
- Wet Processing (Pre-treatment, Dyeing & Finishing)
- Garment Manufacturing

The department started offering Bachelor's in Textile in 2013, Master's in Textile and Materials Engineering in 2020 and Ph.D. in Textile Engineering in 2021; with highly qualified faculty and well-equipped laboratories. There is more than 170 lab scale equipment installed at the department of textile engineering in the following labs.

Laboratories
- Mini Spinning Lab-complete range (Pakistan's first and only such lab)
- Pilot Spinning Lab-complete range
- Weaving Preparatory Lab
- Knitting Lab
- Pre-treatment, Dyeing & Finishing Lab-complete range
- Wet Processing Research Lab
- Textile Chemical Synthesis and Polymerization Lab
- Garment Manufacturing Lab
- Pattern Cutting Lab
- Testing Lab (Physical & Chemical)

- Textile Recycling Lab
- Textile Nano Materials Lab
- Textile Computer Lab
- Agro Waste & Bast Fiber Extraction Lab
- Smart Textile Lab
- Textile Digital Printing Lab

Mission

The mission of the department of textile engineering is to prepare engineers capable of solving complex textile engineering problems, using strong fundamental knowledge and modern ideas, thus serving the national industry while maintaining the international standards. All the 12 PLOs related to WA are adopted for the BSc Textile Engineering program.

Program Educational Objectives

PEO-01: Deal with contemporary challenges in the textile industry by using concepts and techniques of textile engineering and applied sciences.

PEO-02: Exhibit effective communication, and managerial skills, as team leaders as well as team members.

PEO-03: Develop their careers professionally giving due considerations to health and safety, socio-economic, environmental and ethical challenges.

B.Sc. Textile Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Th	Pr
TEX-101	Textile Engineering Fundamentals	2	1
CY-105	Applied Chemistry-I	2	1
ME-102	Mechanical Engineering Fundamentals	3	0
CS-103	Introduction to Computer Programming for Data Science	2	1
MA-105	Applied Mathematics-I	3	0
IS-102	Islamic Studies	3	0

Semester 2

Course No	Subject (Pre-requisites)	Th	Pr
TEX-103	Textile Calculations	2	0
TEX-102	Textile Raw Materials and Science	2	1
EE-199	Basic Electrical and Electronics Engineering	3	1
MA-106	Applied Mathematics	3	0
MGT-110	Social Responsibility	2	0
ME-100L	Workshop Practice	0	1
QT-101	Translation of The Holy Qur'an-I	1	0
MGT-105	Introduction to Economics	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Th	Pr
MA-205	Applied Statistics and Probability	3	0
TEX-202	Yarn Preparatory Processes	2	1
TEX-203	Weaving Preparatory Processes	2	1
TEX-204	Pre-treatment of Textiles	2	1
IS-202	Ideology and Constitution of Pakistan & Islamic studies	3	0
HU-205	Technical Writing	3	0

Semester 4

Course No	Subject (Pre-requisites)	Th	Pr
TEX-205	Yarn Production Engineering	3	1
TEX-206	Dyestuff and Color Science	3	1
TEX-207	Clothing Anthropometry and Pattern Construction	2	1
MA-234	Linear Algebra	3	0
QT-201	Translation of The Holy Qur'an-II	1	0
HU-222	Expository writing	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Th	Pr
TEX-301	Textile Testing and Quality Control	2	1
TEX-302	Weaving Mechanisms and Advancements	3	1
TEX-303	Textile Dyeing and Printing	3	1
TEX-304	Sewn Product Engineering	3	1
TEX-305	Technical Textiles and Nonwovens	3	0

Semester 6

Course No	Subject (Pre-requisites)	Th	Pr
TEX-306	Advance Spinning techniques	3	0
TEX-307	Knitting Operations	3	1
TEX-308	Textile Finishing	3	1
MGT-203	Principles of Marketing	2	0
MGT-318	Entrepreneurship and Management	2	0
QT-301	Translation of The Holy Qur'an-III	1	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Th	Pr
TEX-401	Specialty Yarns	2	0
TEX-402	Fabric Structure and Design	3	1
TEX-403	Senior Design Project I	0	3
TEX-406	Clothing Quality Control	3	1
CS-XXX	Applications of Information and Communication Technologies	2	1

Semester 8

Course No	Subject (Pre-requisites)	Th	Pr
TEX-404	Senior Design Project II	0	3
TEX-405	Industrial Engineering in the Clothing Industry	3	1
MGT-415	Environment, Health and Safety	3	0
QT-401	Translation of The Holy Qur'an-IV	1	0
TEX-412	Denim Manufacturing and Processing	2	0
TEX-408	Recent Trends in Textiles	2	0

The Department is working in close collaboration with the top Pakistani textile industry. Department offer regular industrial tours and training to its textile engineering students as well as industrial expert and foreign lectures for the students at the department. Extensive research is going on at the department and department faculty have published over 220 papers, 11 patents and 6 international book chapters in the last five years. Five Ph.D. students have successfully been co-supervised and completed their practical work in the textile labs of the department, while 7 Ph.D. students of the department research work are currently going on. Department has developed anti-viral masks, PPEs, innovative banana and okra fabric, textile recycling, bio finishes and other range of innovative products and processes. Department is the member of the Society of Dyers and Coloursit, UK. Department also won the only prize for Textile Processing Technologies at the 6th, 7th, 8th Invention to Innovation Summit. Its textile engineering students have won the second place at the EU mask competition 2020, prices at the ICST 2024 and PEC project funding 2023-24.

There is 100% job placement for the graduates of the textile engineering department and around 75% of the students receive the job offer before the graduation, which is one of the highest ratio in engineering filed. Graduates of the UET textile department are currently working in government organizations, working internationally in developed countries, while some of our graduates are CEO's of their own companies. Our graduates are working in some of the top mills of the country like Nishat, Interloop, Crescent, Kamal, Master, Sapphire, CBL, Style, Sadaqat, Artistic, Cotton web, Azgard 9, US Apparel, TTI, US denim and Masood textile etc. Since 2018, every year department of textile engineering organize two mega events of textile (International Conference on Sustainable Textile & all Pakistan textile sustainability competition for students as well as Top Pakistani Textile Brands Tribute). 7th International Conference on Sustainable Textile 2024 was held on 3rd December 2024. More than 550 student projects were displayed in the student competition 2024. Textile sustainability working group has also been announced at the 4th ICST conference and more than 300 textile industry and stakeholders are already part of this initiative.

Department of Computer Science

Chairman	**Associate professors**	**Lecturers**
Dr Muhammad Yasir	Dr. Muhammad Yasir	Dr. Faiza Mehmood
		Mr. Mohsin Sheraz
		Mr. Talha Mubashar
		Mr. Asim Naveed
		Ms. Rida Zaheer

Introduction

This century is witnessing an unprecedented demand for skilled computing professionals. Four-year B.Sc. Computer Science program at University of Engineering and Technology Lahore, Faisalabad Campus is equipped to produce highly skilled computing professionals to meet the ever-increasing demand in various areas ranging from business and industry to education and research. The department is offering 4 years B.Sc. Computer Science program where students can opt for general CS electives or do specialization in Data Science, Artificial Intelligence, Cyber Security, and Multimedia and Gaming. The B.Sc. Computer Science program is accredited by National Computing Education Accreditation Council (NCEAC). The department offers 100% the same curriculum as that of Computer Science department of the main campus, UET Lahore.

Courses of Study

The department offers:
- B.Sc. Computer Science

Mission

To impart high quality computing education to the students, in order to develop critical thinking, analytical skills and abilities to solve real-world problems, for the technological and socio-economic development.

Program Educational Objectives (PEOs)

PEO-01: Graduates demonstrate theoretical and practical knowledge and skills of computer science, to solve real-world complex problems.

PEO-02: Graduates demonstrate professionalism, leadership qualities and engage in continuous learning of new developments in diverse fields of computing.

PEO-03: Graduates communicate effectively, work in a multidisciplinary team environment and exhibit an awareness of the professional and social responsibility, by making an impact on the society in an ethical manner.

Facilities

The Laboratories for the BSc Computer Science program are equipped with the latest fully networked computers. Multimedia projectors are installed in the classrooms and high-speed internet facilities are available in the labs, classrooms, and campus. The department is working closely with the industry.

Department of Basic Sciences and Humanities

Chairman
Prof. Dr. Sajjad Ahmad

Associate Professor
Dr. Ghufrana Samin
Dr. Ilyas Ali
Dr. Arshi Khalid

Assistant Professors
Dr. Muhammad Aslam
Dr. Abdur Rehman
Mr. Kamran Shaheen
Dr. Shazia Karim
Dr. Nosheen Shehzadi

Lecturers
Ms. Saira Zahid

Introduction

The department of Basic Sciences and Humanities (BSH) was established in 2004 at FSD campus with an aim to provide high quality equitable foundation courses in basic sciences and humanities. Basic science & humanities courses are the backbone of the all the disciplines and programs. The department is privileged to have highly qualified, specialized and experienced faculty with degrees from the world-renowned Universities. The department with its highly qualified and professional faculty offers the bridge courses in mathematics, physics, chemistry, communication skills, Islamic and Pak studies to assist the students to get attuned to specialized domains of engineering and sciences. The syllabus of specialized courses has been designed to enrich the students' understanding towards the subjects with a view to helping them in encountering practical problems in real profession carriers. Recently the department has won various competitive research grants from HEC and PHEC under NRPU and Punjab innovation research challenge award scheme.

Courses of Study

The Department of Basic Sciences and Humanities offers following programs:

- B.Sc. Environmental Sciences
- B.Sc. Chemistry
- B.Sc. Mathematics
- BBA
- M.Phil. Applied Chemistry

Laboratories

The department is equipped with various state of the art laboratories including wet analysis lab, general chemistry lab, Hi-tech Chemistry lab, Applied Physics and Chemistry Research lab. These laboratories possess cutting-edge equipment to enrich the learning experience of young minds with practical work. Hi-Tech Chemistry lab was established in 2015 to facilitate the research activities. The major instruments which are available include UV-visible Spectrophotometer, FTIR, Atomic Absorption Spectrophotometer, Rotary evaporator, digital Refrecto & Polarimeter and Sonicator etc.

BS Environmental Sciences
Program Description

BS in Environmental Sciences was started in Faisalabad campus in 2020. Environmental Sciences is an interdisciplinary subject which uses knowledge of Biology, Chemistry, Physics and other related subjects to understand natural processes and human impacts in the atmosphere, aquatic systems, and soils. The BS program is designed to prepare the students with concept, methods and field experience in the subjects including Environmental Microbiology, Air Quality, Water and Waste Water Treatment, Solid Waste Management, Environmental Chemistry, Water Resource Management and Sanitation, Environmental Laws and Policies, Environmental Hazards and Natural Disasters, Environmental Policy and Management, Occupational Hygiene, Health Safety and Environment and Environmental Ethics. The department has fully equipped laboratories and research units to support the teaching, learning and research activities. A variety of openings and career opportunities in government sector, industry, private companies and consulting firms are available for students graduating with a BS degree in Environmental Sciences.

Mission

The aim of launching this program is to provide an educational environment where quality education can be imparted to the youth and to involve various sectors of the society e.g. engineers, technologists, doctors, policy makers, funding agencies, investors, importers, exporters, media educators and all sorts of professionals forming a joint effort to encounter environmental issues.

Tentative Study Plan

The department offers 100% the same PEOs and curriculum as that of BS Environmental Science of the main campus, UET Lahore.

BS Chemistry

Program Description

Chemistry is the core of all sciences. At FSD Campus, initially the department faculty was teaching chemistry in engineering departments. Gradually it grows and now department are offering BS Chemistry (Four years program), M.Phil (Two years Program) and PhD program is being planned. The department focuses on teaching the modern and practical knowledge of the field. The BS Program is designed to prepare the students with concept, knowledge, skills and with field experiences in subjects including Analytical Chemistry, Applied Chemistry, Biochemistry, Environmental, Fuel, Inorganic, Organic, Physical, Nuclear & Radio Chemistry. The main objective of the department of chemistry is to produce graduates of international standard in the established as well as emerging areas of chemical sciences. We owe highly qualified faculty members having training in diverse areas of specialization and publication in internationally recognized journals. We have well equipped labs having advanced instruments and research facilities. Our goal is to prepare and equip our students with creative potential so that they can make significant contributions towards society in local and global industries.

Mission

To create a transformative educational and innovative research experience for students focused on deep disciplinary knowledge, problem solving, leadership, communication and interpersonal skill and well-being.

Tentative Study Plan
The Department follows the PEOs and study plan of the Department of Chemistry, UET Lahore.

BS Mathematics
Program Description
Mathematicians seek truth, beauty and elegance, in mathematics itself and in our work with other disciplines. The BS program at UET Faisalabad Campus is established to train future mathematicians with comprehensive knowledge of math and its applications in various disciplines. The key feature of the BS curriculum includes better exposure of students to courses in the area of pure, applied and computational mathematics. The BS program is focused on the theoretical and technology-based features of the course work and provide enthusiastic learning through class projects, interdisciplinary research and industrial collaborations. Our BS program traces excellence in all aspects of research, teaching and the communication of mathematics.

Mission
The mission of the department is to offer high quality applied and pure mathematics courses to our students. Our task is to equip our graduate students with the essential skills and knowledge to pursue research in mathematics at the highest international standards.

Tentative Study Plan
The Department follows the PEOs and study plan of Department of mathematics, UET Lahore.

Bachelors in Business Administration (BBA)
Program Description
The BBA program at UET Faisalabad Campus is organized to train future managers with the basic tools and techniques of business administration. The key features of the BBA curriculum include better exposure of students to courses in the areas of humanities and social sciences. The BBA program is exclusive in its own right. It is focused on the theoretical and practical features of the coursework and offers vital learning opportunities through class projects, field assignments and strong industry linkages. The BBA graduates have various professional aspects in Pakistan that will help them to have a successful career in future.

Mission
To prepare students with essential business knowledge and skills to achieve the requirements of the industry.

Tentative Study Plan
The Department follows the PEOs and study plan of IB&M, UET Lahore.

Common Facilities at the Campus
Library and Book Bank
Senior Librarian Mr. Mian Tahir Gohar
Campus has a spacious library and book bank. The library has an excellent collection of books related to engineering, sciences as well as literature. The books are opened for issuance by students and faculty. Access to the HEC digital library is also available across all the campus for downloading research papers and books.

Transport
The campus has its own fleet of buses for the transportation of students living in Faisalabad on daily basis covering majority areas of the Faisalabad city. The fleet includes six buses. The fleet also serves for industrial visits as well as visits to the main campus and other universities for educational and Co-Curricular purposes. The university's own fully equipped ambulance is available 24/7 in case of emergency at campus for students and staff.

Hostels
The campus offers accommodation facility for the students domiciled other than Faisalabad. The hostel facility is provided on the basis of seniority and academic record. There are three boys and one girl hostel.

Resident Tutors
Dr. Abdur Rehman, Dr. Shoaib Aslam, Engr. Talha & Dr. Arshi Khalid

Internet & WIFI
The Campus has been provided with the 235 MB of dedicated bandwidth to provide internet facilities for the campus students and staff. Furthermore, WIFI and camera surveillance facilities have been extended throughout the Campus (all the academic buildings, library, offices, hostels) under Safe University Smart Campus (SUSC) by Higher Education Commission (HEC).

Miscellaneous Facilities
Campus has number of facilities including "on campus" medical health clinic run under the supervision of qualified medical doctor, spacious playgrounds, Indoor game facilities, gym, canteen, beautiful mosque having separate facility for boys and girls. Campus has a dedicated café, photocopy and printing facility for the students.

Co-Curricular, Extra-Curricular and other Facilities
Several societies work under a staff advisor, who is a faculty member, for organizing co-curricular and extra-curricular events. An annual sports activity is observed at the campus as well as students participate in different sport events round the year. Literary and cultural events add to the flavor of co-curricular activities, while students are also encouraged to participate in the events held in other universities. A career development cell is also established whose prime job is to ensure better employability of our graduates, recruitment drives and arrange training workshops and lectures by professionals from the industry. There are several scholarships available for campus students.

RACHNA CAMPUS

- Department of Electrical Engineering
- Department of Mechanical Engineering
- Department of Industrial & Manufacturing Engineering
- Department of Computer Science and Engineering
- Department of Natural Sciences, Humanities & Islamic Studies

Incharge
Dr. Haroon Farooq

The College
The College was inaugurated on 15th January 2003; by the then Governor of the Punjab Lt. Gen. (R) Khalid Maqbool. It is located on the left bank of Nokhar Branch Canal about seven kilometers off (East) G.T. Road, between Gakhar and Wazirabad. The area is near to industrial cities of Gujranwala, Sialkot and Gujrat. The campus is spread over an area of 73 acres.

College Status
RCET was declared the Constituent College of University of Engineering & Technology, Lahore on 22-12-2006. Same rules & regularizations, regarding admission, examination, award of degree etc. as adopted by UET, Lahore, are followed. The up-gradation of RCET to Rachna University of Engineering & Technology was announced on 24-06-2008 on the directions of the then Prime Minister of Islamic Republic of Pakistan.

