UNIVERSITY OF ENGINEERING & TECHNOLOGY, LAHORE

UNDERGRADUATE PROSPECTUS

Fall 2026

CONTENTS

Vision and Mission
Chancellor's Message
Vice Chancellor's Message
Officers of the University
Deans of Faculties
Chairpersons / Directors of Teaching Departments / Institutes
Head of Non-Teaching Departments
Academic Calendar
The University
Degree Programs Offered at UET
Affiliated Institutions & Programs Offered
UG Admission Process Schedule
Admission Eligibility and Procedure
Determination of Merit
Application Categories and Symbols
Application filling and Submission
Procedure for the selected candidates

FACULTIES & DEPARTMENT

Lahore Campus

Department of Electrical Engineering
Department of Computer Science
Department of Computer Engineering
Institute of Data Science
Department of Mechanical Engineering
Department of Automotive Engineering
Department of Industrial & Manufacturing Engineering
Department of Mechatronics & Control Engineering
Department of Civil Engineering
Department of Architectural Engineering & Design
Department of Transportation Engineering & Management
Institute of Environmental Engineering & Research
Department of Chemical Engineering
Department of Polymer & Process Engineering
Department of Metallurgical & Materials Engineering
Department of Mining Engineering
Department of Geological Engineering
Department of Petroleum & Gas Engineering
Department of Architecture
Department of City & Regional Planning
Department of Product & Industrial Design
Department of Chemistry
Department of Mathematics
Department of Physics
Laser and Optronics Centre
Centre For Nanotechnology and Advanced Materials Research (CNAMR)
Department of Humanities, Management & Social Sciences
Department of Islamic Studies
Institute of Business and Management

KSK Campus

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

Faisalabad Campus

Department of Electrical, Electronics & Communication Engineering
Department of Mechatronics and Control Engineering
Department of Chemical and Polymer Engineering
Department of Textile Engineering and Technology
Department of Computer Science
Department of Humanities, Basic Sciences and Islamic Studies

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

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

RULES & REGULATIONS

Important Information
Undergraduate Semester Regulations
Examination Regulations
Visiting Students Policy
Migration Regulations
Code of Ethics
Code of Honour
Authorities to check indiscipline
Penalties for Acts of Indiscipline
General Discipline Rules Relating to Students
UG Fee Regulations
Financial Assistance and Scholarship Policy
Fee Structure
UG Fee Schedule for Session 2024
Seat Allocation Chart
UET Alumni Office
Important Contact Information
Acknowledgment
Disclaimer

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

It is my privilege to welcome you to the University of Engineering and Technology (UET), Lahore—an institution that does not merely impart education, but shapes the future.

UET stands as a symbol of excellence, not only within Pakistan but across the globe. With its distinguished global ranking, state-of-the-art laboratories, and a learning environment aligned with international standards, we provide our students with opportunities that prepare them to succeed on the world stage. Our graduates are making remarkable contributions worldwide, and they remain our greatest pride. At UET, every student gains more than a degree—they build an identity that stays with them for life. We do not just educate our students; we embrace them, guide them, and empower them to achieve their highest potential. We strongly believe in international collaboration, offering pathways for students to study with leading global institutions. With thousands of scholarships, globally recognized degrees, and a strong alumni network, we open doors to limitless opportunities for our students. Campus life at UET is a complete experience. With over 40 active student societies, hundreds of co-curricular and extracurricular activities, a world-class library, a landmark auditorium, sports facilities, and excellent hostel and transport systems, we ensure the holistic development of our students—academically, professionally, and personally.

In addition to engineering, technology and sciences, UET offers cutting-edge programs in Artificial Intelligence, Cyber Security, Data Science, Robotics, and emerging technologies—equipping our graduates with skills that are in high demand both in Pakistan and internationally. UET Lahore is not just an institution—it is a vision, a legacy, and a transformative journey that leads you towards excellence, leadership, and global impact.

Join UET—and give your future a powerful identity.

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
SHEIKH ABID SHAHZAD ASLAM

DEANS OF FACULTIES

Faculty of Electrical Engineering
PROF. DR. KHALID FAROOQ

Faculty of Computing
PROF. DR. KHALID FAROOQ

Faculty of Mechanical Engineering
PROF. DR. KHALID FAROOQ

Faculty of Civil Engineering
PROF. DR. KHALID FAROOQ

Faculty of Chemical, Metallurgical & Polymer Engineering
PROF. DR. KHALID FAROOQ

Faculty of Earth Sciences & Engineering
PROF. DR. KHALID FAROOQ

Faculty of Architecture & Planning
PROF. DR. MUHAMMAD SHAHID RAFIQUE

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

CHAIRPERSONS / DIRECTORS OF TEACHING DEPARTMENTS / INSTITUTES

MAIN CAMPUS

Electrical Engineering
PROF. DR. SYED ABDUL REHMAN KASHIF

Computer Science
PROF. DR. MUHAMMAD SHOAIB

Institute of Data Science
PROF. DR. SHAZIA ARSHAD

Computer Engineering
PROF. DR. KASHIF JAVED

Mechanical Engineering
PROF. DR. ASAD NAEEM SHAH

Industrial & Manufacturing Engineering
PROF. DR. QAISER SALEEM

Mechatronics & Control Engineering
PROF. DR. MOHSIN RIZWAN

Civil Engineering
PROF. DR. NOOR MUHAMMAD KHAN

Institute of Environmental Engineering & Research
DR. MEHWISH ANIS

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
PROF. DR. ZULFIQAR ALI

Automotive Engineering
PROF. DR. ZIA UR REHMAN TAHIR

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
PROF. DR. RIZWAN HAMEED

City & Regional Planning
PROF. DR. OBAIDULLAH NADEEM

Physics
PROF. DR. REHANA SHARIF

Chemistry
PROF. DR. FARHAT YASMEEN

Mathematics
PROF. DR. ASMA RASHID BUTT

Humanities & Social Sciences
DR. MEHVISH RAIZ

Islamic Studies
DR. ZAHID LATIF

Institute of Business and Management
PROF. DR. NASIR MALIK

NEW CAMPUS (KSK)

Campus Coordinator
PROF. DR. AMJAD HUSSAIN

Chemical, Polymer & Process Engineering
PROF. DR. HAMAYOUN MEHMOOD

Mechanical, Mechatronics and Manufacturing Engineering
PROF. DR. MUHAMMAD FARHAN

Basic Sciences & Humanities
PROF. DR. MUHAMMAD MUSHTAQ

Computer Sciences
DR. MUHAMMAD JUNAID ARSHAD

Bio-Medical Engineering
DR. NIDA IQBAL

Electrical, Electronics and Telecommunication Engineering
PROF. DR. FAHEEM GOHAR AWAN

Food Engineering and Bio Technology
PROF. DR. SIKANDAR RAFIQUE

Energy Engineering
DR. HASAN ERTEZA GELANI

Management Sciences
DR. ABDUL AZIZ KHAN NIAZI

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

FAISALABAD CAMPUS

Campus Coordinator
PROF. DR. MUHAMMAD MOHSIN

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

Computer Science
DR. MUHAMMAD YASIR

Mechanical, Mechatronics & Control Engineering.
DR. HAFIZ 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

NAROWAL CAMPUS

Campus Coordinator
PROF. DR. MUHAMMAD SHAHBAZ

Electrical Engineering
DR. WAQAS TARIQ TOOR

Mechanical Engineering (HOD)
DR. ZAHID HUSSAIN

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. MOHSIN KAZMI

Director Studies
PROF. DR. –ING. NAVEED RAMZAN

Senior Warden (Boys)
PROF. DR. MUHAMMAD IJAZ AHMAD

Senior Warden (Girls)
PROF DR. SHAHIZA ARSHAD

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. MOHSIN KAZMI

Chairperson Transport Committee
DR. MUHAMMAD ASIM

Chairperson Library Committee
PROF. DR. ASADULLAH QAZI

Chairperson Proctorial Board
PROF. DR. MUHAMMAD SHOAIB

Chairperson Sports Committee
PROF. DR. MUHAMMAD ASIF RAFIQ

Director Repair and Maintenance Center
PROF. DR. MUHAMMAD USMAN GHANI KHAN

DISABILITY COORDINATORS
Chairperson Architecture Department
Chairperson City & Regional Planning Department

Director Students Affairs
DR. AMNA NIAZI

Director International Students Office
DR. EZZA ANWAR

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

Director, Al-Khwarizmi Institute of Computer Sciences
Prof. Dr. Hafiz Shahzad Asif

Director External Linkage
DR. MUHAMMAD WAQAS

Director Planning and Development
PROF. DR. RASHID HAMEED

Project Director Lahore Campus
ENGR. ASAD MASOOD

Resident Officer
MUHAMMAD ASIF

Resident Auditor
SHAHZAD AKHTAR

Director Quality Enhancement Cell
PROF. DR. AMER AZIZ

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 21,000 students. The number of female students enrolling for different disciplines is ever on the increase and is about 7,647 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 Computing
- 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.

ALL UNDERGRADUATE DEGREE PROGRAMS OFFERED AT UET FAII 2026

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) Cyber Security
      j) Data Science
      k) Electrical Engineering
      l) Environmental Engineering
      m) Geological Engineering
      n) Industrial and Manufacturing Engineering
      o) Interior Design
      p) Mechanical Engineering
      q) Mechatronics and Control Engineering
      r) Metallurgical and Materials Engineering
      s) Mining Engineering
      t) Petroleum and Gas Engineering
      u) Polymer Engineering
      v) Robotics and Intelligent Systems
      w) Transportation Engineering
      x) 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) Materials Science
      i) Product and Industrial Design
      j) Remote Sensing and GIS

   iii. Bachelor of Science (B.S.) degree is offered in the following disciplines:
      a) Chemistry
      b) Industrial Chemistry
      c) Mathematics
      d) Physics
      e) Islamic Studies (Specialization in computer technology)
      f) 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) Artificial Intelligence
      c) Computer Engineering (NCEAC)
      d) Computer Science
      e) Chemical Engineering
      f) Electrical Engineering
      g) Energy Systems Management
      h) Food Science and Bio-Technology
      i) Mechanical Engineering
      j) Software Engineering
      k) Data Science
      l) Cyber Security

   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) Mathematics

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
      g) Data Science
      h) Cyber Security

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

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) Mechanical Engineering

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

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

AFFILIATED INSTITUTIONS AND PROGRAMS OFFERED

1. NFC Institute of Engineering and Fertilizer Research Faisalabad
    a) B.Sc. Chemical Engineering
    b) B.Sc. Civil Engineering
    c) B.Sc. Electrical Engineering
    d) B.Sc. Mechanical Engineering
    e) B.Sc. Computer Engineering
    f) B.Sc. Computer Science
    g) B.Sc. Cyber Security
    h) B.Sc. Artificial Intelligence
    i) B.Sc. Data Science
    j) Bachelor of Business Administration
    k) Bachelor of Business Administration Information Technology

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. Electrical Engineering
    b) B.Sc. Computer Science
    c) B.Sc. Robotics & Intelligence
    d) B.Sc. Data Science
    e) B.Sc. Artificial Intelligence

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

6. Swedish College of Engineering & Technology Rahim Yar Khan
    a) B.Sc. Civil Engineering
    b) B.Sc. Mechanical Engineering
    c) B.Sc. Computer Science
    d) B.Sc. Software Engineering
    e) B.Sc. Cyber Security
    f) B.Sc. Artificial Intelligence

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

UNIVERSITY OF ENGINEERING AND TECHNOLOGY, LAHORE

UNDERGRADUATE ADMISSION PROCESS SCHEDULE - 2026 (FALL)

EVENT	DATE	DAY / TIME
On-line Filling and Submission of Admission Forms Starts	08-06-2026	Monday
Candidate may request permission to edit already submitted application by paying Rs.1500/-	12-07-2026 to 14-07-2026	Sunday to Tuesday
Last date of On-Line Submission of Admission Forms	15-07-2026	Wednesday
Hafiz-e-Quran Test	17-07-2026	Friday (10:00AM)
Sports Test	20-07-2026	Monday (10:00AM)
Announcement of 1st Merit List	24-07-2026	Friday (Evening)
Last Date of Depositing Dues and Documents for 1st Merit List	As per mentioned on Offer Letter	
Announcement of 2nd Merit List	07-08-2026	Friday (Evening)
Last Date of Depositing Dues and Documents for 2nd Merit List	As per mentioned on Offer Letter	
Announcement of 3rd Merit List	14-08-2026	Friday (Evening)
Last Date of Depositing Dues and Documents for 3rd Merit List	As per mentioned on Offer Letter	
Announcement of 4th Merit List	21-08-2026	Friday (Evening)
Last Date of Depositing Dues and Documents for 4th Merit List	As per mentioned on Offer Letter	
Single Program Change of Preference application for admitted/ joined candidates on fee of Rs. 1,500/- per candidate	28-08-2026 to 30-08-2026	Friday to Sunday
Announcement of change of preference Merit List of admitted candidates	01-09-2026	Tueday (Evening)

NOTE: After the announcement of the 4th Merit List, all program preferences of leftover / non-selected candidates, add-preference cases, and non-reported candidates shall be removed. Such candidates will be required to submit their program preferences again in accordance with the procedure available at admission.uet.edu.pk.