Programs Offered
Currently, courses at undergraduate and postgraduate levels are being offered. All B.Sc. Engineering courses (except Computer Engineering) are accredited by the Pakistan Engineering Council on Level-II.

Undergraduate
- B.Sc. in Electrical Engineering
- B.Sc. in Computer Engineering (NCEAC)
- B.Sc. in Mechanical Engineering
- B.Sc. in Industrial & Manufacturing Engineering
- B.Sc. (Honors) Computer Science

Department of Electrical Engineering

The department of Electrical Engineering was established in 2003. Currently the department has a student enrollment of around 150. So far by year 2023-24, around 800 students have graduated from the department. The department offer undergraduate B.Sc Electrical Engineering Degree. The program is accredited with Pakistan Engineering Council under Level-II i.e. as per Washington Accord guidelines. Being a constituent college of UET, Lahore the Electrical Engineering Department follows the same curriculum as that of Electrical Engineering Department, UET, Lahore. The department is going to start B.Sc. Computer Engineering (under NCEAC) from Fall-2025.

Program Mission
"To provide sound technical and educational training to students and equip them with skills necessary to carry on lifelong learning and growth in their professional careers. To prepare the students to become innovative, socially responsible and ethically groomed engineers in industry, business, research and academia."

Program Educational Objectives (PEOs)
PEO1: Utilize their skills and knowledge to solve real world Electrical Engineering problems
PEO2: Demonstrate social and ethical responsibility in their professional careers
PEO3: Pursue professional careers through continuous improvement in technical, managerial and communication skills

Faculty
The department has currently 11 faculty members, including two Ph.Ds and nine M.Sc. degree holders. The faculty members are actively involved in teaching and research activities.

Chairman, Department of Electrical Engineering
Dr. Haroon Farooq, **Associate Professor**

Assistant Professors	**Lecturers**	**Lab Staff**
Dr. Muhammad Naveed Akhtar	Engr. Waqas Ali	Engr. Hussnain Khurshid
Engr. Muhammad Rehan Arif	Engr. Muhammad Usama	
Engr. Muhammad Usman Aslam	Engr. Irzam Shahid	
Engr. Moazzam Shehzad	Engr. Hira Ali Jamal	
Dr. Mateen Ahmed (Program Lead CE-NCEAC)	Engr. Saira Arif	
	Engr. Faiqa Tariq	

Laboratories
The department currently has eleven (11) well equipped dedicated laboratories to support program.

1. Electronics Lab
2. Microprocessors Lab
3. Communications Lab
4. Power Electronics Lab
5. Power and Machines Lab
6. Electric Circuit Lab
7. Computer Lab
8. Integrated Electronics Lab
9. Control Systems Lab
10. Workshop
11. Physics Lab

Department of Mechanical Engineering

The department of Mechanical Engineering was established in 2003. Currently the department has a student enrollment of around 180. The department offers undergraduate B.Sc. Mechanical Engineering degree program. The program implements outcome-based education and is accredited with Pakistan Engineering Council under Level II in line with Washington Accord. Further, the degrees are recognized across the globe. The departmental faculty has successfully won various funded research projects. The department plans to double the intake from Fall 2025.

Program Mission
"To produce engineers equipped with knowledge and skills to carry on lifelong learning through quality teaching and training. Our graduates shall be able to serve the society demonstrating professional ethics and social conduct."

Program Educational Objectives (PEOs)
1. Apply knowledge to solve analytical and practical engineering problems.
2. Work for continuous professional and socio-technical development.
3. Demonstrate professional ethics, effective communication, and managerial skills.

Chairman, Department of Mechanical Engineering
Dr. M. Salman Abbasi, **Associate Professor**

Assistant Professors	**Lecturers**	**Teaching Assistants**
Dr. Qasim Ali Ranjha	Dr. Anas Rao	Engr. Mariam Hameed
Dr. Tariq Nawaz Chaudhary	Engr. Muhammad Kashif Jamil	Engr. Abdul Manan Qamar
Dr. Ali Akbar	Engr. Aaqib Imdad	**Workshop/Lab Staff**
Engr. Mushtaq Ahmad	Engr. Hafiz Muhammad Suleman	Engr. Muhammad Irfan
Engr. Humble Bin Khalid		Engr. Usman Jamil
Engr. Muhammad Qasim		

Laboratories

The following laboratories have been setup at Mechanical Engineering Department:

- Energy Resources & Utilization
- Fluid Mechanics/Hydraulic Machinery
- I.C Engines
- Heat Transfer
- H.V.A.C
- Engineering Mechanics
- Mechanics of Materials
- Instrumentation & Control
- Mechanics of Machines
- Mechanical Vibration

- Computer / CAD / FEA
- Mechanical Workshops
- Machines Shop
- Fitting Shop
- Foundry Shop
- Carpentry Shop
- Electrical Shop
- Welding Shop

Department of Industrial & Manufacturing Engineering

Chairman

Dr. Muhammad Harris (Associate Professor)

Assistant Professors

Dr. Ahmad Raza Khan
Dr. Ubaid-Ur-Rehman Ghori (EOL)
Mr. Muhammad Aslam
Mr. Muhammad Awais Ahmad
Mr. Muhammad Shehzad

Lecturers

Mr. Muhammad Nouman Khalid
Mr. Ahmad Sheraz Cheema

Laboratories

The following laboratories have been setup at Industrial & Manufacturing Engineering Department:

- Advanced Manufacturing (3D printing)
- Human Factor Engineering (Ergonomics)
- Computing lab
- Machine Tools and Machining
- Industrial Materials
- Manufacturing Processes
- Metrology and Quality Assurance
- Production and Operations Management
- Instrumentation and Control
- Plant Engineering
- Engineering Drawing

Department of Computer Science and Engineering

The department of Computer Science and Engineering was established in 2008 and is currently offering a degree course in Computer Science at undergraduate level. The degree program is accredited by National Computing Education Accreditation Council (NCEAC). Department follows the same curriculum as that of Department of Computer Science, UET Lahore.

Program Mission
"To impact high quality computing education to the students in order to develop critical thinking, analytical skills and abilities to solve real-world problems for the technological and socio-economic development."

Program Educational Objectives (PEOs)
PEO1: Graduates demonstrate theoretical and practical knowledge and skills of computer science to solve real world complex problems.
PEO2: Graduates demonstrate professionalism, leadership qualities and engage in continuous learning of new developments in diverse fields of computing.
PEO3: Graduates communicate effectively, work in multi-disciplinary team environment and exhibit and awareness of professional and social responsibility by making an impact of society in an ethical manner.

Faculty

Chairman, Department of Computer Science
Dr. Abdul Jaleel   , **Associate Professor**

Assistant Professors
Mr. Shahid Islam
Dr. Tayybah Kiren
Dr. Natasha Nigaar

Lecturers
Mr. Noman Sohaib Qureshi
Ms. Amna Wajid
Ms. Natasha Nigar
Ms. Uroosa Bilal Chaudhry
Mr. Muhammad Shehzad Aslam
Mr. Abu Bakar Siddique

Laboratories
The department currently has following dedicated laboratories to support the BS program.

- Programming Lab
- Systems Lab
- Final Year Projects/Research Lab
- Video Conference Room

Department of Natural Sciences, Humanities and Islamic Studies

Chairman,
Dr. Adnan Aslam, Associate Professor

Assistant Professors
Dr. Majid Hussain (Mathematics)
Dr. Syed Mazhar Shah (Chemistry)
Dr. Atta-ur-Rehman Makhdoom (Physics)
Dr. Muhammad Abdullah (Islamic Studies)

Lecturers
Ms. Faiza Bushra (Mathematics)
Mr. Ahmad Ali (English)

Common Facilities
IT Facilities

An on campus state-of-the-art computer laboratory provides research and simulation facilities to the students. Moreover, high speed internet facility providing access to international research journals is also available at library.

Library
There are more than 6000 books of various disciplines available at the library. The college also has access to the digital library (having more than 25,000 eBooks) being maintained by UET, Lahore. Information Resource Lab is set up in the library, which is equipped with various computers and Internet facility. Under Mega Project funded by HEC, Rs. 30 millions has been reserved for the construction of new main central library.

Accommodations
There are five hostels with the capacity of 350 students. There is separate hostel for female students. All hostels are equipped with the internet facility.

Transport
Transport is provided to the day-scholars from Gujranwala to the college and back to Gujranwala. Boarders also enjoy the facility twice a week for shopping and recreational tours.

Medical Centre
A medical centre with all necessary medicines is being managed by a MBBS Doctor who is on the roll of the College and available round the clock.

Mosque
The College has spacious, beautiful and well-furnished mosque, which can accommodate available strength at Campus for prayers.

Cafeteria and Canteen
A reasonably spacious cafeteria with lawns is available to the students, where food, cold drinks, tea and other utility items are available at the market rates. Moreover, a sizeable canteen and two fruit shops to meet the requirements of students and staff members at the campus exists at the College.

Sports
The College along with the academic activities lays proper emphasis on sports and games. Currently the College has following sports facilities:

- Badminton Courts   02
- Basket Ball Court   01
- Foot Ball Ground   01
- Volley Ball Court   01
- Cricket Ground   01
- Gymnasium   01
- Table Tennis   01

Societies
Currently the following societies are organizing different events, seminars and workshops to enhance mental, physical, creative, literary and dramatic skills of the students to meet different challenges in their professional careers.

- Cultural, Dramatic and Entertainment Society (CDES)
- Literary and Debating Society (LDS)
- Blood Donating Society (BDS)
- Rachna Students Support Society (RSSS)
- Society of Electrical Engineering Department (SEED)
- Institute of Electrical & Electronics Engineers, RCET Chapter (IEEE)

- American Society of Mechanical Engineering, RCET Chapter (ASME)
- Society of Industrial and Manufacturing Engineering (SIME)
- Prosoft Society of Computer Science

Administrative Staff

Deputy Registrar	Mr. Aftab Ahmad Khan
Incharge Examinations	Dr. Mateen Ahmad
Incharge Library	Dr. Muhammad Haris
Administrative Officer (Admin)	Mr. Ishtiaq Ahmad Khan
Administrative Officer (Library)	Mr. Sohail Ejaz Cheema
Administrative Officer (Accounts)	Mr. Muhammad Mazhar Ali
Assistant Director Student Affairs	Mr. Muhammad Nouman Khalid
Incharge Cafeteria/Canteens	Dr. Qasim Ali
Hostel Warden	Mr. Muhammad Rehan Arif
Incharge Sports	Mr. M. Awais Ahmad
Medical officer	Dr. Shahid

NAROWAL CAMPUS

- Department of Electrical Engineering
- Department of Computer Science and Engineering
- Department of Mechanical Engineering
- Department of Civil Engineering
- Department of Architecture
- Department of Bio-Medical Engineering
- Department of Basic Sciences & Humanities

Campus Coordinator
Prof. Dr. Muhammad Shahbaz

University of Engineering and Technology Lahore, Narowal Campus established in 2012, offers multiple Bachelor's level Engineering Programs. Engineering Classes initially started in post Graduate Block of Islamia Degree College Narowal on temporary basis in 2012. Currently Narowal Campus is shifted to its own state of the art \ under construction buildings situated at around 10 Km from Narowal city on Muridke Narowal road. The beautiful architecturally designed buildings are constructed on a vast land of around 200 acres which has been arranged by Government of the Punjab. Around 800 students are studying in this campus in different engineering disciplines of Electrical, Mechanical, Civil, Computer Science & Engineering, Biomedical Engineering and Architecture Programs.

Department of Electrical Engineering

Associate Professors
Dr. Waqas Tariq Toor (Chairman)

Assistant Professors
Dr. Rana Tariq M. Ahmad
Mr. Adnan Bashir

Lecturers
Mr. Amna Javeed
Mr. Shahbaz Bashir

Ms. Asia Rafique
Mr. Osama Bin Naeem
Mr. Muhammad Haseeb
Ms. Noor ul Ain (on Ph.D. Leave)

Program Offered
B.Sc. Electrical Engineering

Mission
To ensure understanding and application of electrical engineering fundamentals by inculcating analysis and design skills for the betterment of humanity and to become a center of excellence in the field of electrical engineering.

Introduction
Department of Electrical Engineering, Narowal Campus started working in 2012 at UET Lahore, Narowal. The mission of Electrical Engineering Department is to ensure understanding and application of electrical engineering fundamentals by inculcating analysis and design skills for the betterment of humanity and to become a center of excellence in the field of electrical engineering.

We are committed to develop an array of skills and techniques, personal qualities and attributes essential for successful performance in working life and thereby enabling learners to make an immediate contribution to the industry and academia. The true spirit of the Electrical Engineering Department lies in its simple maxim; "Quality Education with affordable Fee Structure". Here the students are given the sterling opportunity to get education of highest standards in pleasant and friendly atmosphere, and to make compatible with their means. The students are laudably facilitated with Well-equipped Laboratories, Multimedia Assisted Classrooms, Innovation Center, unlimited Scholarships and consistently Updated Library.

Program Educational Objectives (PEOs)
PEO-01: Graduate should acquire and demonstrate their proficiency of electrical engineering knowledge by inculcating analysis and design skills using modern tools.
PEO-02: Graduate should possess the knowledge translation ability and contribute as an effective team member to reinforce their engineering competency.
PEO-03: Graduates should acquire strong moral values, ethical values, interpersonal and project management skills.
PEO-04: Graduates should build entrepreneurial and innovative mindset to address real world problems.

Alumni
Nine batches of Electrical Engineering Department with a total of 274 students have graduated and the alumni are working in various national and international organizations.

Regulatory Status

The undergraduate program of Electrical Engineering at Narowal Campus is accredited by PEC on Level-II.

Laboratories

The department has the following well equipped laboratories which fulfill the academic needs of students and faculty:

1. Electric Circuits
2. Electronics
3. Systems
4. Electrical Workshop and FYP
5. Electrical Machines
6. Power Systems
7. Computer

Extra-Curricular Activities

Seminars, Project Exhibitions, and workshops etc. are managed by IEEE and IET Societies, under the supervision of Department.

Department of Computer Science and Engineering

Associate Professor	**Lecturers**	**Teaching Fellow**
Dr. Muhammad Idrees (Chairman)	Dr. Yaseen ul Haq	Ms. Hafiza Habiba Shabir
	Ms. Saadia Tariq	
Assistant Professor	Ms. Fatima Shahzadi	**Teaching Assistant**
Dr. Iqra Muneer	Ms. Rabia Zafar	Ms. Farva
	Ms. Rabia Sana	

Mission

The mission of Computer Science and Engineering Department is to equip the students with up-to-date curricula of Computer Science and Engineering disciplines, to ensure that the students have the solid foundations in core concepts in computing, to train them in problem solving and decision making skills and to prepare them for lifelong learning in the discipline. We are committed to develop an array of skills and techniques, personal qualities and attributes essential for successful performance in working life and thereby enabling learners to make an immediate contribution to the computing industry. The true spirit of the Computer Science and Engineering Department lies in its simple maxim; **"Quality Education with affordable Fee Structure"**.

Introduction

Department of Computer Science and Engineering, Narowal Campus started working in 2014 at UET Lahore, Narowal. Here the students are given the sterling opportunity to get education of highest standards in pleasant and friendly atmosphere, and to make compatible with their means. The students are laudably facilitated with Well-equipped Laboratories, state of the art Computer Labs with Internet Facility, Multimedia Assisted Classrooms, Innovation Center, unlimited Scholarships and consistently Updated Library. One of the most admirable features of Computer Science and Engineering Department at Narowal campus is its Highly Educated Faculty.

Program Educational Objectives (PEOs):

PEO-01: Computing Education and Application: Graduates demonstrate theoretical and practical knowledge and skills of computer science to solve real-world complex problems.

PEO-02 Professionalism, Leadership, Continuous Learning: Graduates demonstrate professionalism, leadership qualities and engage in continuous learning of new developments in diverse fields of computing.

PEO-03 Teamwork, Communication, Ethics: Graduates communicate effectively work in a multidisciplinary team environment and exhibit an awareness of the professional and social responsibility by making an impact on the society in an ethical manner.

Alumni

Seven Batches of Computer Science and Engineering Department with a total of more than 200 students have graduated and the alumni are working in various national and international organizations.

Programs

a) B.S. Computer Science
b) B.Sc. Computer Engineering
c) M.Sc. Computer Science (Evening Program)

Regulatory Status

The undergraduate program of Computer Science and Engineering Department at Narowal Campus is accredited by **PEC&NCEAC (HEC)** and achieved **W-Category**.

Laboratories

The department has the following well equipped laboratories which fulfill the academic needs of students and faculty:

1. Programming
2. Software Engineering/Database
3. General Purposes
4. Network/Operating System
5. FYP
6. Digital Logic Design

7.   Hardware

Extra-Curricular Activities

Gaming Competitions, Software Exhibitions, Free-lancing, Sports Activities, Annual Dinners, Debating Activities, etc. also managed by CODATOR Society, under the supervision of Department.
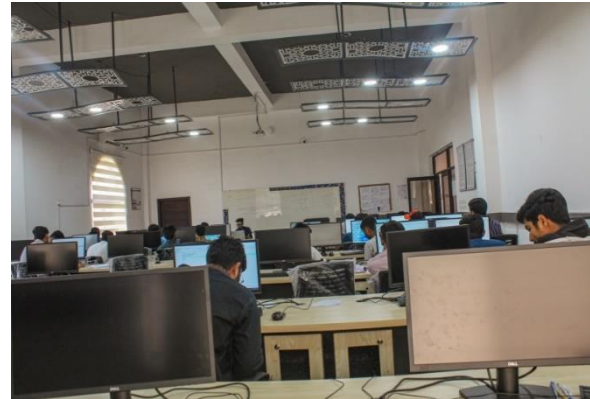
Department of Mechanical Engineering

Assistant Professors
Dr. Muhammad Saqlain Abbas (HoD
Dr. Zahid Hussain

Lecturers
Mr. Tanveer Mukhtar
Mr. Muhammad Lolak
Mr. Umar Ishaq
Mr. Asif Jalal
Mr. Sufyan Matloob
Mr. Basit Ali Wajid

Mr. Shahid Farooq (Phd Study leave)
Mr. Ussama Ali (Phd Study leave)
Mr. Jawad Ahmad (Phd Study leave)

Mission
To produce mechanical engineers equipped with knowledge and skills to carry on lifelong learning through quality teaching and training. Our graduates shall be able to serve for the sustainable development of the society while demonstrating professional ethics and responsible social conduct

Introduction
The Mechanical Engineering department was established in 2012, offering a 4-year Bachelor's degree program aligned with the guidelines of the Higher Education Commission (HEC) and the Pakistan Engineering Council (PEC). Recently, PEC has approved an increase in student intake for B.Sc. Mechanical Engineering Program at Narowal Campus, from 40 to 100 students. Our faculty comprises experienced foreign-qualified Ph.D. and M.Sc. graduates. The program curriculum has been revamped to emphasize industry-relevant skills, including the integration of AI technologies and entrepreneurial capabilities in Mechanical Engineering domains. Our state-of-the-art labs cover all major areas of Mechanical Engineering. Through robust industry partnerships, the program offers practical learning opportunities, enhancing career prospects across various sectors such as defense, manufacturing, power plants, automotive, sports, surgical, and agriculture. Graduates are also equipped to demonstrate leadership skills while upholding ethical values in their professional practice.

Program Educational Objectives (PEOs):
The department has established the following program educational objectives (PEOs) for BSc Mechanical Engineering Program:
PEO-01: Apply the knowledge to solve analytical and practical mechanical engineering problems. (Engineering Capabilities)
PEO-02: Work for the continuous professional and sustainable socio-technical development. (Societal Development and Lifelong Learning)
PEO-03: Demonstrate professional ethics, effective communication and managerial skills. (Ethics, Management and Communication)

Courses of study
- B.Sc. Mechanical Engineering

   Postgraduate Programs
- M.Sc. Mechanical Engineering
- PhD Mechanical Engineering

Regulatory Status
- The undergraduate Mechanical Engineering program at Narowal Campus is accredited by PEC for Outcome-Based-Education (OBE) Level-II.

Laboratories
The department is equipped with the following laboratories, meeting the academic requirements of students, faculty and regularity bodies.
- Engineering Mechanics
- Heat Transfer
- Thermodynamics
- Refrigeration & Air-conditioning
- Fluid Mechanics
- Mechanics of Materials
- Mechanics of Machines
- Metrology & Quality Assurance
- Computer
- Workshops

Alumni

Ten batches of the Mechanical Engineering Department, comprising a total of 302 graduates, have successfully completed their studies. Our alumni are now employed in a diverse range of national and international engineering organizations.

Extra-Curricular Activities

Seminars, Project Exhibitions, Workshops and other events are organized by ASME and SME Societies under the supervision of Department.
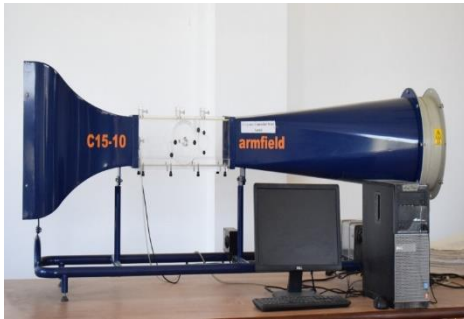
Department of Civil Engineering

Professors	Assistant Professors	Lecturers	
Dr. Khawaja Adeel Tariq (Chairman)	Dr. Muhammad Tahir * Dr. Muhammad Shoaib Karam	Dr.AdeelFaisal Mr. Intezar Hussain Mr. Usman Anwar Ms. Sehrish Khan Mr. Ahad Ali	Mr. Muhammad Usman(Study leave) Mr. Muhammad Mohsin(Study leave) Mr. Sohail Ahmad(Study leave)

Introduction

The Department of Civil Engineering at UET Narowal Campus was established in 2013, and its first batch graduated in 2017. Currently, around 160 students are enrolled across various sessions. The department boasts a team of highly qualified faculty members, with academic and professional backgrounds from Japan, Germany, China, and Pakistan.

The department is committed to excellence in teaching, research, and innovation, focusing on the development of practical solutions to challenges in the construction industry. It aims to produce skilled professionals and future leaders who will make a global impact on technology and society through their contributions to the field of civil engineering.

Program Offered
B.Sc. Civil Engineering

Mission
To impart high-quality Civil Engineering education through modern teaching and research for the national and international socio-economic development.

Program Educational Objectives (PEOs)
PEO-01. Graduates demonstrate their proficiency in applying the knowledge & skills to solve complex Civil engineering problems.
PEO-02. Graduates communicate effectively and contribute in the project team.
PEO-03. Graduates uphold principles of ethics and societal obligations with integrity throughout their professional practices.
PEO-04. Graduates engage themselves in the continuous professional learning process for sustainability.

Alumni
Nine batches have graduated from the Civil Engineering Department, and the alumni are currently serving in various national and international organizations. Some are also working as entrepreneurs and freelancers.

Regulatory Status
The undergraduate program of Civil Engineering at Narowal Campus is accredited by PEC as Level-II.

Laboratories
The department has the following well equipped laboratories which fulfill the academic needs of students and faculty:

- Concrete
- Computer
- Surveying
- Fluid Mechanics
- Strength of Materials
- Engineering Mechanics
- Geotechnical Engineering
- Environmental Engineering

Department of Architecture

Introduction

Department of Architecture at Narowal campus was established in 2023.

The degree programs in Architecture provide a liberal introduction to studying architecture as a discipline and produce all-rounder individuals who can play a leading role in shaping a healthy society. Students gain a critical and ethical awareness of architecture with much to offer in the face of many of today's most pressing societal challenges.

B.Arch. is a five-year program leading to a professional degree in Architecture. Graduates of this program fulfill all licensing requirements of the Pakistan Council of Architects and Town Planners (PCATP), and subject to registration with it, are able to practice Architecture anywhere in Pakistan.

Significant component of studies involves fieldwork, where students are required to visit construction sites, conduct field surveys, and join out-of-station study tours. B.Arch. degree is awarded upon successful completion of all requirements which includes theory and practical courses, as well as project-based studio courses, ending with a research and design-based thesis project. The degree requirements also include 12 weeks of internship in a professional establishment, which typically takes place during the summer months.

Department of Bio-Medical Engineering

Assistant Professor	**Lecturer**	**Teaching Assistant**
Dr. Muhammad Rehan Chaudry (HOD)	Dr. Muhammad Asad Ullah Khan	Ms. Rimsha Sarwar
Dr. Muhammad Umair Ahmad Khan	Mr. Abdul Hanan Taqi	Ms. Amna Tariq
Dr. Hafiz Muhammad Salman Ajmal	**Teaching Fellow**	Ms. Hina Shahzadi
Dr. Sameen Ahmed Malik	Ms. Kinza Naseer	
Dr. Bisma Rauff	Ms. Asma Latif	

Biomedical Engineering is an interdisciplinary field that integrates design principles from various domains of science and engineering, including Electrical, Mechanical, Computer Science, Mathematics, Physics, and Biology. Biomedical engineers are equipped with the expertise to merge this knowledge and develop innovative solutions for the healthcare industry. Their contributions span areas such as clinical equipment management, implantable medical devices, rehabilitation technologies, and medical robotics.

Program Offered

B.Sc. Bio Medical Engineering
M.Sc. Bio Medical Engineering

Mission

To become the leading program of Biomedical Engineering by imparting methodical educational training to our students and preparing them to become innovative and socially responsible engineers in health care research and industry.

Program Education Objectives (PEOs)

PEO-01 Knowledge and Skills: Our graduates will solve application-level problems related to Biomedical Engineering.

PEO-02- Interpersonal, Leadership and Work Ethics: Our graduates will work effectively as a team member and lead multidisciplinary teams while demonstrating the interpersonal and managerial skills, and ethical responsibilities.

PEO-03 Socio-economic and Life-long learning: Our graduates will pursue higher education, research and professional advancement to develop sustainable solutions fulfilling societal needs.

Laboratories

The department has the following well equipped laboratories which fulfill the academic needs of students and faculty:

1. Electronics
2. Anatomy
3. Physiology
4. Bioinstrumentation
5. Clinical instrumentation
6. Robotics
7. Computer and Project Laboratory
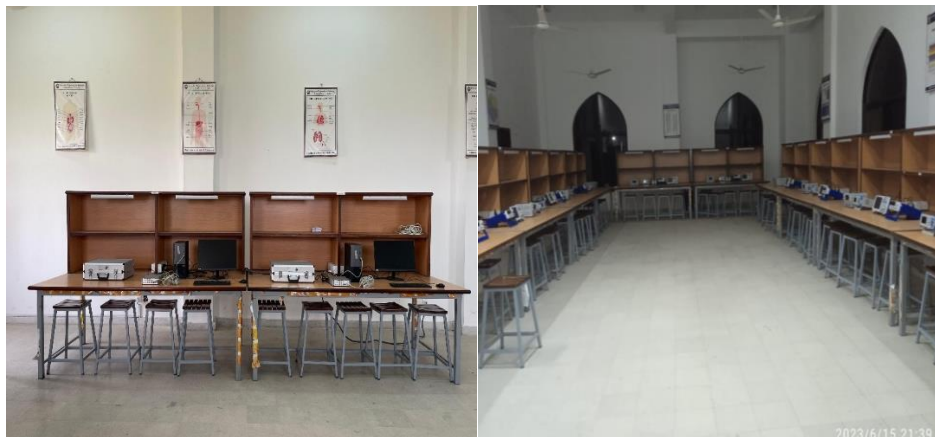
Department of Basic Sciences & Humanities

Assistant Professor
Dr. Habib Hussain (HoD)
Dr. Muhammad Yousuf
Dr. Absar Ul Haq

Lecturers
Mr. Muhammad Zeeshan Ashraf
Mr. Tahir Shahzad
Ms. Farheen Samra
Ms. Rabia Shoukat

Ms. Anjum Naseem Rao (Phd Study leave)
Mr. Muhammad Ishaq Malik
Mr. Hafiz Abdullah Saleem
Mr. Usman Abbas
Ms. Iqra Javed

Introduction
Basic Sciences and Humanities (BS&H) department was established in 2012 in UET Lahore, Narowal campus. To inculcate quality education, 12 highly qualified faculty members have been employed. The department offers BS programs in Chemistry, Physics, Mathematics and focuses to enhance theoretical knowledge and practical expertise of students. The department also shares its faculty members to teach courses of Chemistry, Physics, Mathematics, Communication skills, Business administration, Psychology and Pakistan & Islamic studies, in connection with all the programmes offered by Engineering departments. The department aims to provide the students with a broad perception and incorporate in them the idea of integrated nature of engineering and social aspects of professional life. The department also provides trainings to increase linguistic proficiency.

Mission
To awaken young minds and unleash their talents in both theory and practice, through innovative teaching methods.

Laboratories
The department has following well-equipped laboratories to fulfill academic needs of students and faculty as well:
- Chemistry Lab
- Physics Lab
- Math Lab

Rules & Regulations Relating to Admissions, Examinations & Discipline

IMPORTANT INFORMATION

1. **Definitions**
   a) "University" means the University of Engineering and Technology, Lahore
   b) "College" means the Constituent/Affiliated College of the University
   c) "Faculty" means the concerned faculty of the University
   d) "Vice-Chancellor" means the Vice-Chancellor of the University
   e) "Pro Vice-Chancellor" means the Pro Vice-Chancellor of the University
   f) "Dean" means the Dean of the concerned faculty
   g) "Principal" means the Principal of a college
   h) "Chairperson" means the Chairperson of the concerned department of the University/College
   i) "Controller" means the Controller of Examinations of the University
   j) "Student" means a bonafide student of a degree program of the University who does not maintain admission simultaneously in any other degree/diploma program of the University or in any other Institution
   k) "Candidate" means a student who intends to appear in an examination
   l) "Board of Studies" means the Board of Studies of the concerned discipline of the University/College

   Explanations
   • The pronoun "he" and its derivatives are used for both male and female persons.
   • Depending upon the context, the words imparting the singular number include the plural number as well.

2. **Modification of Rules and Regulations**
   The rule and regulations governing various aspects of students' life at the University (such as discipline, admissions, examination, migration, fees and charges, etc.) are given in this prospectus as they stood at the time of its publication. There is no guarantee that these rules and regulations will remain unchanged throughout a student's stay at the University, nor does it in any way restrict or curtail the inherent powers for the University authorities to modify them whenever in their judgment any modifications are called for, and to implement the modified rules and regulations from a date which they deem appropriate.

3. **Special Provisions**
   a) In all cases where the regulations are silent, the decision of the Vice-Chancellor shall be final.
   b) Interpretation of these rules and regulations by authorized officers of the University shall be final.
   c) The University authorities reserve the right to make any changes in the existing regulations, rules, fee structure and courses of study that may be considered necessary at any time without prior notice.
   d) No student is allowed to maintain simultaneous enrollment in any other program of studies in the University or any other educational institution within or outside Pakistan, unless permitted by the competent authority as an Exchange Student.
   e) In case a student enrolled in this University is found to be a regular student of some other university/institution, whether local or foreign, his admission in this university shall be canceled.
   f) Students are required to know the rules and regulations mentioned in the prospectus and notified time to time. Ignorance of rules and regulations does not absolve them of their responsibilities and shall not be treated as an excuse.
   g) The Vice-Chancellor has been authorized by the Syndicate, on the recommendations of the Deans, to make amendments in these regulations and remove any difficulties faced during implementations of these regulations.

4. **Liability for Injury, Damage and Loss**
   The University teaching programs include training in its workshops and laboratories, places of engineering and architectural interest, industrial concern, and construction jobs. The University or other concerns shall not be responsible in the event of an injury, damage or loss to a student resulting from any cause whatsoever during the course of such training.

UNDERGRADUATE SEMESTER REGULATIONS

1.0 Introduction

The following regulations govern the Semester System of teaching and examination for the Undergraduate degrees awarded by University of Engineering and Technology (UET), Lahore.

a) The Undergraduate degrees offered at the University under Semester System are classified as Bachelor of Science (B.Sc. and B.S.) and Bachelor. B.Sc. degrees are offered in Engineering disciplines, Technology disciplines, Computer Science and City and Regional Planning. Bachelor's degrees are offered in Architecture, Product and Industrial Design, Business Administration and Business Information Technology. B.S. degree is offered in Chemistry, Mathematics and Physics.

b) Masculine gender used in the following regulations implies male students as well as female students.

c) The term faculty member or instructor or teacher when mentioned in these regulations would refer to the concerned faculty member or instructor or teacher, if not mentioned as such.

d) The medium of instructions and examinations shall be English for all subjects except Islamic Studies and Pakistan Studies for which the medium of instructions and examinations may be either Urdu or English.

e) The term "Academic Year" refers to the period of study at the University spread over one calendar year period. Academic year is further divided into semesters.

f) The term "Contact Hour" refers to a 50 minutes period of contact with the students.

g) The term "Credit Hour (CH)" refers to a unit of academic credit during a semester. Each credit hour is related to a one or more "Contact hours per week" according to subject type and the semester in which it is offered as defined in these regulations.

h) The term "Pre-requisite" refers to subjects that must be successfully completed prior to registration in a subject requiring these pre-requisites.

i) The term "Co-requisite" refers to subjects that must be registered simultaneously if studied for the first time. During repetition, simultaneous registration of such subjects is not necessary.

j) The term "Tutor" refers to a teacher appointed as an advisor and counselor to a group of students and the term "Tutorial" refers to a scheduled session with their tutor.