UNDERGRADUATE ADMISSION PROCESS SCHEDULE - 2026 (FALL)

EVENT	DATE	DAY / TIME
Commencement of Online Filling and Submission of Admission Forms for Leftover / Non-Selected Candidates and Non-Reported Candidates. Fee of Rs.3,000/- per candidate shall be charged	02-09-2026 to 07-09-2026	Wednesday to Monday
Announcement of Merit List of such cases	08-09-2026	Tuesday (Evening)
Last Date of Depositing Dues and Documents for such cases	10-09-2026	Thursday
Walk in Admissions Start (within the minimum merit on first cum first basis) Fee of Rs.3,000/- per candidate shall be charged	11-09-2026 to 15-09-2026	Friday to Tuesday
Announcement of Subsequent Merit Lists (subject to availability of vacant seats)	Every Friday	(Evening)
Last Date of Depositing Dues and Documents for Corresponding Merit List	Following Thursday	(Afternoon)
Allocation of Registration Numbers and Orientation in Respective Departments Starts	From 22-09-2026	Tuesday
Hostel Allotment (Subject to availability)	05-10-2026	Monday
Regular Classes Commencement	12-10-2026	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:

UET Lahore offering: Engineering and Faculty of Architecture and Planning Disciplines Appearance in ECAT 2026 First or ECAT 2026 Second is Required.

Engineering & Related Programs (60% in Intermediate / Equivalent)-ECAT 2026 Required)

F.Sc Pre-Engineering / ICS (Math, Physics, & Computer) or equivalent

- Architectural Engineering (LHR)
- Automotive Engineering (LHR)
- Biomedical Engineering (KSK, NWL) (F.Sc Pre-Medical accepted in addition to the above)
- Chemical Engineering (LHR, KSK, FSD)
- Civil Engineering (LHR, NWL)
- Computer Engineering (LHR)
- Electrical Engineering (All Campuses)
- Environmental Engineering (LHR)
- Geological Engineering (LHR)
- Industrial & Manufacturing Engineering (LHR)
- Mechanical Engineering (LHR, KSK, NWL, RCET)
- Mechatronics & Control Engineering (LHR, FSD)
- Metallurgical & Materials Engineering (LHR)
- Mining Engineering (LHR)
- Petroleum & Gas Engineering (LHR)
- Polymer Engineering (LHR)
- Textile Engineering (FSD)
- Transportation Engineering (LHR)

PCATP and Industrial Design Program (Math, Physics, and Statistics are also accepted in addition to the above.)

- Architecture (LHR, NWL) (Minimum 60% Marks)
- City & Regional Planning (LHR) [Minimum 50% Marks]
- Product & Industrial Design (LHR)

Computing & Related Programs (50% in Intermediate / Equivalent)-ECAT 2026 Required)

F.Sc Pre-Engineering/Pre-Medical/ICS (Math, Physics, Statistics & Computer) or equivalent

- Artificial Intelligence (LHR, KSK)
- Business Data Analytics (LHR)
- Computer Science (All Campuses)
- Computer Science – NWL (Specialization in Quantum Computing)
- Computer Engineering (NCEAC) – All Campuses Except Lahore (60% in Intermediate / Equivalent)
- Cyber Security (LHR, KSK, FSD)
- Data Science (LHR, KSK, FSD)
- Robotics & Intelligent Systems (LHR)
- Software Engineering (LHR, KSK)

Business & Science Programs (50% in Intermediate / Equivalent)-No ECAT Required)

Intermediate with any Combination

- Business Administration (LHR, KSK)
- Business Analytics (LHR)
- Business Information Technology (LHR, KSK, NWL)
- English Language and Literature (LHR)
- Interior Design – LHR (at least one Science subject)
- Islamic Studies – LHR (Specialization in Computer Technology)
- Logistics and Supply Chain Management (LHR)

F.Sc. (Pre-Engg, Pre-Medical) or equivalent with mandatory Chemistry

- Chemistry (LHR)
- Environmental Science (LHR)
- Food Science & Technology (KSK)
- Industrial Chemistry (LHR, FSD)

F.Sc. (Pre-Engg, Pre-Medical), ICS, or Intermediate with Mathematics, Statistics & Physics / Computer Science (or equivalent qualification)

- Energy Systems Management (KSK)
- Materials Science (LHR)
- Mathematics – LHR (with mandatory Mathematics) (with specialization in AI, Data Science, and IT)
- Physics – LHR (with mandatory Physics)
- Remote Sensing and GIS (LHR)

Scan these QR codes to access the ADMISSION GUIDE:

URDU GUIDE ENGLISH GUIDE

In all the cases, the merit score calculation formula is also available on admission portal. Applicant must have a minimum aggregate score 50%, along with atleast 60% marks in Engineering, Bachelor's in Architecture, Computer Engineering (under NCEAC) programs and 50% marks for Science, Technology and Business Programs. Formula for calculation of your aggregate is available in determination of merit (Page # 20)

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

Interpretation of A-Level candidates' relevancy for ECAT/ Undergraduate Admission Policy

The candidates who have studied at least two courses in their A-levels which are equivalent to the courses present in the University's approved eligible combinations for computing disciplines may be awarded admission in the computing disciplines; after confirming the course relevance from the concerned departments. However, the candidate has to choose most suitable ECAT combination from the eligible combinations as stated above failing to which shall lead to loss of admission at later stage.

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 2.1), 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. The candidates who have studied at least two courses in their A-levels which are equivalent to the courses present in the University's approved eligible combinations for computing disciplines may be awarded admission in the computing disciplines; after confirming the course relevance from the concerned departments. However, the candidate has to choose most suitable ECAT combination from the eligible combinations as stated above failing to which shall lead to loss of admission at later stage.
iv. 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.
v. He should be a bonafide resident of the area from where he seeks admission.
vi. 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

xxiii. Remote Sensing and GIS

Diploma in Land and mine surveying technology
Diploma in Remote Sensing and GIS

3.3 Seats for B.Sc. Engineering Technology or Equivalent Degree Holders Under Admission Category "P"

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 / merit score.
  - b) First Year Percentage Marks: 50% weight in merit aggregate / merit score.
  - c) Matric Percentage Marks: 17% weight in merit aggregate / merit score.
- In case of "O" and "A" Level qualification or equivalent:
  - a) ET Percentage Marks: 33% weight in merit aggregate / merit score.
  - b) Marks earned in 11th Class ("O" level or equivalent): 67% weight in merit aggregate / merit score.
- In case of diploma holders:
  - a) ET Percentage Marks: 33% weight in merit aggregate / merit score.
  - b) Sum of First- and Second-Years Percentage Marks: 67% weight in merit aggregate / merit score.
- In case of B.Sc. Engineering Technology or equivalent degree holders:
  - a) ET Percentage Marks: 33% weight in merit aggregate / merit score.
  - b) 7 semesters CGPA if degree is not yet complete: 67% weight in merit aggregate / merit score.
- 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 / merit score.
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.
e) In all the cases minimum aggregate / merit score must be 50% for eligibility to admission in Undergraduate Programs

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 **Friday, July 17, 2026**. 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 select single sports category in which you will be participated in sports test.

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 **Monday, July 20, 2026**. 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 upto 4th merit list.

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 (AP1, AP2, AP1M and AP2M)	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 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 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 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.
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 CHALLAN ONLINE**

You may get the Admission Challan 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, Cell 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 candidate can check his / her admission status 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.**

c) Admission will be cancelled at any stage due to ineligibility therefore student should check their eligibility in admitted category.

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 designated centers at UET, Lahore.

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) Two 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) Four copies of the most recent passport size photograph
e) Two 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 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 photocopy of the relevant page of the electoral rolls on which the name of the father/mother of the applicant appears
iv. An 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.

The merit score calculation formula is also available on admission portal. Applicant must have a minimum aggregate score 50%, along with atleast 60% marks in Engineering, Bachelor's in Architecture, Computer Engineering (under NCEAC) programs and 50% marks for Science, Technology and Business Programs.

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 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 as per university rules.

Departments

DEPARTMENT OF ELECTRICAL ENGINEERING

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Syed Abdul Rahman Kashif

Professor Emeritus
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. Mustafeez ul Hasan
Dr. Muhammad Anique Aslam
Dr. Habib Wajid
Dr. Noor ul Ain
Dr. Anam Mughees
Dr. Sajjad Ahmad

Lecturers
Mr. Umar Shahid
Mr. Rehan Naeem
Mr. Khalid Butt
Mr. Usman Yousaf
Ms. Khusbakt
Ms. Maheen Zulfiqar
Ms. Sheezen Malik
Ms. Bareera Sadia
Mr. Shaban Ghias Satti

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 section. 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-104	Islamic Studies//Ethics – I	2	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	3	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
IS-109	Fehm-e-Quran - I	1	0
EE-202	Occupational Health and Safety	1	0

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-373	Microprocessor Systems	3	1
EE-313/314	Integrated Electronics/Analogue and Digital Electronics	3	1
EE-200	Community Service	0	0

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

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	0
EE-499a	Project (Phase-I)	0	3
EE-399	Internship	0	0
IS-203	Ideology and Constitution of Pakistan/ Ethics-II	2	0
CMPE-341/MCT-351	Artificial Intelligence/Robotics	3	1

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	1
499-b	Project (Phase – II)	0	3
IS-209	Fehm-e-Quran II	0	1
MGT-349	Entrepreneurship	2	0
IS-111	Pakistan Studies	2	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)	EE-435: Generative AI
	EE-488: Digital System Verification (L)	

B.Sc. Artificial Intelligence

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
HU-103	Functional English	3	0
AI-121	Discrete Mathematics	3	0
MA-123/101	Calculus and Analytic Geometry/Calculus-I	3	0
AI-101	Applications of ICT	2	1
AI-133	Programming Fundamentals	3	1
IS-104	Islamic Studies / Ethics-I	2	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-118	Applied Physics	2	1
HU-221	Technical Writing & Presentation Skills	3	0
AI-131	Software Engineering	3	0
MA-234	Linear Algebra	3	0
AI-134	Object Oriented Programming	3	1
MA-224/104	Multivariate Calculus/Calculus - II	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
AI-272/CMPE-223	Digital Systems/Digital Logic Design	3	1
AI-234	Data Structures and Algorithms	3	1
AI-XYZ	Domain Core - I	2	1
AI-202/MA-205	Probability and Statistics/Applied Statistics and Probability	3	0
AI-232	Computer Networks	2	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		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
IS-109	Fehm-e-Quran - I	0	1
AI-XYZ	Domain Core - II	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
AI-336	Database System	3	1
AI-339	Analysis and Design of Algorithms	3	0
AI-XYZ	Domain Core - III	3	0
AI-XYZ	Domain Core - IV	2	1
AI-431	Operating Systems	3	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
AI-XYZ	Domain Core - V	3	0
AI-XYZ	Domain Elective - I	3	0
AI-XYZ	Domain Elective - II	3	0
AI-XYZ	Domain Elective - III	2	1
MGT-349	Entrepreneurship	2	0
HU-222	Expository Writing	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MGT-xyz	Introduction to Marketing/Financial Accounting	2	0
AI-XYZ	Domain Core - VI	3	0
AI-xyz	Domain Elective – IV	3	0
HU-xyz	Social Science	2	0
AI-499a	Project (Phase-I)	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-203	Ideology and Constitution of Pakistan	2	0
AI-XYZ	Domain Elective - V	3	0
HU-212	Civics and Community Engagement	2	0
IS-209	Fehm-e-Quran-II	0	1
IS-111	Pakistan Studies	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. Khalid Farooq

Chairman
Prof. Dr. Muhammad Shoaib

Professors
Dr. Shazia Arshad
Dr. Muhammad Aslam
Dr. Muhammad Awais Hassan

Associate Professors
Dr. Muhammad Junaid Arshad
Dr. Tauqir Ahmad
Dr. Amjad Farooq
Dr. Syed Khaldoon Khurshid
Dr. Amna Zafar

Assistant Professors
Dr. Talha Waheed
Dr. Ayesha Altaf
Dr. Maimoona Salam
Dr. Hamra Afzaal
Dr. Aatif Hussain
Dr. Samyan Qayyum Wahla
Dr. Maida Shahid
Dr. Abqa Javed

Lecturers
Mr. Nazeef Ul Haq
Mr. Muhammad Laeeq uz Zaman Khan Niazi
Mr. Syed Tehseen ul Hasan Shah
Mr. Waqas Ali
Ms. Tazeem Haider
Ms. Aaliya Farooq
Ms. Rabeeya Saleem
Ms. Rimsha Afzal

Introduction

The Department of Computer Science is one of the oldest and most distinguished centers of computer education in Pakistan. Its roots date back to 1968, when the University of Engineering and Technology Lahore established a Computer Center under the Department of Mathematics laying the foundation for formal computing education in the country. The Center was equipped with an IBM-1130 third-generation batch processing system, one of the most contemporary computing systems of its era complete with a disk drive, monitor, and printer. From its earliest days, the Center played a central academic role, delivering courses in Computer Science and Numerical Analysis that formed an integral part of the curriculum across all disciplines of the B.Sc. Engineering degree at UET. Beyond its academic mandate, the Center also offered short-term computing courses to private and public sector organizations, establishing an early tradition of industry engagement that continues to define the Department today.

The Department's academic programs have grown steadily in both scope and prestige. A Bachelor's degree program in Computer Science was introduced in 1976, followed by an M.Sc. in Computer Science in 1978 the first graduate program of its kind in the country. This milestone positioned UET Lahore as the national leader in postgraduate computing education. In 1991, the Computer Center was elevated to an independent Department of Computer Science, reflecting its growing academic stature and expanding research contributions.

The Department continued to evolve with the needs of discipline. A four-year B.Sc. (Hons.) Computer Science program was launched in 1999, later renamed B.Sc. Computer Science in September 2003. At graduate level, the M.S. Computer Science program was introduced in 2003, while the Ph.D. Computer Science program, the Department's most advanced academic offering, was established in 2002. Further details regarding graduate programs are available in the UET Graduate Prospectus.
The Department also 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, to develop critical thinking, analytical skills and abilities to solve real-world problems; for technological and socio-economic development.

Degree Program
The Department of Computer Science offers four-year undergraduate degree program: **B.Sc. Computer Science**. The B.Sc. Computer Science program provides students with the flexibility to either pursue general Computer Science electives or specialize in the following focused track:

- **Computer Games Development**

The program is accredited by the National Computing Education Accreditation Council (NCEAC), affirming their academic rigor and alignment with national quality standards in computing education. A minimum of 130 credit hours are required for the successful completion of either 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 professional and social responsibility, by making an impact on society in an ethical manner.

Facilities
The Department of Computer Science offers a modern and well-resourced computing environment to support its academic programs. Five fully equipped computer laboratories and a dedicated Final Year Project Lab provide students with access to over 250 state-of-the-art networked computers with high-performance servers, maintaining a computer-to-student ratio of 1:3. All software and operating systems are either fully licensed or open-source, in keeping with the Department's firm no-piracy policy.

The Department's facilities are connected to the UET Research Center, Main Library, and other academic departments via a fiber optic backbone. High-speed internet is available across all laboratories, multimedia projectors are installed in every classroom, and dedicated teaching spaces are provided in the adjacent purpose-built New Lecture Theaters.

B.Sc. Computer Science

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC102	Programming Fundamentals	3	1
CSC100	Application of Information and Communication Technologies	2	1
CSC101	Quantitative Reasoning – I (Discrete Mathematics)	3	0
MATH-101	Quantitative Reasoning – II (Calculus - I)	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/ Introduction to Marketing / Financial Accounting)	2	0
HU-102	Functional English	3	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC103	Object Oriented Programming	3	1
CSC105	Digital Logic Design	3	1
MATH-104	Calculus and Analytical Geometry – IDS – I (Calculus - II)	3	0
IS-109L	Fehm - e - Quran - I (for Muslim Students)	0	1
CSC403	Arts & Humanities (Professional Practices in Software Development)	2	0
IS-111	Pakistan Studies	2	0
MA-234	Linear Algebra – IDS-II	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC200	Data Structures and Algorithms	3	1
CSC104	Database Systems	3	1
CSC300	Operating Systems	3	1
HU222	Expository Writing	3	0
PHY-111	Natural Sciences (Applied Physics)	2	1
IS-209L	Fehm - e - Quran – II (for Muslim Students)	0	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC204	Software Engineering	3	0
CSC205	Computer Organization & Assembly Language	2	1
CSC208	Design and Analysis of Algorithms	3	0
IS-104	Islamic Studies (Religious Education / Ethics for non-Muslim students)	2	0
HU212	Civics and Community Engagement	2	0
IS-203	Ideology and Constitution of Pakistan	2	0
MGT349	Entrepreneurship	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC203	Computer Networks	2	1
CSC201	Information Security	2	1
CSC202	Artificial Intelligence	2	1
CSC206	Theory of Automata	3	0
	IDS – III	3	0
	IDS – IV	3	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC481	Cloud Computing	3	0
CSC-XXX	Elective-I	3	0
CSC-XXX	Elective-II	3	0
CSC-XXX	Elective-III	3	0
CSC-XXX	Elective-IV	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC401	Final Year Project – I	0	0
CSC404	Professional Certification	3	0
CSC-XXX	Elective-V	3	0
CSC-XXX	Elective-VI	3	0
CSC-XXX	Elective-VII	3	0
CSC-XXX	Elective-VIII	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC402	Final Year Project – II	0	6
CSC405	Field Experience	3	0

A student must choose at least eight courses from a specialization (Computer Games Development) to mention that specialization on the BSCS degree e.g., BSCS (Computer Games Development). However, for BSCS without any specialization, any eight courses from the following list of electives can be taken. The BSCS degree program offers the following specialization:

1) Computer Games Development (CGD)

List of All Electives Courses

New Code	Course Title	Cr Hrs
CSC310	Graph Theory	3 (3-0)
CSC311	Numerical Analysis	3 (3-0)
CSC312	Operations Research	3 (3-0)
CSC313	Programming Languages	3 (3-0)
CSC314	Real Time Systems	3 (3-0)
CSC315	Wireless Networks	3 (3-0)
CSC316	Linux Kernel Implementation	3 (3-0)
CSC317	Internetworking with Unix TCP/IP	3 (3-0)
CSC318	System Programming	3 (3-0)
CSC319	Computer Graphics	3 (3-0)
CSC410	Mobile Application Development	3 (3-0)
CSC411	Open-Source Software Development	3 (3-0)
CSC412	Advanced Programming Techniques (Pre Req: OOP)	3 (3-0)
CSC413	E-Commerce	3 (3-0)
CSC414	Enterprise Application Development	3 (3-0)
CSC415	Web Technologies	3 (3-0)
CSC420	Object Oriented Analysis and Design	3 (3-0)
CSC421	Design Patterns	3 (3-0)
CSC422	Management Information Systems	3 (3-0)
CSC423	Intro to Program Analysis	3 (3-0)
CSC424	Formal Methods	3 (3-0)
CSC425	Leading Software Teams	3 (3-0)
CSC426	Habits of Highly Effective Software Engineer	3 (3-0)
CSC427	Personal, Team and Executive Software Processes	3 (3-0)
CSC430	Database Backup & Recovery	3 (3-0)
CSC431	Distributed Databases	3 (3-0)
CSC432	Graph Databases	3 (3-0)
CSC433	Database Administration	3 (3-0)
CSC434	Database Performance & Optimization	3 (3-0)
CSC460	AI & Emerging Technologies in Environmental Studies	3 (2-1)
SE-211	Software Requirements Engineering	3 (3-0)
SE-222	Software Design & Architecture	3 (3-0)
SE-323	Software Construction and Development	3 (3-0)
SE-326	Principles of Web Engineering	3 (3-0)
SE-325	UX/UI Design	3 (3-0)
SE-331	Software Quality Engineering	3 (2-1)
SE-332	Software Measurement & Metrics	3 (3-0)
SE-341	Software Project Management	3 (3-0)
SE-442	Software Re-Engineering	3 (3-0)
SE-453	Software Engineering Economics	3 (3-0)
SE-454	Topics in Software Engineering	3 (3-0)
CSC350	Programming for AI	3 (3-0)
CSC351	Machine Learning	3 (2-1)
CSC352	Introduction to Deep Learning	3 (3-0)
CSC353	Knowledge Representation and Reasoning	3 (3-0)

CSC354	Computer Vision and Image Processing	3 (3-0)
CSC450	Philosophical Foundations of AI	3 (3-0)
CSC451	Natural Language Processing	3 (3-0)
CSC452	Speech Processing	3 (3-0)
CSC453	Soft Computing	3 (3-0)
CSC454	Agent Based Modelling	3 (3-0)
CSC455	Logical Paradigms of Computing	3 (3-0)
CSC456	Simulation and Modelling	3 (3-0)
CSC457	Web Semantics	3 (3-0)
CSC458	Information Retrieval	3 (3-0)
CSC459	Introduction to Bioinformatics	3 (3-0)
CSC370	Fundamentals of Cyber Security (Pre Req Info. Security)	3 (3-0)
CSC371	Information Assurance	3 (3-0)
CSC372	Network Security	3 (3-0)
CSC373	Secure Software Design and Development	3 (3-0)
CSC374	Digital Forensics	3 (3-0)
CSC470	Vulnerability Assessment and Reverse Engineering	3 (3-0)
CSC471	Malware Analysis and Development	3 (3-0)
CSC472	Penetration Testing	3 (3-0)
CSC473	Ethical Hacking	3 (3-0)
CSC474	Cryptography and Cryptanalysis	3 (3-0)
CSC380	Introduction to Data Science	3 (3-0)
CSC381	Statistics for Data Science	3 (3-0)
CSC382	Data Mining	3 (3-0)
CSC383	Data Visualization	3 (3-0)
CSC384	Data Warehousing and Business Intelligence	3 (3-0)
CSC480	Big Data Analytics	3 (3-0)
CSC482	Internet of Things	3 (3-0)
CSC483	Business Process Analysis	3 (3-0)
CSC484	Platforms and Architectures for Data Science	3 (3-0)
CSC485	Text Mining	3 (3-0)
CSC486	Topics in Data Science	3 (3-0)
CSC390	Mobile Multimedia	3 (3-0)
CSC391	Game Development	3 (3-0)
CSC392	Interactive Games and Audio	3 (3-0)
CSC393	Game Programming	3 (3-0)
CSC394	Video Production Techniques	3 (3-0)
CSC395	2D and 3D Animation	3(3-0)
CSC396	Game Design and Development	3 (3-0)
CSC397	Interactive Gaming and Animation	3(3-0)
CSC490	Game Play and Game Mechanics	3 (3-0)
CSC491	3D Game Development	3 (3-0)
CSC492	Programming Game AI	3 (3-0)
CSC493	Game Marketing	3 (3-0)
CSC494	Art for Games	3 (3-0)
CSC495	Programming for 3D and Web 3D Apps	3 (3-0)
CSC496	Mobile Games and Entertainment	3 (3-0)
CSC497	Applied Game Theory	3 (3-0)
CSC304	Parallel and Distributed Computing	3 (2-1) / (3-0)
CSC207	Advanced Database Management Systems	3 (2-1)
CSC303	Compiler Construction	3 (2-1)
CSC301	Human Computer Interaction	3 (3-0)