2.0 Degree Duration

a) The minimum duration of the undergraduate degree programs shall not be less than four academic years in case of Business Administration, Business Information Technology, Chemistry, Computer Science, City and Regional Planning, Engineering, Engineering Technology, Energy Systems Management, Environmental Science, Food Science and Technology, Mathematics, Physics, Product and Industrial Design, and five academic years in case of Architecture.

b) The maximum duration of the degree program shall not be more than six academic years for programs with a minimum duration of four academic years and seven academic years for programs with a minimum duration of five academic years.

2.1 Extension Beyond Maximum Duration

a) The Vice-Chancellor may grant extensions up to a maximum period of one year beyond the maximum duration for completing requirements for the award of degree. Students requiring extension may apply to the Vice-Chancellor for this purpose.

b) A student would be separated from the University if he requires extension beyond one year.

c) Separated students can apply to the Vice Chancellor for re-admission. If their application is accepted, the concerned department will transfer subjects from the previous registration in accordance with the prescribed rule and assign them to an Entry Session for the purpose of computing their maximum degree duration. They will be allotted new entry session as per the recommendation of the department and new registration number.

d) A re-admitted student will not be granted a second re-admission if he is separated a second time from the University.

3.0 Student Status

a) Students shall be classified (1) on the basis of number of credit hours registered in a semester and (2) on the basis of credit hours completed.

b) The students are classified as per the following nomenclature on the basis of credit hours registered during a semester:

    i. Students registering in at least 12 credit hours during fall and spring semesters and 6 credit hours during summer semester within the minimum duration of their respective degree program shall be called "Regular".

    ii.   Students shall be classified as "Casual" students if they register in less than 12 credit hours during fall and spring semesters and less than 6 credit hours during summer semester; Or they register in subjects after completion of their minimum degree duration period.

c)   The students are classified as per the following nomenclature on the basis of credit hours completed:

    i.   "First Year" students if they have successfully completed less than or up to 32 credit hours of prescribed syllabus;

    ii.   "Second Year" students if they have successfully completed more than 32 credit hours but up to 68 credit hours of prescribed syllabus;

    iii.   "Third Year" students if they have successfully completed more than 68 credit hours but up to 104 credit hours of prescribed syllabus;

    iv.   "Fourth Year" students, in case of five years degree program only, if they have successfully completed more than 104 credit hours but up to 136 credit hours of prescribed syllabus;

    v.   "Final Year" students if they have successfully completed more than 104 credit hours, in case of a four degree program, and more than 136 credit hours, in case of a five years degree program, of prescribed syllabus.

4.0 Credit Hours Requirements

The credit hours required for the award of degree may range from a minimum of **134** to a maximum of **140** for degree programs with minimum duration of four academic years and from a minimum of **166** to a maximum of **174** for degree programs with minimum duration of five academic years. These will include a minimum of 6 credit hours of "final year design project" or equivalent spread over two semesters.

5.0 Semesters Nomenclature, Duration and Registration Matters

a)   There shall be two regular semesters, namely fall and spring semesters, and an optional summer semester during each academic year.

b)   Fall and spring semesters will be spread over 16 to 18 weeks including examinations with at least 15 study weeks during the semester. The duration of summer semester will be 8 weeks including examinations with weekly contact hours being double from those of fall and spring semesters.

c)   The maximum and minimum permissible number of students to be allowed registration in a subject section will be decided by the concerned Board of Studies.

d)   Students may consult their tutors for registration guidelines.

e)   Registration limits for students are given as under:

    i.   First year and second year students may be allowed to register in at most 19 credit hours during fall and spring semesters.

    ii.   Students of third year and beyond may be allowed to register in at most 22 credit hours during fall and spring semesters.

    iii.   At most 8 credit hours during summer semester.

f)   Registration will only be allowed in a subject if the prerequisites, if any, of this subject have been completed successfully.

g)   Registration in a subject section will be closed if the maximum permitted number of students has registered in it.

h)   A subject section will be closed if less than the minimum numbers of students register in that section. Such students who have been denied registration due to a closure of a section may add some alternate subject(s) during add and drop period.

i)   During summer semester, selected subjects will be offered in accordance with departmental policy for that semester.

6.0 Curriculum and Classification of Subjects

a)   The curriculum, subject identification numbers, the credit hours allocated to each subject and detailed syllabus shall be according to the proposals made by the Board of Studies and the Board of Faculty concerned and approved by the Syndicate on the recommendations of the Academic Council.

b)   Subjects are classified as:

    i.   "Theory" wherein the primary mode of teaching shall be lectures given by teachers supplemented by home assignments. For the purpose of these regulations, subjects of this type shall be referred to as Type-A;

    ii.   "Practical" wherein the primary mode of teaching shall be experiments, studio laboratory, designs, drawings, assignments and projects conducted/executed by students as specified in the syllabus. For the purpose of these regulations, subjects of this type shall be referred to as Type-B;

    iii.   "Comprehensive Projects" wherein students engage in design and development of a project under direct supervision of teachers in a laboratory/studio/workshop/industry, spread over one or two regular semesters in an academic year. For the purpose of these regulations, subjects of this type shall be referred to as Type-C.

7.0 Type-A Subjects Evaluation and Contact Hours

a) In Type-A subjects, there shall be a mid-term examination of at least one hour duration and a comprehensive final examination of at least one and a half hour duration. These examinations shall carry 30 and 40 percent weight, respectively. The comprehensive final examination will include 20% questions from pre-mid term syllabus. The teacher shall schedule additional assessment instruments such as quizzes, assignments, presentations, seminars, group discussions, field study reports, etc. as specified in the syllabus or as determined by the teacher. These assessment instruments shall carry the remaining 30% weight of the subject.

b) There shall be one contact hour per week during fall and spring semesters and two contact hours per week during summer semester for each credit hour assigned to Type-A subjects.

8.0 Type-B Subjects Evaluation and Contact Hours

a) In Type-B subjects, each Experiment, Studio work, Jury Presentation, Design, Drawing, Project or Assignment shall be considered as an independent assessment instrument. Cumulative performance in all independent assessment instruments shall form the basis for evaluating a student.

b) There shall be two to three contact hours per week during fall and spring semesters and four to six contact hours per week during summer semester for each credit hour assigned to Type-B subjects.

9.0 Type-C Subjects Evaluation and Contact Hours

a) In Type-C subjects, each exercise, project or assignment shall be assessed for process during its life time (Continuous Assessment) while the end product shall be assessed, right after its submission, through Viva-Voce / Jury examination (Terminal Assessment).

b) Continuous Assessment and Terminal Assessment of Type-C subjects may carry 60 and 40 percent weight, respectively.

c) External Examiners/Jurors shall be involved in the assessment of all Type-C subjects.

d) There shall be two to four contact hours per week during fall and spring semesters for each credit hour assigned to Type-C subjects.

10.0 Award of Letter Grades

a) The subject teacher, having interacted with the students, taught them and having assessed them over the semester, shall award letter grades to the students. Chairperson of the concerned degree awarding department will be consulted while finalizing the letter grades. Letter grade in each Type-A subject shall be awarded on a Relative Scale whereas, letter grade in Type-B and Type-C subjects may be awarded on an absolute scale if deemed fit by the subject teacher.

b) Following steps in awarding letter grades on a relative scale may be followed:

   i. Minimum marks threshold linked to content mastery shall be established for award of a passing letter grade. Students earning marks below this threshold shall be awarded "F" grade;

   ii. Expected maximum marks threshold shall also be established. Student(s) crossing the maximum threshold, if any, will be awarded "A+" grade. The grade points of "A+" and "A" are same. As such, it is expected that only exceptional students demonstrating outstanding results are given recognition by award of this grade.

   iii. Students earning marks between the maximum and minimum thresholds are listed in descending order of merit and the average and standard deviation is computed;

   iv. Passing letter grades are awarded according to the table given below, with "A" being the highest passing grade and "D" being the lowest passing grade.

   v. The cluster of students falling within half standard deviation of average marks may be graded as "C+" or "B-";

   vi. Other passing letter grades may be awarded on the basis of clusters of students within narrow ranges for a population less than 100; Or on a normal curve basis if the population of students is more than 100;

   vii. It is not essential that every class should have all letter grades awarded, that is, it is possible that a class does not have any student below the minimum threshold; Or in another scenario in which no student, in the opinion of the instructor, is eligible for the award of "A" grade. There may be cases where no student qualifies for some intermediate grade.

   viii. An upper limit on percentage of students in a subject who can earn a particular passing grade may be placed, if required.

c) The letter grades and their corresponding grade points (GP) are given in the table below.

Table
Letter Grades & Corresponding Grade Points

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	F	W	WF	I	IP
4.0	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.3	1.0	0	-	-	-	-

d) Subjects repeated to improve grades, excluding "W" or "WF" grades, will be shown on the transcript with a suffix "R".

e) The subject teacher may award an "F" grade to a student if he is convinced, while checking the answer script of mid-term or final examination that the student has cheated. The subject teacher will give opportunity to the student to defend himself before award of this "F" grade.

11.0 Result Matters

11.1 Result Computation Method

The Grade Point Average (GPA) and Cumulative Grade point Average (CGPA) shall be computed according to the following formula:

$$GPA = \sum_{i=1}^{n}(GP_i \times CH_i) \bigg/ \sum_{i=1}^{n} CH_i$$

where n is the number of subjects in the semester for which GPA is being computed.

$$CGPA = \sum_{i=1}^{m}(GP_i \times CH_i) \bigg/ \sum_{i=1}^{m} CH_i$$

where m is the number of total subjects covered in all semesters up to the semester for which CGPA is to be computed.

11.2 Authority to Compute Results

Grade Points (GP) in each subject, Semester Grade Point Average and Cumulative Grade Point Average of each student shall be computed and notified by the Controller of Examinations at the end of each semester.

12.0 Award of "W" , "WF", "I" and "IP" Grades

12.1 Withdrawal ("W" Grade)

a) A student may be allowed to withdraw from a subject in which he is registered. Applications (Form 1) to withdraw from a subject shall be entertained latest up to the 6th study week during fall and spring semesters and up to 3rd study week during summer semester. Withdrawn subjects shall appear in the transcript with a letter grade "W" and shall not be used in computation of GPA. In the transcript, subjects repeated after withdrawal will not be suffixed with a "R".

b) If a student withdraws from a subject, which he is repeating, the previous grade earned will be retained in computation of CGPA and in assessing degree completion requirements.

12.2 Forced Withdrawal ("WF" Grade)

a) A student registered in a subject may not be permitted to continue due to shortage of attendance or other disciplinary action. Such students shall be awarded a Forced Withdrawal (WF) grade. It shall appear in the transcript as such and shall not be used in computation of GPA. Subjects repeated after forced withdrawal will not be suffixed with "R".

b) If a student is withdrawn from a subject, which he is repeating, the previous grade earned will be retained in computation of CGPA and in assessing degree completion requirements.

c) A student who does not drop a subject nor appears in any assessment instrument will not be eligible for a "WF" grade and will be awarded an "F" grade.

12.3 Incomplete "I" Grade

A student, who because of illness or any other acceptable reason fails to complete the required instruments in any subject may be awarded an Incomplete (I) grade as an interim grade. Students having less than 50% attendance will not be eligible for award of this grade. This grade shall appear in the transcript temporarily until it is replaced by the actual grade and will not be treated as an "F" grade. The student receiving such a grade shall make up the unfinished portion of his subject to the satisfaction of the faculty member who awarded this grade, and is given a letter grade as per regulation 10 at the discretion of the faculty member without prejudice to the previous grade "I". In case, the student fails to complete the unfinished portion within the following semester, i.e., spring semester for an "I" grade awarded in fall semester and fall semester for an "I" grade awarded in spring semester, his "I" grade would be converted to an "F" grade by the Controller of Examinations. The responsibility for completing the unfinished portion and satisfying the faculty member lies with the affected student.

12.4 In Progress "IP" Grade

a) Type "C" subjects, like theses, projects, studio work, etc., spread over more than one semester may be graded as "IP" until completion of these subjects. This grade shall be recorded in the transcript and will not be treated as an "F" grade.

b) Each portion of a Type "C" subject spread over two semesters may have been prescribed different nomenclature and different subject code. First portion of such a subject may be graded as "IP" upon completion, if the department decides to award the final letter grade upon completion of the second portion.

c) It shall appear in the transcript as such and shall not be used in computation of GPA. Grades assigned in the semester in which the subjects are completed will be used in computation of Semester GPA with total credit hours of the subjects being counted for this purpose.

13.0 Repetition of Subjects

a) Students are permitted to repeat subjects to improve their grades in a semester within their maximum credit hours registration limit.

b) Separate repetition of Type B part or Type A part of a subject, which is combination of Type A and Type B, is permitted.

c) In case of repetition of a subject, the new grade earned shall replace the previous grade, whether high or low in calculation of CGPA.

14.0 Probation and Separation

14.1 Academic Probation

A student will be placed on academic probation if his CGPA falls below 2.0 after any semester.

14.2 Separation

a) A student will be separated from the University if he remains on probation for a number of consecutive semesters as per schedule given below:

- First year students as defined in these regulations: Two consecutive semesters. Advantage of repetition during summer, falling in between or after the two regular semesters on probation, being given to the student.
- Second year students as defined in these regulations: Three consecutive semesters. Advantage of repetition during summer, falling in between or after the two regular semesters on probation, being given to the student.

b) Students after completing their second year as defined in these regulations will not be separated on account of academic probations.

c) A student would be separated from the University if he requires extension beyond one year in the maximum permissible period for completion of degree requirements.

d) Students who do not register in any subject during their first semester after admission will be separated from the University.

e) Students have the option to freeze or skip a semester by not registering in any subject during that semester (other than first semester). However, they will be separated if they do not register in any subject in a semester without intimating their decision to the Students Section.

14.3 Disposal of Separated Students

a) Separated students can apply to the Vice-Chancellor for re-admission. If their application is accepted, Examination branch will transfer subjects from the previous registration in accordance with the prescribed rule and assign them to an Entry Session for computing their maximum degree duration. They will be allotted a new registration number.

b) A re-admitted student will be required to pay the admissible dues for one extra year even if he completes his degree requirements with his original entry session or a semester later.

c) A re-admitted student will not be granted a second re-admission if he is separated a second time from the University.

15.0 Changing Discipline after Admission

a) A student, after first year of study at the University, may opt for a change in discipline. The minimum admission merit of the discipline, being opted for, must be equal or lower than the merit of the opting student at the time of his admission.

b) The student opting to change his discipline after first year must apply to the Vice-Chancellor through his Chairperson and the Dean. Acceptance shall depend on the availability of seats in the opted discipline.

c) On acceptance of his request, the student shall start afresh with credit being given for any University core subjects studied in the first year in the original discipline. He will be issued new registration number and his maximum permissible duration count will start afresh.

d) Students cannot opt for change in discipline after their second year at the University.

16.0 Award of Degree and Merit Position

a) Students, who are eligible for the award of degree, are required to submit a Degree Requirements Completion Form (Form 2) to their respective Chairperson for onward submission to the Controller of Examinations. Degree status would be decided only after receipt of this form.

b) Students shall qualify for the award of undergraduate degree if they earn a minimum CGPA of 2.0 and they satisfy the following conditions:
   i. Have no compulsory outstanding subject with "W", "WF", "I" and "F" grades during all semesters of a degree program.
   ii. Have repeated elective subjects in which "W", "WF" or "F" grades have been earned or have studied alternate elective subjects in lieu of these to fulfill the credit hours requirement.
   iii. Have completed the prescribed number of credit hours.

c) Students shall qualify for a "Degree with Honors" if they satisfy the following conditions:
   i. Have earned a CGPA of 3.70 or above out of a maximum of 4.00.
   ii. Have not repeated a subject.
   iii. Have not withdrawn from a subject with a "W" or "WF" grade; and
   iv. Have not earned an 'F' grade in any core or elective subject during the course of study.

d) Medals and merit positions will only be awarded to students having earned degree with honours. The awards will be based on the CGPA earned at the time of graduation. Comparison will be made within the students of same entry session graduating in the minimum permissible duration. Immigrating and re-admitted students will not be eligible for any medal or merit position.

17.0 Dean's Honor Roll

At the end of each semester, there shall be a "Dean's Honor Roll" of students earning a Semester GPA of 3.7 and above without any "W" or "WF" or "F" grade while registered in at least 15 credit hours during that semester. There shall not be any Dean's Honor Roll for summer semester.