List of Elective Courses for Computer Games Development Specialization

New Code	Course Title	Specialization	Cr Hrs
CSC391	Game Development	CGD	3 (3-0)
CSC392	Interactive Games and Audio	CGD	3 (3-0)
CSC393	Game Programming	CGD	3 (3-0)
CSC394	Video Production Techniques	CGD	3 (3-0)
CSC395	2D and 3D Animation	CGD	3(3-0)
CSC396	Game Design and Development	CGD	3 (3-0)
CSC397	Interactive Gaming and Animation	CGD	3(3-0)
CSC490	Game Play and Game Mechanics	CGD	3 (3-0)
CSC491	3D Game Development	CGD	3 (3-0)
CSC492	Programming Game AI	CGD	3 (3-0)
CSC493	Game Marketing	CGD	3 (3-0)
CSC494	Art for Games	CGD	3 (3-0)
CSC495	Programming for 3D and Web 3D Apps	CGD	3 (3-0)
CSC496	Mobile Games and Entertainment	CGD	3 (3-0)
CSC497	Applied Game Theory	CGD	3 (3-0)
CSC425	Leading Software Teams	CGD	3 (3-0)
CSC426	Habits of Highly Effective Software Engineer	CGD	3 (3-0)

DEPARTMENT OF COMPUTER ENGINEERING

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Kashif Javed

Professors
Dr. Muhammad Shahbaz
Dr. Ali Hammad Akbar

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
Dr. Sahar Waqar
Dr. Manzar Maqbool

Lecturers
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Mr Afeef Obaid
Ms. Arooj Asad

Teaching Fellow
Ms. Sana Tasleem Rao
Ms Maleeha
Mr Hafiz Mudassar
Mr Mujtaba Pasha
Ms Samia
Ms Kainat
Mr Rashid Mahmood

Graduate Assistants
Ms Aqsa Ilyas
Mr. Shahmeer Nawaz
Mr. Mubashar Imran
Mr Mehmood ul Haq

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
- B.Sc. Information Systems and Technology

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	2	1
HU-111L	Communication Skills	3	0
ME-100L	Workshop Practice	0	1
IS-102	Islamic Studies-I	2	0
MA-123	Calculus - Single Variable	3	0
CMPE-111	Application of Information and Communication technologies	2	1
IS-111	Pakistan Studies	2	0
IS-109/IS-212L	Fehm-e- Quran -I /Social Ethics-I	0	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-131	Electricity and Magnetism	2	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-212/HU-214	Civics and Community Engagement/Psychology	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CMPE-222	Circuits and Electronic Devices	3	1
IS-202	Ideology and Constitution of Pakistan	2	0
CMPE-223	Digital Logic Design	3	1
CMPE-213	Object Oriented Programming	3	1
CMPE-251	Discrete Mathematical Structures	3	0
CMPE-224	Occupational Health and Safety	0	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MA-234	Linear Algebra	3	0
CMPE-231	Database systems	3	1
CMPE-225	Computer Organization	3	1
CMPE-252	Probability and Random Variables	3	0
CMPE-214	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-332	Operating Systems	3	1
CMPE-315	Software Engineering	3	1
CMPE-341	Artificial Intelligence	3	1
CMPE-371	Signal and Systems	3	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CMPE-333	Computer Networks	3	1
CMPE-372	Digital Signal Processing	3	1
CMPE-325	Embedded Systems	3	1
IME-262	Machine Design & CAD	3	1

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-402	Civics and Community Engagement	2	0
CMPE-4XX	Computer Engineering Elective-I	3	0
CMPE-4XX	Computer Engineering Elective-II	2	1
MGT-410	Project Management	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
CMPE-4XX	Computer Engineering Elective V	2	1
MGT-414	Enterpreneurship and Business Management	2	0
IS-209/IS-213L	Fehm -e - Quran - II / Social Ethics-II	0	1

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-01: Graduates will be able to excel in their careers with enhanced knowledge and skills as researchers, system and services security specialist, and entrepreneurs.

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

PEO-03: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)	Credit Hours	
		Th	Pr
CMPE-112	Fundamentals of Programming & Data Science	3	1
CMPE-111	Applications of Information and Communication Technologies	2	1
MA-347	Discrete Mathematics	3	0
MA 123	Calculus	3	0
PHY111	Applied Physics	2	1
IS-111	Pakistan Studies	2	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		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
MA-205	Applied Statistics and Probability	3	0
HU-111L	Communication Skills (Lab)	0	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CYS-222	Computer Organization & Assembly Language	2	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)	Credit Hours	
CMPE-214	Data Structure and Algorithm	3	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	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		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
IS-109/IS-212L	Fehm -e - Quran - I / Social Ethics-I	0	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		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

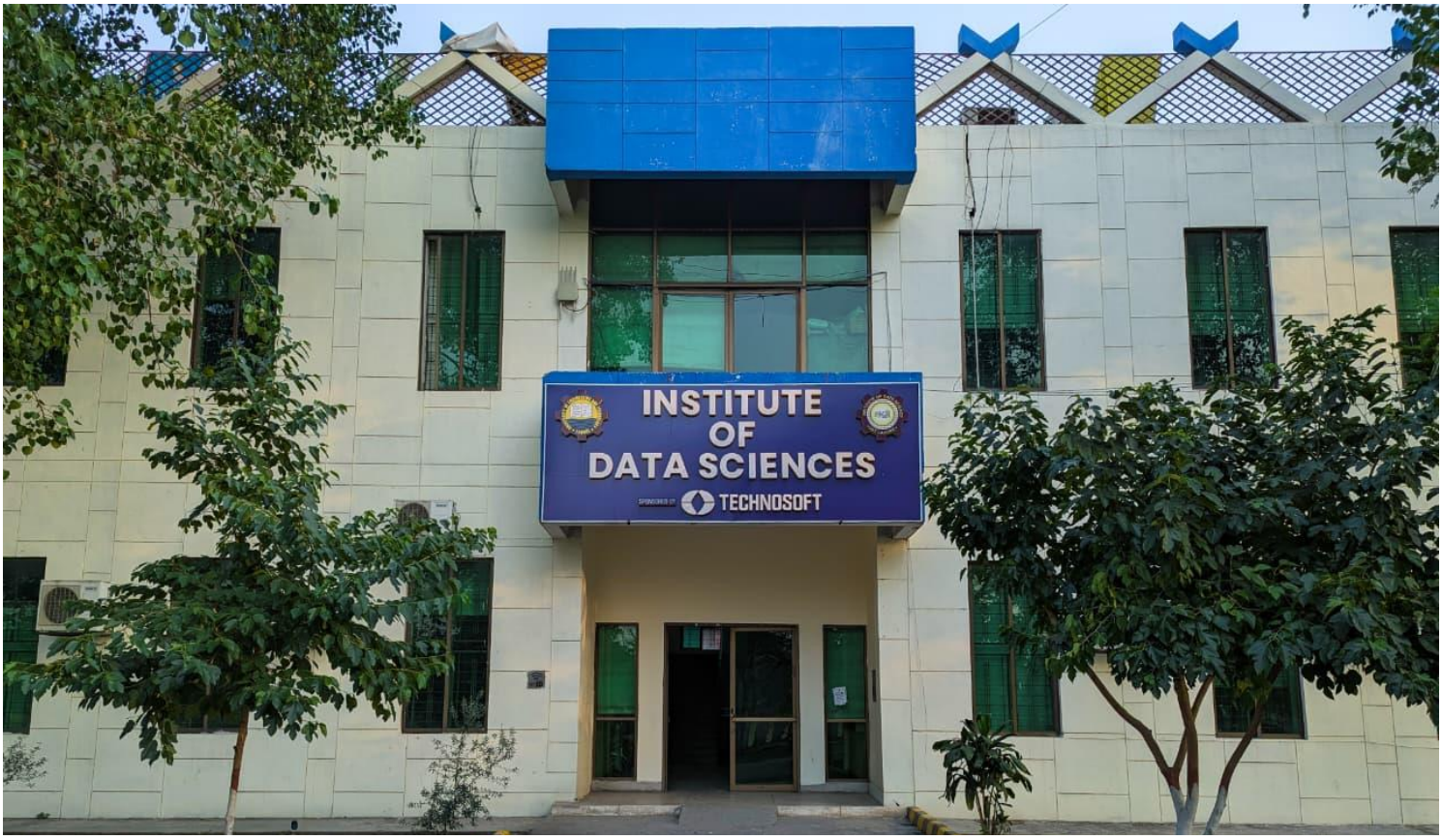
Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		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
IS-109/IS-213L	Fehm -e - Quran - II / Social Ethics-II	0	1

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		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	2	0
CYS-413	Professional Practice in Software Development	2	0
HU xxx	International Language	0	0



INSTITUTE OF DATA SCIENCE

Director
Prof. Dr. Shazia Arshad

Assistant Professor
Dr. Faiza Iqbal
Dr Aamir Hussain Chughtai

Lecturers
Miss. Fatima Shafiq
Miss Hijab Zehra Zaidi
Mr Sharjeel Tariq
Miss Irum
Miss Taliah

Graduate / Teaching Assistant
Miss Esha Hayat
Mr. Haris
Miss Naseeb

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.

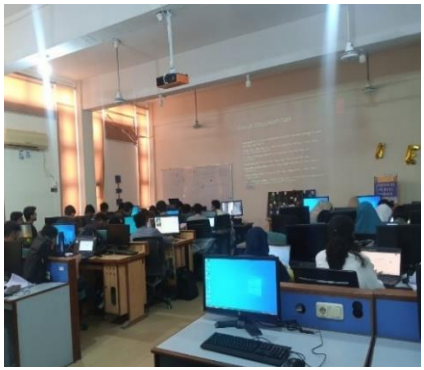
PEO-02: Graduates should be prepared to lead in the domain of data science for societal and economic progress, demonstrating the ability to translate data insights into impactful decisions that support the development and commercialization of technologies.

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 Science

Year 1

Semester 1

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

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CSC103	Object Oriented Programming (PF)	3	1
CSC104	Database Systems	3	1
CSC105	Digital Logic Design	2	1
MA104	Calculus II (CAL I)	3	
HU-102	Functional English	3	

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CSC200	Data Structures and Algorithms (OOP)	3	1
MA234	Linear Algebra (CAL I)	3	
CSC203	Computer Networks	2	1
CSC204	Software Engineering	3	
DS270	Introduction to Data Science	2	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CSC205	Computer Organization & Assembly Language (DLD)	2	1
CSC201	Information Security	2	1
HU-111L	Communication Skills	3	
CSC202	Artificial Intelligence	2	1
DS271	Statistics for Data Science	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CSC300	Operating Systems	2	1
DS370	Data Mining	2	1
DS371	Data Visualization	2	1
MA-205	Applied Statistics and Probability	3	
DSXXX	Domain Elective 1	3	
HU-XXX	Social Science	2	
IS109/IS212L	Feham ul Quran I (Social Ethics 1)		1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
DS372	Data Warehousing & Business Intelligence	2	1
DS373	Parallel and Distributed Computing	2	1
DSXXX	Domain Elective 2	3	
DSXXX	Domain Elective 3	3	
MGTXXX	Elective Supporting Course	3	
HU222	Expository Writing	3	

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CSC401	Final Year Project - I		2
DSXXX	Domain Elective 4	3	
DSXXX	Domain Elective 5	3	
HU212	Civics and Community Engagement	2	
HU200	Technical Report Writing	3	
MGT-349	Entrepreneurship	2	
IS111	Pakistan Studies	2	
IS209/IS213L	Fehm ul Quran II (Social Ethics 2)		1

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CSC402	Final Year Project - II (FYP-I)		4
DSXXX	Domain Elective 6	3	
DSXXX	Domain Elective 7	3	
IS203	Ideology and Constitution of Pakistan	2	
CSC403	Professional Practices in Software Development	2	
IS104	Islamic Studies/Ethics	2	
HUXXX	International Language		