18.0 Grievance Committee and Grade Change Request

a) The examination regulations provide sufficient transparency by mandating teachers to show result of all assessment instruments including final examination to their students. Sufficient time is provided to students, even after finalization of the award list, to point out errors and omissions and get them rectified. As such, the following aspects will neither be reviewed nor discussed while interpreting the provisions of this regulation:
   i. Marks awarded by the teacher in any of the assessment instruments;
   ii. Letter grade thresholds;

b) A student has two options for redress of grievances. The first option can only be exercised during the semester and the second option after declaration of semester results.
   i. During the semester: A student may file a grievance petition with the Chairperson of his department during a semester if sufficient opportunity is not provided to him to review the assessment instruments as prescribed in the Examination regulations. The Chairperson will form a 3 member

departmental Committee headed by a senior faculty member to redress the grievance. It will be mandatory on the Committee to hear both sides (student and the teacher), and recommend corrective action within 5 days after filing of the grievance. The recommendations of the Committee will be binding on the teacher as well as the student.

ii.   **After Declaration of Semester Result**: A student may submit a Grade Change Request (Form 3) to the Chairperson's office stating the specific reason for change in grade. Grade Change requests must be submitted no later than one week after the first grade was posted or within the first week of the following semester, whichever is later. The request will be routed to the concerned faculty member. Normally, the only person who can change a grade is the faculty member who gave the grade; however, in case that faculty member is no longer available or cannot be reached, the department's Chairperson has the authority to evaluate the situation and change a grade, if required. When a grade is to be changed, the Chairperson shall forward the case to the Dean with justification for change. The result will be modified after approval of the Dean.

19.0 Students Registration and Hostel Accommodation
a)   Regular and casual students may register for subjects being offered during that semester within their maximum permissible credit hours registration limit.
b)   The student may add or drop subjects within first three weeks of fall and spring semesters and within first week of summer semester.
c)   A student, who is fulfilling requirements of an "I" grade in a semester, is not required to register in the subject in which he has been awarded an "I" grade.
d)   Casual students will not be eligible for hostel accommodation. However, foreign casual students may be allowed to continue staying in hostels by the Senior Warden after approval of the Vice-Chancellor.

20.0 Deferment of Studies (Freezing)
a)   Students enrolled in the first semester cannot apply for deferment.
b)   There shall be no relaxation in the maximum degree duration period for students seeking deferment.
c)   A student may defer studies for at most two consecutive regular semesters, for medical or other circumstances beyond his control, with summer semester not being counted. In such cases, the student shall apply (Form 4) to the Chairperson concerned, at least 15 days before the commencement of the semester, for approval of deferment by the concerned Dean. CAC, after approval, shall notify deferment for a specified period.

21.0 Attendance Requirements
a)   Students failing to maintain a minimum attendance of 75% in a subject during a semester shall be awarded a "WF" grade. Chairperson in consultation with the respective Dean shall review cases of students seeking relaxation of up to 10% in attendance requirement. The relaxation shall be allowed after approval by the Dean. Any relaxation in excess of 10% shall be forwarded to the Vice-Chancellor through the respective Dean for final decision.
b)   Leaves availed by a student after approval of the Chairperson will not be counted towards attendance;
c)   Students eligible for award of an "I" grade will be awarded such a grade only if their attendance is at least 50%.

EXAMINATION REGULATIONS

1.0 Evaluation Process of Subjects

1.1 Evaluation of Type-A Subjects

a) For mid-term and final examinations of Type-A subjects, the teacher of a subject shall set the question paper of that subject, supervise its examination, mark the answer books and prepare the award list. Any teaching resource provided to assist a teacher cannot be tasked to mark answer books of mid-term and final examinations.

b) Every teacher of Type-A subjects shall return the marked quizzes, assignments, etc. and mid-term examination scripts to the students for review, and in case of presentations, etc. communicate the earned score to the student within one week of the event. Mid-term scripts, however, would be recovered from the students and deposited with the Chairperson concerned.

c) At the end of scheduled teaching period of a semester but before commencement of the final examinations, the teacher shall prepare and display the Interim Award List. Composition, display, correction, and reporting requirements/procedures of Interim Award List shall be as prescribed in these rules.

d) Teachers would mark the final examination scripts, and prepare and display complete Award List, excluding letter grades, within one week after the examination of the subject.

e) The students may be shown the final examination marked scripts before submission of Comprehensive Award List to the Controller of Examinations, if they so desire.

1.2 Evaluation of Type-B Subjects

a) Teachers of Type-B subjects shall keep all students informed of their performance at every stage in each category of task performed. Immediately after the end of each stage/assessment event, teachers shall prepare and communicate the earned score to the student in that stage/assessment event.

b) At the end of semester and before the end of examination period, teachers shall prepare and display the Interim Award List. Content and other requirements regarding Interim Award List shall be as prescribed in these rules.

c) After following the procedures and requirements regarding Interim Award List, the teachers shall prepare and display complete Award List, excluding letter grades, within one week after the end of scheduled teaching period.

1.3 Evaluation of Type-C Subjects

a) Teachers of Type-C subjects shall keep all students informed of their performance at every stage in each category of task performed. Immediately after the end of each stage/assessment event, teachers shall prepare and display a list of earned score of each student in that assessment instrument.

b) At the end of first of the two semesters of a Type-C subject and before the end of examination period, teachers would prepare and display an Intermediate Award List. This list would be similar to the Comprehensive Award List of Type-A and Type -B subjects except that letter grade assignment based upon this list will be limited to "IP" Grade.

c) At the end of second of the two semesters of a Type-C subject and before the end of examination period, teachers shall prepare and display the Interim Award List. Content and other requirements regarding Interim Award List shall be as prescribed in these rules.

d) Within one week of the conduct of Viva-voce/Jury examination, internal and external examiners shall prepare and display complete Award List excluding the letter grades.

1.4 Interim Award List

a) Interim Award List would show the percentage as well as weighted score of each stage/assessment instrument of that subject including the mid-term examination in case of Type-A subjects.

b) The Interim Award List will be communicated to all students via electronic means or/and displayed on the Notice Boards for at least two working days to permit students to point out any anomalies, errors, omissions, etc. in the list.

c) The teachers shall give due consideration to any anomalies, errors, omissions, etc. in the list pointed out by any student, and may correct the list.

d) Any further processing of the list shall be carried out only after it has been displayed on the Notice Boards for the mandatory period and decisions regarding all matters pointed out by students have been taken.

1.5 Comprehensive Award List

The Comprehensive Award List shall show, for each student:

a) The weighted combination of the Interim Award and Final Examination award in percentage format and Letter Grades corresponding to the comprehensive award.

b) Sealed Comprehensive Award List will be sent to the Controller by the concerned teacher with a copy to the Chairperson for record only.

1.6 Delay in Submission of Results

After passage of six working days from the date of scheduled final examination period, Controller of Examinations will submit a report to the Vice-Chancellor on the status of submitted results. The Vice-Chancellor will decide on the fate of teachers failing to submit their results within the prescribed time.

2.0 Conduct of Examination of Type A Subjects Under Semester System

2.1 Question Papers

a)   All question papers are set by the concerned teacher.

b)   The paper setters, who also ensure their correctness, supervise the photocopying or duplicating of the papers.

c)   Question papers are kept in the safe custody of the teacher till the start of examination. He shall bear legal and moral responsibility for the safe custody and secrecy of the question papers.

2.2 Reference Material during Tests/Examinations

Prior to class tests, mid-term/final examination, the subject teacher announces such books, notes or other material that can be referred to by the students during the test or examinations. All other books, notes, papers, etc., are withdrawn from the examinees.

2.3 Examination Schedule

The Chairperson of the department publishes the mid-term and final examination schedule at least two weeks before start of the examinations in accordance with the University's academic calendar.

2.4 Conduct of Mid-Term and Final Examinations

a)   The Chairperson shall depute teachers or staff as Deputy Superintendent and Invigilators for the conduct of examinations. The number of invigilators will be estimated on the basis of one invigilator for every twenty-five students.

b)   The subject teacher shall be the Superintendent for the conduct of examination. The Superintendent shall ensure the following:

i.   That all answer books used in the examination are signed or initialled. The teacher may require the students to answer on the question paper itself. No other answer book is to be used in this case.

ii. Answer books are issued to the invigilators 5 minutes before the commencement of the examination and retrieved at the end of the examination.

iii. The absentee report, if any, is prepared and forwarded to the Chairperson's office at the end of each examination.

2.5 Teachers or Staff acting as invigilators are detailed by the respective Chairperson. They ensure the following:

a)   That the students are identified through means such as University identification card or a valid photo ID.

b)   That the students are warned against the use of unfair means and have been advised to surrender mobile phones, notes, papers or   other unauthorized material before the commencement of the examination.

c)   That the students are not allowed to talk with or copy from other students during the examination.

d)   That no student is allowed to join the examination thirty minutes after its commencement.

e) That no student is allowed to submit the answer sheet and leave the examination room within thirty minutes of commencement of examination. Visits to toilets are carefully controlled.

f) That the question papers and answer books of a student detected using unfair means or assisting another candidate, are taken away and the matter is reported to the Controller of Examinations. The superintendent records all available evidence to be used as proof later on.

g) That the students write their registration numbers, name and class on the front cover of each additional answer sheet used. If more than one answer book is used, these are stapled together.

2.6 <u>The subject teachers, being the Superintendent(s), shall:</u>

a) Supervise distribution of the question papers to the students according to the schedule published.

b) Be available in the examination center during examination of their subject to clarify any query and to collect answer books after the examination. In case of multiple examination centers, they must remain available near the centers.

c) Report any incidence of unfair means or disobedience or hooliganism detected in the examination center to the Controller of Examinations for processing under rules governing use of unfair means during examinations. The report must include collected evidence (if any), written and signed statement by the invigilator detecting the incidence and of the candidate(s) found involved.

3.0 Disposal of Answer Scripts

Answer sheets of mid-term and final examinations will be stored in the respective department for one semester after declaration of result of a semester. The sheets would be disposed off subsequently in a suitable manner as decided by the concerned Chairperson.

4.0 Transfer of Credits of Subjects For Migrated Students

a) Students from other HEC approved universities and programs accredited by PEC or PCATP, may apply for migration to this University in the same programs, in accordance with University's Migration Rules. Following conditions shall govern transfer of subjects (credits) to the University for subjects studied elsewhere. Subjects that do not satisfy these conditions shall not be transferred nor given any credit:

i. The subject must correspond to a subject offered by UET or be deemed equivalent in depth and intensity.

ii. The student must have earned at least "40%" marks in case of absolute grading system or a minimum of "C" grade or higher in a letter grading system similar to the one in this University. In case of any other grading system, the department shall decide with the above minimum limits in perspective. In case, both letter grades and marks are mentioned on the transcript, only letter grade will be considered for the purpose of transfer of semester credits.

b) The accumulative credits accepted for transfer in any program should not exceed one-half (50%) of the total credits required to complete that particular program, in any case.

c) The credits transferred are counted towards the degree requirements of the student. However, GPA of transferred credits shall not be counted towards the calculation of CGPA, and that only "Transferred" shall be written against those subject(s) in which transfer of credits was allowed. In addition, migrated students shall neither be eligible for a merit position nor degree with Honors.

d) Migrating student may be deficient in subjects as compared to the class which he has joined. Such a student shall repeat these subjects. In case, he is studying a particular subject for the first time, it will not be classified as repeated subject for him.

5.0 Transfer of Credits of Subjects For Newly Admitted/Re-admitted Students

(Newly admitted students in this clause implies those students who have been permanently separated from UET and have secured admission as fresh students after completing the UET admission process)

"Subjects" and "grades of subjects", studied during the previous five years from the date of re-admission, in which they have earned a grade of "C" or above shall stand transferred and the students shall be placed in the semester recommended by the department. In addition, re-admitted or newly admitted students availing this facility shall neither be eligible for a merit position nor degree with Honors.

6.0 Transfer of Credits of Subjects For Double Degree Students

Credit hours of subjects, as recommended by the concerned department, in which they have earned a minimum of 40% marks or a minimum grade of "C" (as the case may be) during their first degree program within the University shall stand transferred and they shall be placed in the semester recommended by the department. The credits transferred are counted towards the degree requirements of the student. However, GPA of transferred credits shall not be counted towards the calculation of CGPA, and that only "Transferred" shall be written against those subject(s) in which transfer of credits was allowed. In addition, double degree students shall neither be eligible for a merit position nor a degree with Honors.

7.0 Transfer of Credits of Subjects For Exchange Students

a) Following conditions shall govern transfer of subjects (credits) to the University for subjects studied elsewhere as Exchange students under an HEC or University approved scheme. Subjects that do not satisfy these conditions shall not be transferred nor given any credit.

    i. The subject must correspond to a subject offered by UET or be deemed equivalent in depth and intensity.

    ii. The student must have earned at least "40%" marks in case of absolute grading system or a minimum of "C" grade or higher in a letter grading system similar to the one in this University. In case of any other grading system, the department shall decide with the above minimum limits in perspective. In case, both letter grades and marks are mentioned on the transcript, only letter grade will be considered for the purpose of transfer of semester credits.

b) The credits transferred are counted towards the degree requirements of the student. However, GPA of transferred credits shall not be counted towards the calculation of CGPA, and that only "Transferred" shall be written against those subject(s) in which transfer of credits was allowed. In addition, such students shall neither be eligible for a merit position nor degree with Honors.

8.0 Exemption of Credits For Students Admitted on the Basis of B.Sc. Engineering Technology or Equivalent Degree

Subjects studied in the first two semesters of the engineering program in which the student has been admitted shall stand transferred. The credits transferred will be counted towards the degree requirements of the student. However, GPA of transferred credits shall not be counted towards the calculation of CGPA, and that only "Transferred" shall be written against those subject(s) in which transfer of credits has been allowed. In addition, such students shall be eligible for a merit position and degree with Honors if they so qualify.

9.0 Final Transcript Issued by Examination Branch

Examination Branch will issue a final transcript after the student completes all the degree requirements. The recording of result on final transcript will be according to the following:

i. The transcript will be chronological showing all subjects registered in each semester and corresponding grades earned.

ii. All "I" grades would be replaced by the grade earned or "F" grade if requirements have not been completed.

iii. "IP" grade in a subject or sequel of subjects would be shown in the semester(s) in which it has been awarded. It will not be counted towards computation of GPA or CGPA in these semesters.

iv. The semester grade awarded in a subject, which is a follow up of a subject or subjects in which "IP" has been awarded in previous semesters, would be counted towards computation of semester GPA and CGPA by considering the total credit hours assigned to the subject or a sequel of subjects.

v. Elective subjects in which the student has earned "F" grades may not be counted towards computation of CGPA if alternate elective subjects have been studied in their place. This will not be automatic. The student must apply to the Controller Examination to avail this facility.

10.0 Results Declaration by Examination Branch

The student would be able to see his subject grades on the Examination portal as soon as those have been submitted by the teachers to the Controller Examinations. The status of these results would be "Provisional". When all results have been received by the Branch, official results would be declared within one week following due process of scrutiny and verification. The status of these results would change to "Confirmed" after declaration.

VISITING STUDENTS POLICY

1. Visiting students are classified as students currently admitted into a B.Sc. (4 years), M.Sc./ M.Phil. (18 years) or Ph.D. program of any University within or outside Pakistan and enrolled for one semester only to study selected subjects at UET Lahore. Registration in a maximum of five courses by any individual student at undergraduate level and two courses at postgraduate level is permissible.

2. The candidates desiring to study one or more subjects in any department of UET shall apply directly to the Chairperson concerned at least 15 days before commencement of a Semester. The Chairperson, after discussion with the concerned teacher, may approve or reject the request. In case the request is accepted by the Chairperson, it will be forwarded to the respective Dean. The Dean after due deliberation may accept or reject the request. In case of acceptance by the Dean, the request will be forwarded to Convener Admission Committee for further action.

3. CAC shall issue a registration number to the student after submission of: (a) total dues, (b) matriculation or equivalent certificate and (c) a No Objection Certificate from the parent university of the applicant. A folder shall be maintained in the Students Section and a notification shall be issued with copies to Controller, Treasurer, concerned Dean and Chairperson of the department, and to the Security Office.

4. The registration number shall be of the following nomenclature:

   YYYY-PP-DD-V-XX

   where
   - YYYY: Year of application like 2021, 2022, etc.
   - PP: Program like B.Sc., M.S., M.Phil. or Ph.D.
   - DD: Department like EE, Civil, ME, etc.
   - V: Shall be written as such indicating Visiting Status
   - XX: Two digit Integer number starting from 10.

5. The visiting student shall be issued the temporary University ID card but he shall not be eligible for any benefit admissible to regular students of the University like hostels, library, sports facility, etc. He shall have to pay all the dues in advance and shall not be eligible for financial assistance or instalments facility. Any dues once paid shall be non-refundable.

6. The student shall be governed by all rules regarding academics and discipline.

7. Studentship of a visiting student shall end on completion of the Semester in which he is registered in a course. Second time registration as a visiting student is not permissible.

8. Examination Branch shall include his name in the student record of the concerned department facilitating his registration and issuance of DMC or Transcript on completion of the said subject. Examination record shall be maintained for any future reference.