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

B.Sc. Business Data Analytics

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC102 CSC102L	Programming Fundamental (Comp Core)	3	1
CSC100	Application of Information and Communication Technologies (AICT) (Comp Core)	2	1
BUS101	Microeconomics (Bus Core)	3	
BUS131	Principle of Management (Bus Core)	3	
HU102	Functional English (FE) (GER)	3	

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC103 CSC103L	Object Oriented Programming (Pre: PF; Comp Core)	3	1
CSC104 CSC104L	Database Systems (Comp Core)	3	1
BUS 102	Macroeconomics (Bus Core)	3	
BUS 111	Principle of Accounting (Bus Core)	3	
MA 154 or MA-151	Quantitative Reasoning-I (QR) OR Business Mathematics (MSC)	3	

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC200 CSC200L	Data Structure and Algorithms (Pre: DABP; Comp Core)	3	1
BUS 241	Principles of Marketing (Bus Core)	3	
BUS-112	Financial Accounting (Bus Core)	3	
HU104	Communication Skills (Pre: FE; GER)	3	
MA 259 or MA-257	Quantitative Reasoning-II (QR) OR Business Statistics (Pre: QR-I; MSC)	3	

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
DS-270	Introduction of Data Science (Domain Core)	2	1
BUS-231	Human Resource Management (Bus Core)	3	
	Business analysis and design (Core)	3	
BUS-211	Managerial Accounting (Bus Core)	3	
MA-234	Linear Algebra (MSC)	3	
IS 109	Fehm ul Quran I (UE)		1
IS104	Islamic Studies / Ethics (GER)	2	

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC-202	Artificial Intelligence (Computing Core)	2	1
BUS-232	Business Finance (Bus Core)	3	
BUS-342	Marketing Management (Bus Core)	3	
MCT-304	Probability and Statistics (MSC)	3	
CE-225	Social Science (e.g. Psychology / Anthropology / Economics / Sociology / Social Work / IR / Political Science) (GER)	2	
	Domain Elective 1 (Domain Elective)	3	

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
DS-372	Data Warehousing & Business Intelligence (Domain Core)	2	1
DS-374	Big Data Analytics (Domain Core)	2	1
DS-371	Data Visualization (Domain Core)	3	
BUS-322	Financial Management (Domain Elective)	3	
IS 209	Fehm ul Quran-II (UE)		1
	Domain Elective 2 (Domain Elective)	3	

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
	Final Year Project - I (Computing Core)		2
BUS-412	Strategic Business Management (GER)	3	
	Internship (ESC)	3	
IS 111	Pakistan Studies	2	
	Domain Elective 3 (Domain Elective)	3	
	Domain Elective 4 (Domain Elective)	3	

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
	Final Year Project - II (Pre: FYP-I; Computing Core)		4
BUS-471	Entrepreneurship (Bus Core)	3	
IS-203	Ideology and Constitution of Pakistan (GER)	2	
MGT-410	Project Management (Bus Core)	3	
HU-400	International Language (UE)		
	Domain Elective 5 (Domain Elective)	3	
	Domain Elective 6 (Domain Elective)	3	

Elective Courses	
DS-376	Machine Learning for Business Analytics (ML)
DS-370	Data Mining
DS-377	Artificial Neural Networks and Deep Learning For Business Analytics (DL)
DS-378	Business Process Analysis
CS-303	Introduction to Human Computer Interaction
DS-471	Platforms and Architectures for Data Science
DS-472	Text Mining
DS-473	Advance Topics in Data Science
DS-474	Speech Processing
-	Prompt Engineering
CS-354	Nature Language Processing
CSE-466	Computer Vision
BSA-XXX	Marketing Analytics
BSA-XXX	Supply Chain Analytics
BSA-XXX	Healthcare Analytics / Sports Analytics
BSA-XXX	Advanced Data Visualization for Business
BSA-XXX	Communication for Data-Driven Decisions

B.Sc. Software Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC102	Programming Fundamentals (Computing Core)	3	1
CSC100	Application of Information and Communication Technologies (GER)	2	1
CSC101	Discrete Mathematics (GER)	3	
MATH-101	Calculus-I (GER)	3	
PHY-111	Applied Physics (GER)	2	1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC103	Object Oriented Programming (PF; Computing Core)	3	1
CSC104	Database Systems (Computing Core)	3	1
CSC105	Digital Logic Design (Computing Core)	2	1
MATH-104	Calculus-II (CAL I; MSC)	3	
HU-102	Functional English (GER)	3	

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC200	Data Structures and Algorithms (OOP; Computing Core)	3	1
MA-234	Linear Algebra (CAL I; MSC)	3	
CSC203	Computer Networks (Computing Core)	2	1
HU-111	Communication Skills (GER)	3	
CSC204	Software Engineering (Computing Core)	3	

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC205	Computer Organization and Assembly Language (DLD; Computing Core)	2	1
CSC201	Information Security (Computing Core)	2	1
CSC202	Artificial Intelligence (Computing Core)	2	1
SE-211	Software Requirement Engineering (SE; Domain Core)	3	
CSC208	Design and Analysis of Algorithms (DS; Computing Core)	3	
SE-222	Software Design & Architecture (SE; Domain Core)	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC300	Operating Systems (Computing Core)	2	1
SE-323	Software Construction and Development (SDA; Domain Core)	2	1
SE-331	Software Quality Engineering (SE; Domain Core)	3	
MA-205	Applied Statistics and Probability (MSC)	3	
CSCXXX	Domain Elective 1 (Domain Elective)	3	
HU-XXX	Social Science (GER)	2	
IS-109/IS212L	Fehm-e-Quran-I (Social Ethics 1) (UE)		1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
SE-341	Software Project Management (SE; Domain Core)	3	
CSC304	Parallel and Distributed Computing (OOP, OS; Domain Core)	2	1
CSCXXX	Domain Elective 2 (Domain Elective)	3	
CSCXXX	Domain Elective 3 (Domain Elective)	3	
XX-XXX	Elective Supporting Course (ESC)	3	
HU222	Expository Writing (GER)	3	

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC401	Final Year Project - I (Computing Core)		2
CSCXXX	Domain Elective 4 (Domain Elective)	3	
CSCXXX	Domain Elective 5 (Domain Elective)	3	
HU212	Civics and Community Engagement (GER)	2	
HU200	Technical Report Writing (MSC)	3	
MGT349	Entrepreneurship (GER)	2	
IS-111	Pakistan Studies (GER)	2	
IS-209/IS213L	Fehm-e-Quran-II (Social Ethics 2) (UE)		1

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC402	Final Year Project - II (FYP-I; Computing Core)		4
CSCXXX	Domain Elective 6 (Domain Elective)	3	
CSCXXX	Domain Elective 7 (Domain Elective)	3	
IS-203	Ideology and Constitution of Pakistan (GER)	2	
CSC403	Professional Practices in Software Development (GER)	2	
IS-104	Islamic Studies (GER)	2	
HU-XXX	International Language (UE)		

Elective Courses

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
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
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
CSC206	Theory of Automata
CSC207	Advanced Database Management Systems (Pre. Requisite: DB)
CSC301	Introduction to Human Computer Interaction
SE-326	Principles of Web Engineering
SE-325	UX/UI Design

DEPARTMENT OF MECHANICAL ENGINEERING

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Asad Naeem Shah

Professor Emeritus
Mr. Dilshad Hussain

Professors
Dr. Nasir Hayat
Dr. Tauseef Aized
Dr. Asad Naeem Shah
Dr. Asif Mahmood Qureshi
Dr. Ghulam Moeen-ud-Din
Dr. Muhammad Asim

Associate Professors
Dr. Awais Ahmad Khan
Dr. Muhammad Usman
Dr. Jamal Umar
Dr. Naseer Ahmad
Dr Jawad Sarwar

Assistant Professors
Engr. Shabbir Hussain
Engr. Muhammad Rashid Sajid
Engr. Muhammad Kashif Tariq
Engr. Umair Ashraf Khokhar
Dr. Hafiz Zahid Nabi
Engr. Ahmad Naveed
Engr. Syed Saqib
Dr. Jafar Hussain
Dr. Muhammad Zubair Sheikh
Dr. Syed Nadeem Abbas Shah
Dr. Muhammad Waqar Nasir
Dr Rehmat Bashir
Dr Syed Wasim Hassan Zubair

Lecturers
Engr. Rabbia Sehar
Engr. Haris Hussain
Dr. Hibbah Akhtar
Engr. 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 201-250 in QS world ranking 2025-26. 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 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 machining operations. 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
ii. Heat Treatment
iii. Welding Equipment
iv. Machine Shop-I
v. Machine Shop-II
vi. Automation & Robotics
vii. Engineering Entrepreneurship

External Linkages

The Department has established a dedicated Office of Internships and Industrial Linkages to strengthen collaboration with industry, alumni, and academic institutions. It operates a well-structured internship program, facilitating placements for all third-year students in reputable industrial organizations across Pakistan. Additionally, students are actively encouraged to undertake final-year projects in collaboration with industry partners.

The Department places strong emphasis on Academic-Industrial interaction and regularly offers refresher courses to the local industry on several topics related to Mechanical Engineering. Furthermore, 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

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
HU-111	Communication Skills	3	0
MA-113	Calculus and Analytic Geometry	3	0
PHY-119	Engineering Physics	2	0
CSC-106 & CSC-106L	Application of Information & Communication Technologies	2	1
ME-111	Thermodynamics-I	3	0
ME-121(22) & ME-121(22)L	Engineering Graphics and Drawing	1	1
ME-123(22)	Engineering Mechanics-I	2	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-104	Islamic Studies	2	0
ME-131(22) & ME-131(22)L	Materials and Manufacturing-I	3	1
ME-124(22)	Engineering Mechanics-II	2	0
HU-221	Technical Writing & Presentation Skills	3	0
MA-225	Differential Equations and Transforms	3	0
ME- 122(22)L	Engineering Mechanics	0	1
HU-212	Civics & Community Engagement	2	0
ME-100L	Workshop Practice	0	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-203	Ideology & Constitution of Pakistan	2	0
ME-231(22) & ME-231(22)L	Materials and Manufacturing-II (ME-131(22))	2	1
ME-251L	Computer Aided Drawing	0	1
ME-221	Mechanics of Materials-I	3	0
ME-211(22) & ME-211(22)L	Fluid Mechanics-I	3	1
CS-103 & CS-103L	Introduction to Computer Programming for Data Science	2	1
HU-003	International Language	0	0
EE-101(24)	Basic Electrical Machines	1	0
IS-109L	Fehm E Quran-I	0	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ME-272	Engineering Project Management	2	0
ME-212	Thermodynamics-II (ME-111)	3	1
ME-213(22) & ME-213(22)	Fluid Mechanics-II (ME-211(22))	3	1
ME-222	Mechanics of Materials-II (ME-221)	3	0
MA-241	Applied Engineering Statistics	2	0
ME-215L	Thermodynamics Lab	0	1
ME-273L	Engineering Entrepreneurship	0	1
ME-225L	Mechanics of Materials Lab	0	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ME-321(22) & ME-321(22)L	Mechanics of Machines	3	1
ME-312(22) & ME-312(22)L	Heat and Mass Transfer	2	1
ME-341(22)	Instrumentation and Control	2	0
ME-322(22)	Machine Design -I	3	0
ME-351L	Computer-Aided Design -I	0	1
ME-381L	Health Safety & Industrial Environment	0	1
ME-399L	Semester Design Project	0	1
IS-111	Pakistan Studies	2	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ME-342 & ME-342L	Robotics and Automation (ME-341(22))	2	1
ME-382 & ME-382L	Engineering Data Analytics & AI	2	1
ME-323 (22)	Machine Design II (ME-322(22))	2	0
ME-352L	Computer Aided Design-II	0	1
ME-332	Metrology and Quality Assurance (MA-241)	2	0
ME-361(22)	Energy Resources and Utilization	2	0
ME-353(24) & ME-353(24)L	Numerical Analysis for Mechanical Engineers	2	1
ME-371(24)	Professional Ethics in Engineering Practices	1	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ME-415(22)	Power Plants Engineering (ME-212)	2	0
ME-478	Engineering Economics	2	0
ME-453(24) & ME-453(24)L	Computational Engineering (ME-353(24))	2	1
ME-411 & ME-411L	IC Engine (ME-212)	2	1
ME-496L	FYDP-I	0	3
ME-4xx	Elective-I	2	0
IS-209L	Fehm E Quran-II	0	1
ME-471	Production and Operations Management	2	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ME-461	Energy Conservation & Management	2	0
ME-464L	Energy & Power Systems	0	1
ME-412(22) & ME-412(22)L	Refrigeration and Air Conditioning (ME-312(22))	2	1
ME-421(22) & ME-421(22)L	Mechanical Vibrations	3	1
ME-472	Supply Chain Management	2	0
ME-497L	FYDP- II (ME-496L)	0	3
ME-4xx	Elective-II	2	0

AUTOMOTIVE ENGINEERING CENTRE

Dean
Prof. Dr. Khalid Farooq Chohan

Director
Dr. Zia ul Rehman Tahir

Professor
Dr. Amjad Hussain

Associate Professors
Dr. Zia ul Rehman Tahir
Dr. Ali Hussain Kazim

Assistant Professors
Dr. Saad Jahangir
Dr. Muhammad Ali Shahbaz
Dr. Adeel Shehzad

Lecturers
Mr. Omer Asghar
Dr. 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	Credit Hours Pr
HU-111	Communication Skills	3	0
IS-104	Islamic studies/Ethics for Non-Muslims	2	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	Credit Hours Pr
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	Credit Hours Pr
Is-109	Fehm-e-Quran I/ Social Ethics I	0	1
IS-111	Pakistan Studies	2	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	Credit Hours Pr
IS-203	Ideology and Constitution of Pakistan	2	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	Credit Hours 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	Credit Hours Pr
IS-209	Fehm-e-Quran II/Social Ethics II	0	1
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	Credit Hours Pr
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	Credit Hours 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	3
AM-472	Powertrain Design	4
AM-473	Micro & Nano Manufacturing	5
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. Khalid Farooq

Chairman
Prof. Dr. Muhammad Qaiser Saleem

Professor Emeritus
Dr. Nadeem Ahmad Mufti

Associate Professors
Dr. Kashif Ishfaq
Dr. Sarmad Ali Khan
Dr. Rakhshanda Naveed
Dr. Muhammad Faisal Shahzad

Assistant Professors
Dr. Syed Farhan Raza Rizvi
Dr. Sana Ehsan
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)	Credit Hours	
		Th	Pr
HU-111	Communication Skills	3	0
MA-113	Calculus and Analytic Geometry	3	0
CSC-100 & CSC-100 L	Applications of ICT	2	1
IS-104	Islamic Studies/Ethics	2	0
IME-131(24) & IME-131(24)L	Engineering Mechanics	2	1
HU-XXX	Arts and Humanities Elective	2	0
IME-161(24)& IME-161(24)	Engineering Drawing and Graphics	1	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MA-116	Linear Algebra and Differential Equations	3	0
IS-203	Ideology and Constitution of Pakistan	2	0
IS-111	Pakistan Studies	2	0
CS-103& CS-103L	Introduction to Computer Programming for Data Science	2	1
IME-141 & IME-141L	Introduction to Thermo-Fluids	3	1
IME-111& IME-111L	Industrial Materials	2	1
ME-100L	Workshop Practice	0	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MA-244& MA-244L	Probability & Statistics	2	1
HU-200	Technical Report Writing	3	0
IME-231(24) &IME-231(240L	Mechanics of Materials	2	1
IME-221 (24)& IME-221 (24)L	Manufacturing Processes-I	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)	Credit Hours	
		Th	Pr
IS-109L /IS-212L	Fehm– e-Quran-II / Social Ethics-I	0	1
MA-260	Logical &Critical Thinking	3	0
HU-212	Civics and Community Engagement	2	0
IME-261(24)& IME-261(24)L	Machine Design and CAD	2	1
IME-232(24)&IME-232 (24)L	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)	Credit Hours	
		Th	Pr
MGT-320	Project Management in Engineering	2	0
XXX-XXX	Social Science Elective	2	0
XXX-XXX	Management Science Elective	2	0
IME-351(24) &IME-351(24)L	Human Factors Engineering	3	1
IME-352 (24)	Production Planning & Control	3	0
IME-321(24) &IME-321(24)L	Manufacturing Processes-II	3	1

Semester 6

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

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-209L /IS-213L	Fehm– e-Quran-II / Social Ethics-I	0	1
IME-481(24)& IME-481(24)L	Metrology & Quality Control	3	1
IME-491& IME-491L	Computer Simulations of Manufacturing Systems	2	1
IME-XXX	Elective-I	3	0
MCT-434& MCT-434L	Industrial Automation	2	1
IME-401L	Final Year Project-I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		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
Prof. Dr. Mohsin Rizwan

Associate Professors
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
Dr. Muhammad Rzi Abbas

Lecturers
Ms. Amina Younas
Mr. Misbah-ur-Rehman
Mr. Amir Sharif
Ms. Qurat Ul Ain Masud
Mr. Shujat Ali

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 stakeholders' 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, instrumentation, 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 enrolment is around 328 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 till 2026, twenty-two batches are serving the industry, in mechanical, electronics, instrumentation, automation, oil and gas, aviation and other sectors.

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. The Extended Reality (XR) Lab at the department focused on Virtual Reality (VR) and Augmented Reality (AR), serves as a hub for immersive technology research and innovation.

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 is a rapidly evolving field that intersects 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.

The B.Sc. in Robotics and Intelligent Systems is a specialized non-engineering program with core contents from Mechatronics with focus in the field of Robotics. Graduates are equipped to pursue careers in high-growth sectors such as cyber-physical systems, applied intelligence, autonomous systems, and industrial robotics. As the global demand for the convergence of Robotics and Artificial Intelligence accelerates, this program prepares students for leadership roles in both the local and international technological landscapes.

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. It also shares some of the labs and other resources with Mechanical, Industrial & Manufacturing and Electrical Engineering Departments.

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 compulsory 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.

EXTENDED REALITY (XR) LAB

Utilizing the outcomes and resources from HEC NRPU and European Commission's Erasmus+ CBHE funded projects, focused on Virtual Reality (VR) and Augmented Reality (AR), the lab serves as a hub for immersive technology research and innovation. It integrates mechatronics, control, and intelligent systems with extended reality to develop practical and educational applications.

B.Sc. Mechatronics and Control Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisite)	Credit Hours	
		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-111	Pakistan Studies	2	0
HU-111	Communication Skills	3	0
ME-100L	Workshop Practice	0	1
IS-109	Fehm-e-Quran-I/Social Ethics-I (For Non-Muslims)	0	1

Semester 2

Course No	Subject (Pre-requisite)	Credit Hours	
		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-107	Application of Information and Communication Technologies	1	2

Year 2

Semester 3

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
MA-129	Vector and Complex Analysis	3	0
IS-104	Islamic Studies/Ethics (for Non-Muslims)	2	0
MCT-213	Mechanisms	2	1
EE-204	Electrical Machinery	2	1
MCT-241	Digital Logic Design	3	1
MCT-245	Advance Computing	1	2

Semester 4

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
MA-234	Linear Algebra	3	0
MCT-216	Machine Design and Elements	3	1
MCT-236	Embedded Systems- I	3	1
MCT-244	Signal Processing	2	1
IS-203	Ideology and Constitution of Pakistan	2	0
IS-209	Fehm-e-Quran-II/Social Ethics-II (For Non-Muslims)	0	1

Year 3

Semester 5

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
MA-343	Applied Probability and Statistics	3	0
MGT-318	Entrepreneurship and Management	2	0
MCT-331	Modeling and Simulation (MA-225)	3	1
MCT-339	Embedded Systems-II (MCT-241)	3	1
MCT-361	Hydraulics and Pneumatics	2	1
MCT-335	Instrumentation and Measurements	2	1

Semester 6

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
MCT-xxx	Elective I	2	1
MCT-333	Control Systems – I	3	1
MCT-307	Product Design	2	0
MCT-343	Data Sciences and Analytics	3	1
MCT-352	Robotics (MA-234)	3	1
MCT-309	Internship	0	0

Year 4

Semester 7

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
MCT-xxx	Elective II	2	1
MGT-xxx	Social Science Elective	2	0
MCT-434	Industrial Automation	2	1
MCT-435	Control System-II	3	0
MCT-498	Final Project- I	0	3
HU-221	Technical Writing & Presentation Skills	3	0

Semester 8

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
MCT-xxx	Elective III	2	1
MCT-404	Professional Ethics	2	0
MCT-499	Final Project- II (MCT-498)	0	3
MGT-320	Project Management in Engineering	2	0
MGT-110	Social Responsibility	2	0

Elective Subjects

MCT-412	Condition Monitoring
MCT-411	Mechanical Vibrations
MCT-421	Digital Signal Processing (MCT-244)
MCT-422	Power Electronics (MCT-122)
MCT-436	Digital Control Systems (MCT-333)
MCT-433	Estimation and Filtering (MCT-333)
MCT-452	Intelligent Systems
MCT-453	Machine Vision
MCT-454	Mobile Robotics
MCT-471	Wearable Robotics
MCT-456	Internet of Things
MCT-457	Biomedical Devices
MCT-472	Human Centered Robotics
MCT-473	Aerial Robotics
MCT-461	Smart Electric Vehicles
MCT-491	Special Topics in Mechatronics

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

B.Sc. Robotics and Intelligent Systems

Year 1

Semester 1

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr.
RIS-121	Electric Circuits	3	0
ME-121bL	Engineering Graphics and Drawing	0	1
IS-109	Fehm-e-Quran-I/Social Ethics-I (For Non-Muslims)	0	1
IS-111	Pakistan Studies	2	0
HU-111	Communication Skills	3	0
MA-113	Calculus and Analytic Geometry	3	0
PHY-118	Applied Physics	2	1

Semester 2

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr.
ME-125	Engineering Mechanics	3	0
EE-216	Electronic Devices and Circuits	3	1
MCT-107	Application of Information and Communication Technologies	1	2
CY-101	Applied Chemistry	2	1
MA-225	Differential Equations and Transforms	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr.
ME-226(24)	Mechanisms	3	1
EE-272	Digital Systems	3	1
CSC-103	Object Oriented Programming	3	1
RIS-231	Introduction to Robotics	2	1
MA-129	Vector and Complex Analysis	3	0

Semester 4

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr.
ME-227(24)	Machine Design and Elements for Robots	3	1
MA-154	Quantitative Reasoning-I	3	0
RIS-232	Embedded Systems	3	1
MA-234	Linear Algebra	3	0
IS-203	Ideology and Constitution of Pakistan	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr.
CSC-202	Artificial Intelligence	2	1
MA-343	Applied Probability and Statistics	3	0
RIS-331	Robot Operating Systems	3	1
RIS-321	Sensors and Actuators	2	1
IS-111	Pakistan Studies	2	0

Semester 6

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr.
RIS-333	Robot Kinematics and Dynamics	2	1
RIS-351	Machine Vision	3	1
IS-209	Fehm-e-Quran-II/Social Ethics-II (For Non-Muslims)	0	1
EE-220	Signals and Systems	3	0
DS-375	Big Data Analytics	3	0
RIS-301	Internship	0	0
HU-221	Technical Writing & Presentation Skills	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr.
RIS-xxx	Elective I	3	0
MGT-xxx	Social Science Elective	2	0
RIS-431	Robot Motion Planning and Control	3	1
CSC-352	Introduction to Deep Learning	3	0
RIS-498	Final Project-I	0	2

Semester 8

Course No	Subject (Pre-requisite)	Credit Hours	
		Th	Pr.
RIS-xxx	Elective-II	2	1
RIS-432	Mobile Robotics	2	1
MGT-110	Social Responsibility	2	0
RIS-499	Final Project-II	0	2
MGT-318	Entrepreneurship and Management	2	0

Elective Subjects

RIS-441	Extended Reality
RIS-452	Swarm and Collective Intelligence
RIS-433	Wearable Robotics
RIS-440	Internet of Things
BME-301	Biomedical Devices
RIS-434	Human-Centered Robotics
RIS-435	Aerial Robotics
AM-424	Hybrid 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
Dr. Abdul Sattar Shakir
Dr. Habib ur Rehman

Professors
Dr. Khalid Farooq
Dr. Noor Muhammad Khan
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

Assistant Professors (cont..)
Engr. Usman Ali
Dr. Umbreen us Sahar
Dr. Aqsa Shabbir
Dr. Muhammad Ali
Dr. Muhammad Kashif
Dr. Ubaid Ahmad Mughal
Dr. Babar Mutaba

Lecturers
Engr.. Muhammad Rehan Ashraf
Engr. Aamina Rajput
Engr. Bilal Ahmad Khokar
Engr. Abdul Rehman
Engr. Muhammad Faraz Javaid

Teaching Fellows
Engr. M. Asim
Engr. Mohiq Khalid
Engr. Maria Talib

The Civil Engineering Department is one of the oldest departments in the country, imparting Civil Engineering courses at undergraduate and postgraduate levels, ranked among top 2 in the country and among 201-275 in the world in the QS World subject ranking 2026. 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. Civil Engineering faculty has won many national and international research grants and is actively involved in research and development in the academia as well as in the industrial sector.