9. Fee structure is given below:
   - Registration Fee: Rs 5,000/-
   - Fee per course including any laboratory, if applicable: Rs 20,000/- (UG)/Rs 25,000/- (PG)

MIGRATION REGULATIONS

1. Subject to the provision of Regulations, the Vice-Chancellor may admit a current student to the University by migration from other HEC approved Universities or Institutions accredited by PEC/PCATP/IPP in relevant discipline on open merit under category "A1" or self-support under category "A2" according to the regulations.
2. The grounds for migration shall constitute changes in circumstances, which render it practically impossible for the student to continue his studies in his Parent University or Institution.
3. No migration shall be allowed into UET, its campuses/college and into its affiliated institutions from within its constituent campuses/college and affiliated campuses/ colleges.
4. Admission by migration shall not be allowed ordinarily after the expiry of three weeks from the commencement of the session.
5. Only those students who possess academic record comparable with admission requirements of this University (for their particular Entry Session) shall be considered for admission by migration subject to availability of seats in the concerned department.
6. No student shall be admitted to First Year and Final Year classes by migration. In terms of semesters, migration is only permissible into the 3rd, 4th or 5th semester.
7. A migrated student is required to complete at least 50% curriculum, required for award of the degree, at UET in order to be eligible for UET's degree.
8. No student shall be admitted by migration from a University or Institution in Pakistan unless he produces a "No Objection Certificate" and Good Moral Character Certificate to the effect that the student has not been debarred from taking University examinations and suspended or not expelled or rusticated from the University or Institution from which he intends to migrate and that no disciplinary action is pending against him.
9. The applicant must have appeared in the Combined Entry Test conducted by UET Lahore of the same session in which he was admitted in parent university. In case, he has not appeared in UET entry test then he must have appeared in the entry test of UET Peshawar or MUET Jamshoro or NED Karachi or the one conducted by HEC Islamabad of the same session in which he was admitted in parent university. In case of the candidate of University/Institution is abroad, he must have appeared in the SAT of same year in which he obtained admission in the parent university. The applicant will provide certified copies of the transcript and approved course outline from his parent university. The SAT result card must be sent to UET Lahore directly from Educational Testing Service (ETS).
10. The applicant must have passed Intermediate (Pre-Engineering) or its equivalent with at least 60% marks and 50% weighted aggregate based on 70% weight to Intermediate marks and 30% weight to Entry Test marks.
11. An application for admission by migration shall be accompanied by a detailed marks certificate showing the examinations passed by the applicant at his parent university. The applicant is required to be in good standing with a minimum CGPA of 2.5 out of 4.0.
12. No student admitted to any University or Institution against seats reserved for special categories shall be eligible for admission by migration.
13. No applicant shall be admitted by migration who possesses less than 1% of admission merit of this university as well as the sub-campuses of that year in which he was admitted in his parent institution.
14. No student shall be migrated to the University who carries any of his papers of his previous years/semesters or having subject with "I", "W", "F" and "WF" grades.
15. No applicant shall be admitted by migration whose parent institution is within the same city. However, he may be considered for admission by migration to sub-campuses of this university.
16. Migration application will only be entertained on the prescribed application form, obtainable from UET websites http://www.uet.edu.pk or https://admission.uet.edu.pk from the downloads section. Migration form fee of Rs. 1,000/- will be paid at the time of submission of application form.
17. Transfer of credits of subjects for migrated students (see 4.0 in Examination Regulations).
18. Migration fee shall be charged at the time of admission, from the candidates allowed to migrate to the University from other Universities/Institutions under the rules at the following rates:
    i. Rs: 500,000/- (Rupees five hundred thousand only) in case of candidates of Universities/Institutions abroad.
    ii. Rs: 400,000/-(Rupees four hundred thousand only) from applicants admitted elsewhere in Pakistan in private universities or Self-support/Self-finance basis in public universities.
    iii. Rs: 50,000/- (Rupees fifty thousand only) per semester to be studied in University of Engineering and Technology, Lahore and its campuses from the applicants not covered in the first two cases above. The applicant shall pay prescribed semester dues of the category in which he got admission, in addition to the migration fee.

CODE OF ETHICS

بسم الله الرحمن الرحيم

In the name of Allah, the Beneficent, the Merciful

Whereas Allah enjoineth upon his men faithfully to observe their trusts and their covenants;

- that professional expertise is a sacred trust entrusted to those whom Allah in his magnificent bounty has endowed with this skill and knowledge;
- that every member of the profession shall appreciate and shall have knowledge as to what constitutes this trust and covenant and that a set of dynamic principles derived from the Holy Quran shall guide this conduct in applying his knowledge for the benefit of society,

It shall be incumbent upon the members of the professional community to subscribe to individually and collectively and to uphold the honour and dignity of their profession:

1. "Allah commands you to render back your trusts to those to whom they are due, and that when you judge between people you judge with justice. Allah admonishes you with what is excellent." (4:58)
   - You shall be honest, faithful and just, and shall not act in any manner derogatory to the honour, integrity or dignity of their profession.
2. "And let not hatred of a people incite you not to act equitably. Be just that is nearer to observance of duty." (5:8)
   - You shall not injure, maliciously, directly or indirectly the reputation or employment of another Engineer, nor shall you fail to act equitably while performing professional duty.
3. "Give full measure and weight justly and defraud not men of their things and act not corruptly in the land making mischief." (11:85)
   - You shall use your knowledge and skill of engineering for human welfare and render professional service and advice which reflects your best professional Judgement.
4. "And swallow not up your property among your salves by false means, nor seek to gain access thereby to the judges, so that you may swallow up a part of the property of men wrongfully while you know." (2:188)
   - You shall not abuse you position or power, nor accept illegal gratifications of any sort.
5. "Fulfil the obligations." (5:1)
   - You shall faithfully observe and fulfil all your obligations.
6. "And speak straight words." (33:70)
   - You shall express your opinion on professional or other matters in a frank, open and straight forward manner.
7. "Avoid most of suspicion for surely suspicion in some cases is sin; and spy not nor let some of you backbite others." (69:12)
   - You shall not criticize another professional's work without his knowledge nor malign, or injure his professional reputation.
8. "Ye who believe. Let not some men Among you laugh at others. It may be that the (latter) are better than the (Former); Nor let some women Laugh at others: It may be that the (latter) are better than the (Former)" (49: 11)
   - You shall not ridicule fellow professional nor let one professional discipline deride other disciplines or professions.
9. "Nor defame nor be sarcastic to each other. Nor call each other By (Offensive nicknames)" (49:11)
   - You shall not directly or indirectly discredit other professionals nor assign (derogatory) epithets to their persons or work.
10. "And follow not that of which thou hast no knowledge. Surely the hearing and the sight and the heart, of all these it will be asked." (17:36)
    - Your professional advice shall be based on full knowledge of the facts and honest conviction, and you shall not write articles or advertise in self laudatory language or in any manner derogatory to the dignity of the profession.
11. "O ye who believe: If a wicked person comes to you with any news, Ascertain the truth lest Ye harm people unwittingly." (49 :6)
    - You shall ascertain facts before accepting them and shall not encourage or cause others to carry tales. Credulity is no credit.
12. "And help one another in righteousness and piety and help not one another in sin and aggression and keep your duty to Allah." {5:2)
    - You shall help one another in upholding and doing what is right and shall not associate with those who transgress and those who indulge in unethical practices.
13. "And forget not kindness among yourselves." (2:237)
    - You shall be kind and considerate to others and shall not fail to be co-operative and accommodating.
14. "And whose affairs are decided by counsel among themselves." (62:38)
    - You shall decide matters of common professional interest by mutual consultation.
15. "And hold fast by the covenant of Allah all together and be not disunited." (3:102)
16. "And obey Allah ad His apostle; And fall into no disputes Lest ye lose heart and reputation." (8:40)
    - You shall strive individually and collectively to enhance the prestige of your profession by ordering your conduct in accordance with this Code of Ethics and shall not be disunited.

CODE OF HONOUR

1. He must be loyal, faithful in his religious duties and respect the conviction of others in matters of religion.
2. He must be loyal to his country and refrain from doing anything which might lower its honour and prestige.
3. He must be truthful and honest in dealings with all people.
4. He must respect the elders and be polite to all, especially women, children, old people, the weak and helpless.
5. He must respect his teachers and others in authority in the University.
6. He must keep clean in all respects i.e. body, mind, speech, sport and habits.
7. He must help his fellow beings especially those in distress.
8. He must devote himself faithfully to his studies.
9. He must observe thrift and protect property.

Prohibition of Smoking and Protection of Non-Smokers Health Ordinance 2002
The University requires adherence to the Prohibition of Smoking and Protection of Non-smokers Health Ordinance 2002. As such, smoking is stricktly prohibited at all open and closed places within university premises and in university's transport.

Acts of Indiscipline Punishable Under University Rules
1.   No Student shall:
i. Smoke in the class room, laboratory, workshop, library, examination hall, convocation hall and during studio work or academic functions.
ii. Consume alcoholic liquor or other intoxicating drugs within the University Campus or a hall of residence or during the instructional, sports or
iii. cultural tours, or survey camps, or enter any such place or attend any such tour or camp, while under the influence of such intoxicants.
iv. Organize or take part in any function within the University campus or a hall of residence, organize any club or society of students except in accordance with the prescribed rules and regulations.
v. Collect any money or receive donations or pecuniary assistance for or on behalf of the University or any University organization except with the written permission of the Vice Chancellor.
vi. Stage, incite or participate in any walkout, strike or other form of agitation against the University or its teachers and officers.

2.   A Student Who:
i. Commits a breach of any of the rules of conduct specified in these regulations, or
ii. Disobeys the lawful order of a teacher or other person in authority in the University, or
iii. Habitually neglects his work or habitually absents himself from his classes without reasonable cause, or
iv. Wilfully damages University property or the property of a fellow student or any teacher or employee of the University; or
v. Does not pay the fees, fines or other dues levied under the University ordinances rules and regulations, or
vi. Does not comply with the rules relating to residence in the hostels or halls of residence or the rules relating to the wearing of uniform or academic dress, or
vii. Uses indecent language, wears immodest dress, makes indecent remarks or gestures or behaves in a disorderly manner, or
viii. Commits any criminal, immoral, or dishonorable act whether within the University campus or otherwise which is prejudicial to the interest of the University.

Shall be guilty of an act of indiscipline and shall be liable for each such act to one or more of the penalties under the General Discipline Rules.

AUTHORITIES TO CHECK INDISCIPLINE

1. Every Member of the Teaching Staff shall:
   Have the powers and it shall be his duty to check disorderly or improper conduct or any breach of the rules by students occurring in any part of the precincts of the University. Should such misconduct occur in room when the student is under the charge of a demonstrator, the latter shall report the matter without delay to the Chairman of the Department.

2. The Librarian shall:
   Be responsible for maintenance of order in the Library. In case of disorderly conduct or any breach of rules, he may require the student so offending to withdraw from the library for the remainder of the day and shall immediately report the offence to the Chairman of the Library Committee.

3. The Senior Warden/Warden and the Resident Tutor shall:
   Be responsible for maintenance of order among the students in halls of residence or hostels.

4. The Director of Physical Education shall:
   Be responsible for the maintenance of order among the students on or near the play grounds or while otherwise under his charge.

5. Committee of Discipline:
   There is a Committee of Discipline to deal with serious cases of indiscipline. It consists of the following members as per University of Engineering an Technology, Punjab Act V of 1974:
   a) Chairman to be nominated by the Vice-Chancellor
   b) Two Professors to be nominated by the Academic Council
   c) One member to be nominated by the Syndicate
   d) Director Students Affairs (Member/Secretary)
   e) Senior Tutor of the University; and
   f) Senior Warden of the University Hostels
      i. The term of office of members of the Committee excluding ex-officio members shall be two years
      ii. The quorum for a meeting of the Committee of Discipline shall be four members

The functions of this Committee are:
- to propose Regulations to the Academic Council for the conduct of University Students, Maintenance of Discipline and breach of discipline; and
- to perform such other functions as may be prescribed by Regulations

PENALTIES FOR ACTS OF INDISCIPLINE

The penalty or penalties imposed shall be appropriate and proportioned to the nature and gravity of the Act. The penalties which may be imposed and the authority or authorities competent to impose each kind of penalty are specified below:

	PENALTY	AUTHORITY COMPETENT TO IMPOSE THE PENALTY
a)	Exclusion for class room, Laboratory, Workshop or field work for the periods concerned, for not more than four such consecutive periods	Teacher Incharge
b)	Exclusion from the game or the Field for not more than one week	Incharge of the Game
c)	Exclusion from Instructional or Sports Tour or Survey Camp	Teacher Incharge or Head of Department / Chairman
d)	Exclusion from the Department for a period not exceeding two weeks	Head of Department / Chairman
e)	Exclusion from the Library for not more than two weeks	Chairman, Library Committee
f)	Exclusion from all or any Class in any Faculty for a period not exceeding two weeks	Dean of the Faculty
g)	Exclusion from the Hall of residence for a period not exceeding six months	Resident Tutor
h)	Exclusion form the Hall of residence for a period not exceeding one year	Senior Warden / Warden / Director Students Affairs
i)	Suspension or removal from a position of authority in a Hall of Residence	Resident Tutor / Warden / Senior Warden
j)	Suspension or removal from a position of authority in the Students Union	Director, Students Affairs
k)	Suspension or removal from a position of authority in the University Sports	President Sports committee
l)	Cancellation or Remission of fee or University Scholarship	Dean of the Faculty
m)	Fine up to Rs. 1,000/-	Lecturer / Resident Tutor
n)	Fine up to Rs. 2,000/-	Assistant Professor / Warden
o)	Fine up to Rs. 3,000/-	Associate Professor
p)	Fine up to Rs. 5,000/-	Chairman of Teaching Department/ Professor / Senior Warden
q)	Fine without limit	/ Director Students Affairs.
r)	Rustication from the University for a period not exceeding six months	Dean of the Faculty
s)	Rustication from the University for a period not exceeding one year	Associate Professor
t)	Rustication for any period	Chairman of a Teaching Department / Professor / Committee
u)	Expulsion from the University	Committee of Discipline

GENERAL DISCIPLINE RULES RELATING TO STUDENTS

1. When a case against a student is referred to the Committee of Discipline, the Committee may, if it deem fit, suspend the student from University Rolls and / or direct him to vacate the Hall of Residence till it has taken a decision in the case.

2. The Vice Chancellor shall have the power to impose any of the penalties mentioned in "Penalties for Acts of Indiscipline" or to refer any case to the Committee of Discipline.

3. A Teacher or officer mentioned in "Penalties for Acts of Indiscipline" in whose presence or in relation to whom an act of indiscipline is committed or who obtains knowledge of such act on a report or otherwise, may deal with the case himself or if in his view:

   a) the case is one which can be more appropriately dealt with by another authority; or

   b) a penalty or penalties severer than those which he is competent to impose are called for in the case; he shall follow the procedure specified below:

   i. If he is not the Dean of the faculty he shall refer the case to the Dean who may deal with it himself or refer it to the appropriate authority.

   ii. If he is the Dean of the Faculty, he shall refer it to the appropriate authority or the Committee of Discipline.

4. No Student shall be rusticated or expelled from the University, unless he has been allowed reasonable chance of replying to the accusation against him.

5. When in the opinion of the Committee of Discipline, the penalty of rustication or expulsion is not called for in a case referred to it, it may impose any other penalties mentioned in "Penalties for Acts of Indiscipline".

6. When a Teacher or an Officer has imposed penalty/penalties on a student under "Penalties for Acts of Indiscipline", the later shall not be liable to a higher or an additional penalty unless the offending student has been given a reasonable opportunity of showing cause against the proposed action.

7. An appeal against the imposition of penalty may be made within a week's time to the teacher who imposed the penalty. In case the student is not satisfied with his decision/revision he may appeal to the Chairman, Discipline Committee who shall place it before the Discipline Committee for its consideration and decision within a maximum of six weeks to dispose of the case. A final appeal against the imposition of penalty may then be made to the Committee as provided in Rule 11(i) of the General Discipline rules relating to students.

8. An appeal against a decision imposing a penalty mentioned in clauses (r) and (s) of "Penalties for Acts of Indiscipline" shall lie with a Committee consisting of the Vice Chancellor and the Deans of Faculties. No appeal shall lie against a decision of an authority imposing a penalty other than that mentioned in sub-rule (i) of this rule except on the ground that such authority has imposed a penalty which it was not competent to impose.

9. An appeal on the ground that an authority has imposed a penalty which it was not competent to impose shall lie to the Vice Chancellor. No appeal by a student shall be entertained, unless it is presented within fifteen days from the date on which the decision is communicated to him provided that the Vice Chancellor may for valid reason extent this period.

10. The Vice Chancellor or any teacher or officer to whom the Vice-Chancellor may delegate his powers may direct a student to pay compensation for any loss of or damage to property belonging to the University or fellow student or to an employee of the University, caused by a wilful act or gross negligence of the student and if the student does not pay such compensation within a reasonable time, the Vice-Chancellor may expel him from the University.

11. The Syndicate may for special reason re-admit a student rusticated or expelled from the university under these rules, if otherwise eligible.