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

Programs of Study

Undergraduate programs

- B.Sc. Civil Engineering

Postgraduate programs

- M.Sc. Hydraulics and Irrigation Engineering
- M.Sc. Geotechnical Engineering
- M.Sc. Structural Engineering
- M.Sc. Disaster Mitigation Engineering
- Ph.D. Civil Engineering (with specialization in any of the above-mentioned postgraduate programs)

Laboratories and Other Facilities

The Department has the following well-equipped dedicated laboratories (in addition to access to specialized labs at University level such as Material characterization labs of Physics, and Metallurgy deptts) , that meet the academic needs of students and teachers as well as the professional demands of the government and private organizations:

- Concrete Materials Labs (2)
- Computer Labs (4)
- Earthquake Engineering Lab
- Engineering Mechanics Lab
- Geotechnical Engineering Labs (3)
- Hydraulics & Irrigation Engineering Labs
- Strength of Materials Lab
- Surveying & Levelling Lab
- Test Floor Lab
- Transportation Engineering Lab

Civil Engineering graduates are eligible to get membership of the Pakistan Engineering Council (PEC) which has become the full signatory of the prestigious Washington Accord (WA). The graduates from PEC-accredited engineering programs are accepted for education and employment purposes in other member countries of the Washington Accord. As such, the BSc Civil Engineering program of UET is well recognized in all Washington Accord countries.

B.Sc. Civil Engineering

YEAR-1

1st Semester

Course Code	Subject (Pre-requisite)	Credit Hours	
		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
IS-102	Islamic Studies/Ethics	2	0

2nd Semester

Course Code	Subject (Pre-requisite)	Credit Hours	
		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
IS-109L/212L	Fehm-e-Quran – I/ Social Ethics-I	0	1
MA-112	Applied Mathematics-II	3	0
ME-100L	Workshop Practice	0	1
CE-131	Fluid Mechanics	3	1

YEAR-2

3rd Semester

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
CE-201A	Surveying and Geo-Informatics	3	1
CE-236A	Engineering Hydrology	2	1
MA-346	Numerical Methods	3	0
IS-203	Ideology and Constitution of Pakistan	2	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)	Credit Hours	
		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
IS-209L/213L	Fehm-e-Quran – II/ Social Ethics-II	0	1
CE-231	Advanced Fluid Mechanics	3	1
CE-200A	Occupational Health & Safety	0	1
CE-100A	Survey Camp	Non-Credit (Mandatory and qualifying)	

YEAR-3

5th Semester

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
CE-311A	Structural Analysis-II	2	0
CE-313A	Steel Structures	3	1
CE-321A	Geotechnical Engineering	3	1
HU-300	Technical Report Writing	3	0
CE-331	Hydraulic Engineering	3	1

6th Semester

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
CE-312A	Mechanics of Solids-II	3	1
CE-314A	Reinforced Concrete Design-I	3	1
CE-335	Irrigation Engineering	3	1
MA-356	Probability and Statistics in Engineering	2	0
CE-301A	Construction Project Management	2	0
CE-323A	Foundation Engineering	2	0
CE-300A	Internship (6-8 weeks)	Non-Credit (Mandatory and qualifying)	

YEAR-4

7th Semester

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
CE-401A	Structural Engineering	3	0
CE-411A	Reinforced Concrete Design-II	3	1
CE-421A	Transportation Engineering	3	1
HU-111	Communication Skills	3	0
CE-499A	FYDP-I	0	3

8th Semester

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
CE-412A	Computer Aided Design of Structures	1	2
CE-423A	Pavement Analysis and Design	2	0
ENE-440	Environmental Engineering	3	1
IS-111	Pakistan Studies	2	0
Mgt-319A	Entrepreneurship for Engineers	2	0
CE-499A	FYDP-II	0	3

DEPARTMENT OF ARCHITECTURAL ENGINEERING & DESIGN

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Khuram Rashid

Professor
Dr. Sajjad Mubin*

Associate Professor
Dr. Maria Idrees

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

Lecturers
Ms. Tehreem Naseer
Dr. Arjmand Khaliq
Dr. Anam Fatima
Mr. H. Abrar Ahmad
Dr. Abdul Mueed Iqbal
Dr. Huda Riaz
Ms. Afia Razzaq
Ms. Khadija Mawra

* On Deputation

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. in Building Engineering, M.Sc. in Construction Management, PhD in 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. 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 and Electrical Engineering. The department has a dedicated library, three design studios, and one computer lab, along with various laboratories related to Structural Engineering, Materials and Construction, Geotechnical and Foundation Engineering, Surveying, and Environmental Control Systems.

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 Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
AE-101	Surveying	2	1
CS-103	Introduction to Computer Programming for Data Science	2	1
IS-104	Islamic Studies / Ethics	2	-
MA-123	Calculus	3	-
AE-114	Construction Materials	2	1
AE-145L	Architectural and Engineering Drawing	-	2
IS-109/ IS-212L	Fehm-e-Quran- I / Social Ethics-I	0	1

Semester 2

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
HU-111	Communication Skills	3	-
AE-132	Mechanics of Materials - I	3	-
PHY-102	Physics for Architectural Engineers	2	1
ME-100 WL	Workshop Practice	-	1
AE-146L	Computer Aided Drawing	-	1
AE-103	Applications of Information and Communication Technologies	2	1
IS-111	Pakistan Studies	2	-
MGT-105	Introduction to Economics	2	-

Year 2

Semester 3

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
IS-203	Ideology and Constitution of Pakistan	2	-
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	-
HU-206	Civic and Community Engagement	2	-
HU-003	International Language	-	-

Semester 4

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
MA-234	Linear Algebra	3	-
AE-225	Renewable Energy Systems for Buildings	1	1
AE-234	Mechanics of Materials - II	3	1
AE-244L	Architectural Design - II	-	3
HU-221	Technical Writing and Presentation Skills	3	-
IS-209/ IS-213L	Fehm-e-Quran- II / Social Ethics- II	-	1
AE-144	History of Building Technology	2	-

Year 3

Semester 5

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
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
AE-214	Construction Engineering and Building Information Modelling	3	1
MGT-318	Entrepreneurship and Management	2	-

Semester 6

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
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
MGT-320	Project Management in Engineering	2	-
	Note: 6-8 weeks mandatory internship program offered in summer break	-	-

Year 4

Semester 7

Course Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
AE-435	Computer Aided Structural Analysis	3	1
AE-436	Design of Steel Structures	3	1
AE-441L	Integrated Building Design – I	-	2
AE-302	Water Supply and Sanitation Systems for Buildings	2	1
AE-499	Final Year Design Project – I	-	3

Course Code	Subject (Elective Subjects)	Credit Hours	
		Th	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 Code	Subject (Pre-requisite)	Credit Hours	
		Th	Pr
AE-437	Structural Dynamics and Earthquake Engineering	3	1
AE-442L	Integrated Building Design - II	-	2
AE-457	Professional Ethics	1	-
AE-4xx	Elective	2	-
AE-499	Final Year Design Project - II	-	3
AE-453	Construction Management	2	1
AE 151L	Occupational Health and Safety	-	1

DEPARTMENT OF TRANSPORTATION ENGINEERING & MANAGEMENT

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Zia-ur-Rehman

Professors
Dr. Ammad Hassan Khan

Associate Professor
Dr. Abdur Rahim
Dr. Izza Anwer

Assistant Professors
Dr. Hina Saleemi
Dr. Saadia Tabassum
Dr. Mujasim Ali Rizvi
Dr. Bilal Zia Malik

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. Program 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. Twenty sessions (2002-2021) of the DTEM have already graduated. Furthermore, in response to the increasing needs of regional and global trade, the Department has launched a second undergraduate program with the name BS Logistics and Supply Chain Management. This program equips students with the skills needed to meet the growing demand for professionals who can manage complex supply chains and logistics systems. It prepares graduates to play a vital role in ensuring the efficient flow of goods and services from producers to consumers.

Mission
Our mission is to produce 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
- BS Logistics and Supply Chain Management

Postgraduate Programs

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

The emphasis of the B.Sc. Transportation Engineering is on the understanding of the fundamental concepts and principles that constitute the basis of transportation engineering. Whereas, BS Logistics and Supply Chain Management provides a strong foundation in business, logistics, procurement, operations, and supply chain strategy. The courses consist of lectures, design/practical work, laboratory/field investigations, presentations, and final year research project.

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.

Graduates of the department 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), Port Qasim Authority, Tranzum Courier Service (TCS), FedEX, Nestlé Pakistan, Coca-Cola Beverages Pakistan, Engro Corporation, Packages Limited, Pakistan State Oil (PSO), Shell Pakistan, Total PARCO, and many other public and private sector organizations. In addition to this, there is a high employment demand for graduates of B.Sc. Transportation Engineering and BS Logistics & Supply Chain Management in the Middle East, Europe, Canada, 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 B.Sc. Transportation Engineering 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

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MA-113	Calculus and Analytic Geometry	3	0
CY-101	Applied Chemistry	2	0
HU-102	Functional English	3	0
CS-103	Introduction to Computer Programming for data science	2	1
TE-102	Surveying-I	3	1
PHY-122	Basic Mechanics	2	1
IS-109	Fehm-e-Quran-I	0	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
HU-111	Communication Skills	3	0
TE-106	Construction and Pavement Materials	2	1
TE103L	Engineering Drawing and Graphics	0	2
Geo-E-110	Physical Geology	3	1
IS-111	Pakistan Studies	2	0
TE-105	Information and Communication Technologies in Transport	2	1
ME-100L	Workshop Practice	0	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-203	Ideology and Constitution of Pakistan	2	0
TE-212	Mechanics of Solids (PHY-122)	2	1
TE-213	Surveying-II (TE-102)	2	1
MA-228	Differential Equations	3	0
EE-299	Electrical Systems for Transport Infrastructure	2	1
IS-104	Islamic Studies	2	0
HU-212	Civics and Community Engagement	2	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
TE-203	Geotechnical Engineering-I	3	1
MA-346	Numerical Methods	3	0
HU-200	Technical Report Writing	3	0
MGT-105	Introduction to Economics	2	0
TE-206	Traffic Engineering - I	2	1
TE-224	Structural Analysis (TE-212)	2	1
IS-209	Fehm-e-Quran-II	0	1
Survey camp		Non Credit (Mandatory)	

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
TE-311	Geotechnical Engineering-II (TE-203)	3	1
MA-343	Applied Probability and Statistics	3	0
EnE-307	Environmental Engineering	2	1
TE-312	Traffic Engineering – II (TE-206)	2	1
TE-333	Plain and Reinforced Concrete (TE-224)	2	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
TE-314	Railway Engineering-I	2	0
Mgt-316A	Professional Ethics and Engineering Entrepreneurship	2	0
TE-315	Pavement Analysis and Design	2	1
TE-316	Geometric Design for Transportation Facilities	2	1
TE-327	Transportation Planning	3	0
TE-318	Waterway Transportation	2	0
TE-329	Pipeway Engineering	2	0
Internship		Non Credit (Mandatory)	