UG FEE REGULATIONS

1. **Periods of fees and Other Charges**
    a) The fees and other charges are categorized as:
        i. One-time payments at the time of admission
        ii. Semester recurring fees
        iii. Summer semester dues for students registering during summer semester
    b) During each year of a student's stay at the University, all recurring fees are charged in two installments payable at the beginning of Fall and Spring semesters except for the first semester wherein students can pay the charges in two installments.
    c) Registration fee at the rate of: (i) Rs 2,634/- per credit hour for subsidized category, and (ii) Rs 9,835/- per credit hour for partially subsidized category will be charged for subjects registered during the summer semester.
    d) A total of 8 semesters or 10 semesters recurring fees are admissible from students graduating from a four years degree program or a five years degree program, respectively.
    e) Students registering in subjects after completing 8 semesters or 10 semesters, respectively, from a four years degree program or a five years degree program will not be required to pay the admissible semester dues but will, however, pay Rs 2,634/- per credit hour for the subjects registered.
    f) Re-admitted students are required to pay the admissible dues, of the session they are placed with, for two extra semesters even if they complete their degree requirements with their original entry session or a semester later. They will pay Rs 2,634/- per credit hour for the subjects registered beyond the two extra semesters for which admissible dues have been paid by them.
    g) An admission retention fee of Rs 15,000/- per semester will be charged from students who have deferred their studies or who have not registered in any subject in a semester. This fee will be over and above the total fee period admissible from such students.
    h) The hostel charges are payable for the period of allotment, a part of semester being counted as full semester. Rent and electricity charges for fans are payable on per semester basis. Electricity charges for room heaters are payable only during the winter season for four months.

2. **Revision of Tuition Fees Rates**
    a) The fee and other charges schedule (for four years) published in the prospectus will be applicable to the entry session of that year only.
    b) To account for inflation, 12% increase in tuition fee and other charges may be incorporated each year.

3. **Payment of Dues**
    a) Fee challan form would be available online in the student's login on Learning Management System (LMS) before commencement of the semester.
    b) The challan form shall show the amount payable by the due date and the amount payable after the due date.
    c) Students are encouraged to pay their dues through electronic means as facilitated by HBL.
    d) Students will not be permitted to register in a semester if they do not deposit the semester dues in advance. Failing to pay the dues until the end of 21 days add/ drop period, after commencement of the semester, will result in missing the semester altogether.
    e) Admission of student defaulting in payment of their dues until the end of add/ drop period may be cancelled. Such students will have to get readmission after permission by the VC and on payment of all outstanding dues and the readmission fee.
    f) Students whose names do not appear in LMS attendance roll will not be allowed to sit in the classes by the departments.
    g) Cases of students who are externally sponsored will be dealt separately.

4. **Refund on Admission Cancellation**
    4.1 **Admission Cancellation by Freshly Admitted Students**
        All dues paid by the student are refundable excluding the Admission Fee as per the following schedule:
        a) Full (100%) fee refund if admission cancelled up to 7th day.
        b) Half (50%) fee refund if admission cancelled from 8th to 15th day.
        c) No fee refund if admission cancelled from 16th day onward.

    The count of days mentioned in the schedule for determining refund amount, would start from the date falling last from the date of convening of classes.

4.1-A Admission Cancellation by Freshly Admitted ineligible students

Ineligible students are defined as those newly admitted candidates who met the admission criteria at the time of admission (based on first-year intermediate or equivalent exam results) but later fail to meet the minimum required marks after the declaration of their second year (first annual) results.

Only the results of intermediate or equivalent examinations conducted up to and including the first annual examination of the admission year will be considered for eligibility. Any examination results declared after the first annual, or results of exams taken in subsequent attempts, will not be accepted for determining eligibility.

If a student is declared ineligible based on these final results, they are entitled to a fee refund only if they inform the Admission Office/Student Section at UET, Lahore (Main Campus) within one month of the result declaration.

No fee refund will be granted if the student fails to notify the administration within the specified time. After this period, all deposited dues and fees, including tuition fees, will be non-refundable.

4.1-B Admission Cancellation Policy for Non-Payment of Second Installment

"After securing provisional admission by paying 1st installment, it is necessary to submit the 2nd installment before commencement of classes. Failing to which may lead to cancellation of provisional admission and the seat may be awarded to the next candidate in merit. However, an option of restore will still be available, not necessarily in the same discipline, since this would depend on the availability of seat and merit after CAC's approval"

4.1   Admission Cancellation by Other Students

The University security, library security, hostel security and mess securities are refunded when a student cancels his admission before completion of his degree.
• The one-time deposit of US$ 10,000/- made by foreign and dual national students admitted under SF category shall be refunded after deduction of months availed at the university. The one-time deposit will be divided by 48 to determine monthly refund rate. For counting availed months, a portion of a month shall be counted as one full month.
4.3

All other dues and fees deposited shall not be refunded including migration fee charged from migrated students.

FINANCIAL ASSISTANCE AND SCHOLARSHIP POLICY

1. **Categories which are not eligible for Financial Assistance**
   "A2", "S", and "SI" categories are not eligible to apply for financial assistance from the University.

2. **Financial Assistance in the form of Work and Study Model**
   Following categories are eligible to apply to the Office of FA&CS for financial assistance from the University in the form of up to 50% tuition waiver through a Work and Study arrangement:
   - "A1", "N", "L", "Q", "P", "R", "B", "D", "E", "J1", "J2" and "O".

   Decision of award will be made by the Director FA&CS on the basis of the credentials provided by the applicant. Awardees will be required to serve the University for 10 hours per week during the semesters for which the award has been given. This service may be in the form of office work, horticultural work, cleanliness work, environmental work, etc. The awardees will be attached with the offices of the Resident Officer, Project Director, Security Officer, Director Sports, Senior Warden, or another office as deemed appropriate by Director FA&CS.

3. **Scholarships for PTAP and Cultural Exchange Scholars**
   International and Cultural Exchange students admitted under "H1" and "H4" category without financial support will be charged tuition fee of "A1" category students. The Vice-Chancellor is authorized to give a scholarship in the form of a waiver of tuition fee up to 75% to selected Pakistan Technical Assistance Program (PTAP) and Cultural Exchange scholars on the recommendation of FA&CS or In-charge Students' Section.

4. **Scholarships for Disabled Students and Baluchistan Domiciled Students**
   All charges categorized as fees chargeable by the University are waived for Baluchistan domiciled students and disabled students admitted under "T" category or "A1" category if they apply for the same to the office of FA&CS or In-charge Students' Section.

5. **Orphan Students Admitted Under "A1" Category and FATA Domiciled Students**
   a) Needy orphan students admitted under "A1" category may apply to Director FA&CS for full tuition waiver. Decision to award tuition waiver or otherwise will be based on assessment of whether the student is needy or not.
   b) FATA domiciled students will be awarded full tuition waiver at the time of admission, if they claim to be needy with required proof as acceptable to the Office of FA&CS.

6. **Merit Scholarships Policy**
   a) Merit scholarships are awarded in the form of full tuition waiver to students earning top positions for one semester following the semester in which position has been earned as per the approved criteria. "A2", "S" and "SI" categories are also eligible for the award of merit scholarship, if they so qualify.
   b) Students who have been awarded need based tuition waiver by UET are eligible for merit scholarships. However, need based tuition waiver will be discontinued for the semester in which merit scholarship is admissible.
   c) Students who have been awarded scholarships by external donors/agencies are not eligible for University merit scholarship.

7. **Award of Multiple Financial Assistance/ Scholarships**
   a) Students are only eligible for the award of one scholarship at a time.
   b) Orphan students admitted under "A1" category and students from Baluchistan and FATA are granted full tuition waiver by the University. However, they are permitted to avail another need-based scholarship awarded by an external agency. If the external scholarship includes tuition fee as its component, then full tuition fee will be recovered from the scholarship amount awarded to these students. However, if such an amount is not included, then tuition waiver will be maintained.
   c) Cases regarding tuition fee of orphan students availing HEC scholarship will be decided by the HEC Focal Person Office/HEC Need Based Scholarship Committee.
   d) Board of Intermediate and Secondary Education merit scholarships will be given to the awardees even if they are in receipt of a scholarship from the University.

FEE STRUCTURE

		SUBSIDIZED	PARTIALLY SUBSIDIZED
	Eligible Categories	**A1, B, D, E, J1, L, P, Q, R, SF**	**A2, J2, N, NM, O & S**
I	**NON-RECURRING FEES (Payable at the time of admission)**		
1	Admission Fee payable in First Semester/ Readmission Fee	53,045	73,036
II	**SEMESTER RECURRING FEES (from 2nd to 8th or 10th semesters)**		
1.	Tutorial Fee	131	140
2.	Inter-University Tournament Fee	131	140
3.	Magazine Fee	197	211
4.	Medical Fee	658	702
5.	Tuition Fee (payable in every semester)	53,106	79,421
6.	Laboratory Fee	2,487	13,264
7.	Examination Fee	1,474	1,572
8.	Recreation / Sports Fee	791	843
9.	Tennis/ Squash Club Fees for Student Members only	2,634	2,810
10.	Facilities Charges	5,000 for day scholars / 2,500 for hostel residents	5,000 for day scholars / 2,500 for hostel residents
11.	Internet Charges	2,371	2,529
12.	Summer Semester Subject Registration Fee	2,634 per credit hour	9,835 per credit hour
IV	**SEMESTER HOSTEL CHARGES**		
1.	Room Rent (Cubicle)	4,572	9,144
2.	Room Rent (Dormitory)	2,286	4,572
3.	Fan Rent (Cubicle)	409	409
4.	Fan Rent (Dormitory)	255	255
5.	Electricity Charges (Fans) Cubicle/ Dormitory. Summer season only	1,371 / 915	1,371 / 915
6.	Electricity Charges (Lights) Cubicle/ Dormitory	2,286 / 1,830	2,286 / 1,830
7.	Sui Gas Charges	1,486	1,486
8.	Consolidated Summer Semester Charges (July & August)	12,247	12,247

UNDERGRADUATE FEE SCHEDULE FOR SESSION 2025

Applicable from 1st Semester (Fall 2025) until 8th/10th Semester (Spring 2029/30)

	SUBSIDIZED (Rs)	PARTIALLY SUBSIDIZED (Rs)
First Semester (Fall) [1st Instalment]	53,045.00	73,036.00
First Semester (Fall) [2nd Instalment] (Tuition Fee due on 1st day of classes, that is, September 08, 2025)	53,106.00*	80,421.00
Second Semester (Spring)	66,347.00	103,821.00
Third Semester (Fall)	72,720.00	113,352.00
Fourth Semester (Spring)	72,720.00	113,352.00
Fifth Semester (Fall)	79,857.00	124,027.00
Sixth Semester (Spring)	79,857.00	124,027.00
Seventh Semester (Fall)	87,851.00	135,982.00
Eighth Semester (Spring)	94,851.00	142,982.00
Total (8 semesters program)	**660,354.00**	**1,011,000.00**
Ninth Semester (Fall)	96,804.00	149,371.00
Tenth Semester (Spring)	96,804.00	149,371.00
Total (10 semesters program)	**853,962.00**	**1,309,742.00**

Hostel Fees Per Semester
Rs. 2,634 / 2,810 charged as non-refundable Hostel Security at the time of allotment

Cubicle (Fall/Spring)	11,253 / 12,624	15,825 / 17,196
Dormitory (Fall/Spring)	8,358 / 9,273	10,644 / 11,559
Summer Semester (July & August)	12,247	12,247

* - The students in programs with 25% discount have to pay discounted tuition fee with 25% reduction. Those admitted in programs with Rs.50000 fixed fee have to pay Rs.103045 in first semester (which includes admission charges) and Rs.50000 per semester until seventh semester (with final semester containing degree/DMC fee).

SEAT ALLOCATION CHART-2025-FALL FOR FACULTY OF ELECTRICAL ENGINEERING

Category Description	Category	Electrical Lahore	Electrical Faisalabad	Electrical KSK	Electrical RCET	Electrical Narowal	Energy Systems and Management KSK	Computer Engineering Lahore	Computer Science Lahore	Computer Science KSK	Computer Science Faisalabad	Computer Science RCET	Computer Science Narowal	Cybersecurity Lahore	Software Engineering Lahore	Software Engineering KSK	Artificial Intelligence Lahore	Artificial Intelligence KSK	Data Science Lahore	B.Sc Business Data Analytics	Computer Engineering (NCEAC) KSK	Computer Engineering (NCEAC) Faisalabad	Computer Engineering (NCEAC) Narowal	Computer Engineering (NCEAC) RCET	Gaming and Animation	Applied Computing	Information Systems Technology Lahore	Information Systems Technology KSK	BME KSK	BME Nrwl	Bio Medical Science KSK	Bio Medical Science NML	Total
Open Merit (Punjab) - Subsidized	A1	84	81	57	45	93	50	58	150	113	50	50	100		50		50	50			50	50	50	50					14	51	25	25	1396
Open Merit (Punjab) - Subsidized	A1-M																												13	47			60
Open Merit (Punjab) Partially subsidized	A2	49		9				37	100	100	50	50	50	100	50	50	200		50	50		50			50	50	50	50	11		25	25	1259
Open Merit (Punjab) Partially subsidized- (Afternoon)	A2								150					100	50		150		100														550
Open Merit (Punjab) Partially subsidized	A2-M																												11				11
DAE - Subsidized	I												As per decision of Pakistan Supreme Court																				
Children of Engrs, Architects, Planners	N	2																															2
Non-Muslims (Punjab)	NM	2	1	1	1	2	1	1	3	2	1	2	2	2	1	1	4	1	1	1	1	2	1	1	1	1	1	1	1	2			42
Backward Areas of Punjab	L	1																															1
Children of Univ. Employees	M											Upper Limit of 10 seats in any major discipline- A total of 41 seats in all.																					
Children of University Alumni	O	1																															1
B.Sc Engg Tech or equivalent	P	4	2	2	1	2																							1	2			14
Bhakkar and Layyah Districts	R	1																															1
Children of Overseas Pakistanis	S	10	14	18	2	5												2															51
Children of Overseas Pakistanis (DAE)	SI											As per decision of Pakistan Supreme Court																					
Disabled (Punjab Domicile)	T																																
Sub-total (i)		154	98	87	49	102	51	96	403	215	101	102	152	202	101	103	354	51	201	51	51	102	51	51	51	51	51	51	51	102	50	50	3385

May Change in line with university policy.

RESERVED SEAT ALLOCATION CHART-2025-FALL FOR FACULTY OF ELECTRICAL ENGINEERING

Category Description	Category	Electrical Lahore	Electrical Faisalabad	Electrical KSK	Electrical RCET	Electrical Narowal	Energy Systems and Management KSK	Computer Engineering Lahore	Computer Science Lahore	Computer Science KSK	Computer Science Faisalabad	Computer Science RCET	Computer Science Narowal	Cybersecurity Lahore	Software Engineering Lahore	Software Engineering KSK	Artificial Intelligence Lahore	Artificial Intelligence KSK	Data Science	B.Sc Business Data Analytics	Computer Engineering (NCEAC) KSK	Computer Engineering (NCEAC) Faisalabad	Computer Engineering (NCEAC) National	Computer Engineering (NCEAC) RCET	Geoinformation	Applied Computing	Information Systems Technology Lahore	Information Systems Technology KSK	BME KSK	BME Nwl	Bio Medical Science KSK	Bio Medical Science NWL	Total
Sindh	B	1																															1
Baluchistan	C	1	1	1	1							1																					5
KPK	D	1				1																											2
Azad Kashmir	E	5	1	1	1																												8
Azad Kashmir (Lepa Valley)	E	Open - Choice open to the candidate – A total of one seat in all.																															1
Gilgit Baltistan	E	1		1																													2
Foreign (under Economics Affairs Division)	H1	20																															20
Afghan Nationals	H2	Open – Upper limit of 05 seats in major disciplines in Lahore Campus – A total of 44 seats in all.																															
OIC Nominees	H2																																
Indian Occupied Kashmir	H3	Open – Upper limit of 03 seats in major disciplines – A total of 15 seats in all.																															
Cultural Exchange (Yemen)	H4	2							4																								6
Pak-Sri Lanka HECP	H5	1					1																										2
Army	J	3							2																								5
Air Force	J	1							1																								2
Navy	J								1																								1
FATA	K	4																															4
DG Khan (Tribal)	Q	1																															1
Rajanpur (Tribal)	Q	1																															1
Baluchistan/ FATA (HEC Scholars)	U	Open – Upper limit of 04 seats in major disciplines – A total of 20 seats in all.																															
HEC Self Finance	SF	10	Open - Upper Limit of 05 seats in each discipline – A total of 50 seats in all.						10	Open - Upper Limit of 05 seats in each discipline – A total of 50 seats in all.																							20
Sub-total (ii)		52	2	3	2	1	-	5	14	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80
Sub-total (i)		154	98	87	49	102	51	96	403	215	101	102	152	202	101	103	354	51	201	51	51	102	51	51	51	51	51	51	51	102	50	50	3385
Grand Total		206	100	90	51	103	51	101	417	215	101	103	152	202	101	103	354	51	201	51	51	102	51	51	51	51	51	51	51	102	50	50	3465

May Change in line with university policy.

SEAT ALLOCATION CHART-2025-FALL FOR THE FACULTY OF MECHANICAL ENGINEERING

Category Description	Category	Mechanical Lahore	Mechanical KSK	Mechanical RCET	Mechanical Narowal	Mechatronics Lahore	Mechatronics Faisalabad	Robotics and Intelligent Systems Lahore	Automotive Engineering	IME Lahore	IME RCET	Textile Faisalabad	Total
Open Merit (Punjab) - Subsidized	A1	84	65	43	92	58	86	50	26	39	49	47	639
Open Merit (Punjab) Partially subsidized	A2	49	17			19		50	24	5			164
DAE - Subsidized	I		As per decision of Pakistan Supreme Court										
Children of Engrs, Architects, Planners	N	2											2
Non-Muslims (Punjab)	NM	2	1	1	2	1	2	1	1	1	1	1	14
Backward Areas of Punjab	L	1											1
Children of Univ. Employees	M		Upper Limit of 10 seats in any major discipline- A total of 41 seats in all.										
Children of University Alumni	O	1											1
B.Sc Engg Tech or equivalent	P	4	2	1	2					1	1	1	12
Bhakkar and Layyah Districts	R												
Children of Overseas Pakistanis	S	15	14	2	6	2	11			3			53
Children of Overseas Pakistanis (DAE)	SI		As per decision of Pakistan Supreme Court										
Disabled (Punjab Domiciled)	T												
Sub-total (i)		158	99	47	102	80	99	101	51	49	51	49	886

May Change in line with university policy.

RESERVED SEAT ALLOCATION CHART-2025-FALL FOR THE FACULTY OF MECHANICAL ENGINEERING

Category Description	Category	Mechanical Lahore	Mechanical KSK	Mechanical RCET	Mechanical Narowal	Mechatronics Lahore	Mechatronics Faisalabad	Robotics and Intelligent Systems Lahore	Automotive Engineering	IME Lahore	IME RCET	Textile Faisalabad	Total
Sindh	B	1											1
Baluchistan	C	1		1							1		3
KPK	D	1											1
Azad Kashmir	E	5	1	1									7
Azad Kashmir (Lepa Valley)	E	Open - Choice open to the candidate – A total of one seat in all.											
Gilgit Baltistan	E	1		1		1	1						4
Foreign (under Economics Affairs Division)	H1	12											12
Afghan Nationals	H2	Open – Upper limit of 05 seats in major disciplines in Lahore Campus – A total of 44 seats in all.											
OIC Nominees	H2	1											1
Indian Occupied Kashmir	H3	Open – Upper limit of 03 seats in major disciplines – A total of 15 seats in all.											
Cultural Exchange (Yemen)	H4	2											2
Pak-Sri Lanka HECP	H5	1											1
Army	J	3											3
Air Force	J												
Navy	J	1											1
FATA	K	4		2			2			2		2	12
DG Khan (Tribal Area)	Q		1										1
Rajanpur (Tribal Area)	Q			1									1
Baluchistan/ FATA (HEC Scholars)	U	Open – Upper limit of 04 seats in major disciplines – A total of 20 seats in all.											
HEC Self Finance	SF	10	Open - Upper Limit of 05 seats in each discipline – A total of 50 seats in all.										10
Sub-total (ii)		43	2	6		1	3		0	2	1	2	60
Sub-total (i)		158	99	47	102	80	99	101	51	49	51	49	886
Grand Total		201	101	53	102	81	102	101	51	51	52	51	946

May Change in line with university policy.

SEAT ALLOCATION CHART-2025-FALL FOR FACULTY OF CIVIL ENGINEERING, FACULTY OF CHEMICAL, METALLURGICAL AND MATERIAL ENGINEERING AND FACULTY OF EARTH SCIENCES AND ENGINEERING

Category Description	Category	Civil Lahore	Civil Narowal	Architectural Engg Lahore	Transportation Engg Lahore	Logistics and Supply Chain Management	Environmental Engg Lahore	Environmental Science Lahore	Chemical Lahore	Chemical Faisalabad	Chemical KSK	Food Science & Technology KSK	Food Science and Human Nutrition KSK	Polymer Engg Lahore	Metallurgical and Materials Engg Lahore	Materials Science Lahore	Petroleum Engg Lahore	Mining Engg Lahore	Geological Engineering	Total
Open Merit (Punjab) - Subsidized	A1	86	67	27	37	50	48	25	56	41	72	25	30	37	39	30	24	36	42	772
Open Merit (Punjab) - Subsidized	A1-M							23				25								48
Open Merit – Partially subsidized	A2	41		7					17		18			20		20	5			128
Open Merit (Punjab) Partially subsidized	A2-M							2												2
DAE - Subsidized	I	As per decision of Pakistan Supreme Court																		
Children of Engrs, Architects, Planners	N	2							1						1		1	1		6
Non-Muslims (Punjab)	NM	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19
Backward Areas of Punjab	L																			
Children of Univ. Employees	M	Upper Limit of 10 seats in any major discipline- A total of 41 seats in all.																		
Children of University Alumni	O																			
B.Sc. Engg Tech or equivalent	P	4	1						2	1	1									9
Bhakkar and Layyah Districts	R																			
Children of Overseas Pakistanis	S	15	10	5	2		2	2	10	4	4				2	1	3		1	61
Children of Overseas Pakistanis (DAE)	SI	As per decision of Pakistan Supreme Court																		
Disabled (Punjab Domiciled)	T																			
Sub-total (i)		150	79	40	40	51	51	53	87	47	96	51	51	40	42	51	34	38	44	1045

May Change in line with university policy.

RESERVED SEAT ALLOCATION CHART -2025-FALL FOR FACULTY CIVIL ENGINEERING, FACULTY OF CHEMICAL, METALLURGICAL AND MATERIAL ENGINEERING AND FACULTY OF EARTH SCIENCES AND ENGINEERING

Category Description	Category	Civil Lahore	Civil Narowal	Architectural Engg Lahore	Transportation Engg Lahore	Logistics and Supply Chain Management	Environmental Engg Lahore	Environmental Science Lahore	Chemical Lahore	Chemical Faisalabad	Chemical KSK	Food Science & Technology KSK	Food Science and Human Nutrition KSK	Polymer Engg Lahore	Metallurgical and Materials Engg Lahore	Materials Science Lahore	Petroleum Engg Lahore	Mining Engg Lahore	Geological Engg Lahore	Total
Sindh	B	1							2								2	1	1	7
Baluchistan	C	3		1	1				1	1					1		3	2	1	14
KPK	D	1	1	1					2						2		1	1	2	11
Azad Kashmir	E	5		1					2	2								2	2	14
Azad Kashmir (Lepa Valley)	E	Open - Choice open to the candidate – A total of one seat in all.																		
Gilgit Baltistan	E		1												1			1		3
Foreign (under Economics Affairs Division)	H1	21		3					4						3		3			34
Afghan Nationals	H2	Open – Upper limit of 05 seats in major disciplines in Lahore Campus – A total of 44 seats in all.																		
OIC Nominees	H2	1																1		2
Indian Occupied Kashmir	H3	Open – Upper limit of 03 seats in major disciplines – A total of 15 seats in all.																		
Cultural Exchange (Yemen)	H4	1															1			2
Pak-Sri Lanka HECP	H5	1							1											2
Army	J	2																		2
Air Force	J																			
Navy	J																			
FATA	K	8							2		2								2	14
DG Khan (Tribal)	Q	1															1			2
Rajanpur (Tribal)	Q									1										1
Baluchistan/ FATA (HEC Scholars)	U	Open – Upper limit of 04 seats in major disciplines – A total of 20 seats in all.																		
HEC Self Finance	SF	10	Open - Upper Limit of 05 seats in each discipline – A total of 50 seats in all.																	10
Sub-total (ii)		55	2	6	1		-	-	14	4	2	-	-	1	6	-	11	8	8	118
Sub-total (i)		150	79	40	40	51	51	53	87	47	96	51	51	40	42	51	34	38	44	1045
Grand Total		205	81	46	41	51	51	53	101	51	98	51	51	41	48	51	45	46	52	1163

May Change in line with university policy.

SEAT ALLOCATION CHART -2025-FALL FOR FACULTY OF FACULTY OF ARCHITECTURE AND PLANNING & FACULTY OF NATURAL SCIENCES, HUMANITIES AND ISLAMIC STUDIES

Category Description	Category	Architecture Lahore	Architecture Narowal	Product & Industrial Design Lahore	Interior Design Lahore	City and Regional Planning Lahore	Chemistry Lahore	Industrial Chemistry Lahore	Chemistry KSK	Chemistry FSD	Mathematics Lahore	Mathematics Faisalabad	Physics Lahore	BBA Lahore	BBA KSK	BBIT Lahore	BBIT KSK	BS Islamic Studies	BS English	Business Analytics	Total
Open Merit (Punjab) - Subsidized	A1	21	28	42	50	28	23	25	24	25	95	50	23	150	100	150	50	50	50		984
Open Merit (Punjab) – Subsidized	A1-M						22	25	24	24			22								117
Open Merit (Punjab) Partially subsidized	A2	14		8		5								100		150				50	327
Open Merit (Punjab) Partially subsidized **(Afternoon)**	A2													50		100					150
Open Merit (Punjab) Partially subsidized	A2-M																				
DAE - Subsidized	I	As per decision of Pakistan Supreme Court																			
Children of Engrs, Architects, Planners	N	1				1															2
Non-Muslims (Punjab)	NM	1	1	1	1	1	1	1	1	1	2	1	1	3	2	3	1	1	1	1	25
Backward Areas of Punjab	L																				
Children of Univ. Employees	M	Upper Limit of 10 seats in any major discipline- A total of 41 seats in all.																			
Children of University Alumni	O																				
B.Tech(P)	P																				
Bhakkar and Layyah Districts	R																				
Children of Overseas Pakistanis	S	5	2	2			5		2	1	5	1	5								28
Children of Overseas Pakistanis (DAE)	SI																				
Disabled (Punjab Domiciled)	T	1				1															2
Sub-total (i)		43	31	53	51	36	51	51	51	51	102	52	51	303	102	403	51	51	51	51	1635

May Change in line with university policy.

RESERVED SEAT ALLOCATION CHART-2025-FALL FOR FACULTY OF FACULTY OF ARCHITECTURE AND PLANNING & FACULTY OF NATURAL SCIENCES, HUMANITIES AND ISLAMIC STUDIES

Category Description	Category	Architecture Lahore	Architecture Narowal	Product & Industrial Design Lahore	Interior Design Lahore	City and Regional Planning Lahore	Chemistry Lahore	Industrial Chemistry Lahore	Chemistry KSK	Chemistry FSD	Mathematics Lahore	Mathematics FSD	Physics Lahore	BBA Lahore	BBA KSK	BBIT Lahore	BBIT KSK	BS Islamic Studies	BS English	Business Analytics	Total
Sindh	B					1															1
Baluchistan	C	1				1															2
KPK	D					5															5
Azad Kashmir	E					2															2
Azad Kashmir (Lepa Valley)	E	Open - Choice open to the candidate – A total of one seat in all.																			
Gilgit Baltistan	E					1															1
Foreign (under Economics Affairs Division)	H1	2				3															5
Afghan Nationals	H2	Open – Upper limit of 05 seats in major disciplines in Lahore Campus – A total of 44 seats in all.																			
OIC Nominees	H2																				
Indian Occupied Kashmir	H3	Open – Upper limit of 03 seats in major disciplines – A total of 15 seats in all.																			
Cultural Exchange (Yemen)	H4																				
Army	J																				
Air Force	J																				
Navy	J																				
FATA	K																				
DG Khan (Tribal Area)	Q																				
Rajanpur (Tribal Area)	Q																				
Baluchistan/ FATA (HEC Scholars)	U																				
HEC Self Finance	SF	Open - Upper Limit of 05 seats in each discipline – A total of 50 seats in all.																			
Sub-total (ii)		3	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
Sub-total (i)		43	31	53	51	36	51	51	51	51	102	52	51	303	102	403	51	51	51	51	1635
Grand Total		46	31	53	51	49	51	51	51	51	102	52	51	303	102	403	51	51	51	51	1651

May Change in line with university policy.

UET ALUMNI OFFICE

Objective
The University of Engineering and Technology, Lahore aims to maintain associations with former students who want to stay involved with, or support, their Institution. The Alumni office will help the graduates to keep in touch with their fellow alumni and keep them informed about what's happening here at the University. The Alumni Office provides a variety of services and opportunities that improve the relationship between UET and Alumni.

Mission
UET Lahore Alumni builds collaborative relationships between alumni and current students while contributing to scientific development and education. UET alumni will have a network to pursue their social and professional goals, mentor students, and provide assistance to the UET and its students to bring UET to the international standard.

UET Alumni Activities
To effectively engage UET Alumni resources in the betterment of the institution, the UET Alumni office plans the following.
- The Fundraising for student Scholarship/Endorsement fund.
- The Fundraising for UET Departmental projects and renovations.
- Engaging Alumni in Seminars for students/faculty career counselling.
- Alumni Recognition Ceremony
- Annual Alumni Reunion
- Arrange Internships and Jobs from Alumni

UET Alumni Benefits
UET Alumni Office plans to offer the following benefits to its registered Alumni to connect the UET past graduates with their alma mater in an effective resource.
- Library Membership for Alumni.
- Sport and Gym Membership.
- Reserved seats for Admission.
- Availability of guest house for Alumni
- Availability of Alumni Lounge
- Alumni card and Alumni registration (https://lms.uet.edu.pk/alumni-registration)

The UET Alumni office has been established to maintain an association among the graduates of UET. The main objective of the Alumni office is to establish a forum where all our scientists & engineers can contact and reminisce with other UET graduates. The alumni office is in keen interest to build a strong relationship between UET and their alumni who want to stay involved with or support their institution.

UET wants to maintain an association with pass-out students who want to stay involved with or support their institution. Our mission is to establish a forum where all our scientists & engineers could share valuable experiences & ideas. We are keenly interested in building a strong relationship with our alumni & every day we are moving to take radical steps towards scientific development.
Alumni Office provides the opportunities to share valuable experiences & ideas of the UET graduates. Furthermore, the Alumni Office arranges the alumni reunions and many activities.

The Alumni Office arrange funds from alumni for UET Needy Students. the fundraising for student's scholarship and endowment fund. We help our alumni to keep in touch and update them periodically about current happenings at university, moreover our aim is to provide them excellent benefits in terms of library membership, faculty career counseling, alumni recognition ceremony, sports& gym membership, reserved seats for admissions, availability of guest house and effective web portal membership. We understand our alumni are the pillars of our institution; UET is highly interested to stay them connected with their parent organization. We are constructing a strong relationship between alumni & this prestigious institution providing world class solutions to bring UET to international standards.

Email: alumni.office@uet.edu.pk
Web: alumni.uet.edu.pk / lms.uet.edu.pk/alumni-registration

IMPORTANT CONTACT INFORMATION

DESIGNATION	OFFICE	E-MAIL	DESIGNATION	OFFICE	E-MAIL
VICE CHANCELLOR	042-99250201	vc@uet.edu.pk	Metallurgical Engg & Material Science	042-99029207	chairmanmet@uet.edu.pk
	042-99029205		Mining Engineering	042-99029212	chairmanmining@uet.edu.pk
	042-99250202 Fax		Petroleum Engineering	042-99029471	chairmanpetroleum@uet.edu.pk
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Faculty of Civil Engineering	042-99029222	deancivil@uet.edu.pk	Product & Industrial Design	042-99029203	chairmanpid@uet.edu.pk
Faculty of Chemical, Mineral and Metallurgical Engineering	042-99029230	deancmme@uet.edu.pk	**HEADS OF NON TEACHING DEPARTMENTS**		
Faculty of Architecture & Planning	042-99029250	deanarch@uet.edu.pk	Chairman Health Committee	042-99029240	chairmanee@uet.edu.pk
Faculty of NaturalSciences, Humanities and Islamic Studies	042-99029215	deannshis@uet.edu.pk	Dirctor Finanacial Aid & Career Services	042-99029218	facs@uet.edu.pk
CHAIRPERSONS OF TEACHING DEPARTMENTS			ChairmanTransport Committee	042-99029266	ctc@uet.edu.pk
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Architecture Engineering & Design	042-99029419	chairmanaed@uet.edu.pk	Controller of Examinations	042-99029235	examination@uet.edu.pk
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DISCLAIMER

The contents of this prospectus are for information and shall not be TAKEN AS BINDING on the University. Each aspect of the education set up, like the admission procedure or criteria, the academic rules and regulations, discipline regulations, admissible fees, etc. requires continuous review by the competent authorities. The University, therefore, reserves the right to change rules, regulations, fees applicable to students whenever it is deemed appropriate or necessary. Inquiries concerning admission should be addressed to:

Convener Admission Committee
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UNIVERSITY OF ENGINEERING & TECHNOLOGY, LAHORE

To generate knowledge for global competitive advantage and become a leading world class university

UNDERGRADUATE PROSPECTUS