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
TE-401	Bridge and Tunnel for Transportation Engineering	3	0
TE-423	Airport Engineering	3	0
TE-424	Pavement Drainage system and Design (TE-315)	2	1
TE-426	Automotive Engineering	2	1
TE-425	Ports and Harbour Management (TE-318)	2	0
TE-499	Final Year Design Project	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
TE-427	Project Management	2	0
TE-438	Pavement Evaluation and Rehabilitation (TE-424)	2	1
TE-439	Sea Freight and Logistics (TE-425)	2	0
TE-429	Railway Engineering-II (TE-314)	2	0
TE-449	Transportation Informatics	2	1
TE-428L	Occupational Health and Safety	0	1
TE-499	Final Year Design Project	0	3

BS Logistics and Supply Chain Management

Year 1

Semester 1

Course No	Subject	Credit Hours Th	Credit Hours Pr
HU – 200	Technical Report Writing	3	0
IS-104	Islamic Studies	2	0
IS-111	Pakistan Studies	2	0
CS – 103	Introduction to Computer Programming for data Science	2	1
MA - 151	Business Mathematics	3	0
LSM – 101	Basic Logistics	3	0
IS-109	Fehm-e-Quran – I	0	1

Semester 2

Course No	Subject	Credit Hours Th	Credit Hours Pr
IS – 203	Ideology and Constitution of Pakistan	2	0
BUS - 101	Microeconomics	3	0
BUS -111	Principles of Accounting	3	0
LSM-111	Principles and Practice of Marketing	3	0
ES-312	Occupational Safety, Health and Environment	2	1
HU-111	Communication Skills	3	0

Year 2

Semester 3

Course No	Subject	Credit Hours Th	Credit Hours Pr
LSM-221	Macroeconomics	3	0
LSM-222	Human Resource Management	2	0
LSM-233	Corporate Finance	2	0
LSM-234	Operations Management	2	0
LSM-225	Fundamentals of Supply Chain Management	2	0
LSM-236	Transportation and Logistics Management	3	0
LSM-237	Cross cultural Studies	3	0

Semester 4

Course No	Subject	Credit Hours Th	Credit Hours Pr
LSM-211	Innovation and Entrepreneurship	3	0
LSM-232	Statistics for Logistics	3	0
LSM-223	Business Communication	3	0
LSM-224	Supply Chain Management	3	0
LSM-235	Customer Relationship Management	3	0
LSM-246	Data Analysis & Visualization for Supply Chains	2	1
IS-209	Fehm-e-Quran – II	0	1

Year 3

Semester 5

Course No	Subject	Credit Hours Th	Credit Hours Pr
LSM-341	Logistics and Supply Chain Team Project	3	0
LSM-322	Logistics Management Information System	3	0
LSM-343	Management Accounting	3	0
LSM-344	Enterprise Resource Planning (ERP) Systems	2	1
LSM-345	Trade Laws in Pakistan	3	0

Semester 6

Course No	Subject	Credit Hours Th	Credit Hours Pr
LSM-331	Research Methods	3	0
LSM-332	Total Quality Management	3	0
MA-343	Applied Probability and Statistics	3	0
LSM-321	Professional Ethics	3	0
LSM-353	Warehouse and Inventory Management	3	0
LSM-354	Supply Chain Software & Tools (WMS, TMS, Inventory Systems)	2	1
Summer Internship		3	

Year 4

Semester 7

Course No	Subject	Credit Hours Th	Credit Hours Pr
LSM-451	Strategic Management	3	0
LSM-442	Retail and Manufacturing Logistics	3	0
LSM-453	Global Logistics and Supply Chain Management	3	0
LSM-444	Procurement and Supplier Management	3	0
LSM-455	Geographic Information Systems (GIS) for Logistics Software: ArcGIS, QGIS, Google Earth Pro	2	1

Semester 8

Course No	Subject	Credit Hours Th	Credit Hours Pr
LSM-441	Project Management	3	0
LSM-432	Specialization Course I	3	0
LSM-443	Specialization Course II	3	0
LSM-454	Workplace Experience	3	0
LSM-479	Capstone Project	0	3

INSTITUTE OF ENVIRONMENTAL ENGINEERING & RESEARCH

Dean
Prof. Dr. Khalid Farooq

Professor Emeritus
Dr. Javed Anwar Aziz

Director
Dr. Mehwish Anis

Professors
Dr. Amir Ikhlaq

Associate Professors
Dr. Muhammad Irfan Jalees
Dr. Mehwish Anis

Assistant Professors
Dr. Fizzah Zahid
Dr. Gul -E- Hina

Lecturers
Engr. Sahar Aurangzeb
Engr. Qurat-ul-Ain
Engr. Tanveer Ahmed
Engr. Asma Imam
Engr. Hafiza Aroosa Aslam Khan

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
- Ph.D. in Environmental Science

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. 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. In 2017, 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)	Credit Hours	
		Th	Pr
HU-111	Communication Skills	3	3
IS-104	Islamic Studies/Ethics (for Non-Muslims)	2	2
CE-101	Elementary Surveying	3	3
CE-101L	Elementary Surveying	1	3
EnE-101	Introduction to Environmental Engineering	2	2
PHY-112	Applied Physics	2	2
PHY-112L	Applied Physics	1	3
MA-115	Engineering Mathematics	3	3
IS-109L/IS-212L	Fehm-ul-Quran/Social Ethics-I	1	3

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CSC-100	Application of Information and Communication Technologies	2	2
CSC-100L	Application of Information and Communication Technologies	1	3
EnE-103	Environmental Laws and Policies	2	2
EnE-104	Environmental Chemistry	2	2
EnE-104L	Environmental Chemistry	1	3
EnE-105	Ecological Management	2	2
ME-100L	Workshop Practice	1	3
MA-116	Linear Algebra and Differential Equations	3	3
IS-111	Pakistan Studies	2	2

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EnE-201	Environmental Microbiology	2	2
EnE-201L	Environmental Microbiology	1	3
CE-232	Fluid Mechanics	3	3
CE-232L	Fluid Mechanics	1	3
CE-235	Soil Mechanics	3	3
CE-235L	Soil Mechanics	1	3
MA-242	Engineering Statistics	3	3
IS-209L/IS-213L	Fehm-ul-Quran/Social Ethics-II	1	3
HU-200	Technical Report Writing	3	3

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EnE-225L	Occupational health and Safety	1	3
IS-203	Ideology and Constitution of Pakistan	2	2
CRP-220	GIS and Remote Sensing	2	2
CRP-220L	GIS and Remote Sensing	1	3
ME-238	Thermodynamics	2	2
ME-238L	Thermodynamics	1	3
CE-240	Engineering drawings and CAD	1	1
CE-240L	Engineering drawings and CAD	2	6
CE-210	Structural Systems	3	3
CS-103	Introduction of Computer Programming for Data Science	2	2
CS-103L	Introduction of Computer Programming for Data Science	1	3

Year 3

Semester 5

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

Semester 6

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

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
EnE-435	Air and Noise Pollution Control	3	3
EnE-435L	Air and Noise Pollution Control	1	3
EnE-436	Principles and Design of Wastewater Treatment	3	3
EnE-436L	Principles and Design of Wastewater Treatment	1	3
EnE-432	Environmental Modeling	2	2
EnE-432L	Environmental Modeling	1	3
EnE-499A	Final Year Design Project-I	3	9
HU-003	International language	0	3
HU-212	Civics and Community Engagement	2	2

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ME-481	Energy Resources & Management	2	2
EnE-404	Ethics and Interpersonal Skills	1	1
EnE-404L	Ethics and Interpersonal Skills	1	3
EnE-426	Wastewater Disposal and Reuse	2	2
EnE-433	Industrial and Hazardous Waste Management	3	3
MGT-349	Entrepreneurship	2	2
EnE-427	Climate Change: Adaptation, Mitigation and Sustainable Development	2	2
EnE-499B	Final Year Design Project-II	3	9
EnE-428	Review of Environmental Engineering (Optional Course)	0	2

B.S. Environmental Science

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		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
CSC-100	Applications of Information and Communication Technologies	2	0
CSC-100L	Applications of Information and Communication Technologies	0	1
IS-109L/IS-212L	Fehm-ul-Quran/ Social Ethics-I	0	1
IS-104	Islamic Studies/Ethics for Non-Muslims	2	0
MA-154	Quantitative Reasoning – I	3	0
ES-102	Environmental Biochemistry	2	0
ES-102L	Environmental Biochemistry	0	1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-111	Pakistan Studies	2	0
ES-111	Fundamentals of Ecology	3	0
CY-221	Inorganic and Organic Chemistry	2	0
CY-221L	Inorganic and Organic Chemistry	0	1
MA-259	Quantitative Reasoning – II	3	0
CRP 206	Sociology	2	0
HU-201	Functional English	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-211	Environmental Physics	3	0
IS-203	Ideology & Constitution of Pakistan	2	0
ES-206	Environmental Chemistry	2	0
ES-206L	Environmental Chemistry	0	1
	Mineral Resources[1]	3	0
ES-215	Introduction to Earth Sciences	2	0
HU-222	Expository Writing	2	0
HU-212	Civics & Community Engagement	2	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ES-220	Water & Wastewater Treatment	3	0
MGT-349	Entrepreneurship	2	0
ES-216	Environmental Toxicology	2	0
ES-216L	Environmental Toxicology	0	1
ES-217	Basics of Environmental Pollution	3	0
ES-218	Applied Ecology	3	0
ES-219	Environmental Microbiology	3	0
IS-209L/IS-213L	Fehm-ul-Quran/ Social Ethics- II	0	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ES-304	Analytical Techniques in Environmental Science	2	0
ES-304L	Analytical Techniques in Environmental Science	0	1
ES-313	Research Methods in Environmental Science	3	0
CRP-302	Geographical Information Systems & Remote Sensing	2	0
CRP-302L	Geographical Information Systems & Remote Sensing	0	1
ES-314	Environmental Governance	3	0
ES-315	Climate Change	3	0
ES-316	Economic Aspects of Environmental Protection	2	0
HU-202	International Language (Chinese)	2	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ES-309	Environmental Management Systems	2	0
ES-309L	Environmental Management Systems	0	1
ES-317	Solid Waste Management	3	0
ES-399	Internship	3	0
ES-318	Energy and Environment Elective-I	3	0
Es-319	Hydrology and Water Pollution Elective-II	3	0
CRP-308	Climate Change Adaptation and Disaster Management	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ES-416	Air Pollution Elective-III	3	0
ES-417	Environmental Impact Assessment Elective-IV	3	0
ES-415	Biodiversity & Conservation	3	0
CSC-460	AI & Emerging Technologies in Environmental studies	2	0
CSC-460L	AI & Emerging Technologies in Environmental studies	0	1
ES-418	Sustainable Development	3	0
ES-496A	Capstone Project	0	1

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ES-419	Pollution Control Technologies Elective-V	3	0
ES-420	Natural Resource Management Elective-VI	3	0
ES-496B	Capstone Project	0	2
ES-421	Environmental Nanotechnology Elective-VII	3	0
ES-422	Occupational Health and Safety	3	0

1[1] The course code and course material has been requested from the Mining Engineering Department.

DEPARTMENT OF CHEMICAL ENGINEERING

Chairperson
Dr. Hafiz Muhammad Zaheer Aslam

Professor Emeritus
Dr. Shahid Naveed
Dr. Nadeem Feroze

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

Professors
Dr. Naveed Ramzan
Dr. Hafiz Muhammad Zaheer Aslam

Associate Professors
Dr. Muhammad Azam Saeed
Dr. Muhammad Faheem
Dr. Umair Aslam
Dr. Farhan Javed
Dr. Muhammad 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. Hirra Anjum
Dr. Farhan Ahmad

Lecturers
Ms. Sobia Anwar
Mr. Hafiz Muhammad Mudasser
Mr. Qazi Muhammad Omer

Adjunct Associate Professors
Dr. Salman Raza Naqvi

Mission
The mission of the Undergraduate program of the Department of Chemical Engineering encompasses three (3) key aspects:

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.

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.

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.

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
- Instrumentation and Control
- Mass Transfer
- Process/Wet Analysis
- Catalysis

The Environmental Engineering laboratory is equipped with state-of-the-art equipment including atomic absorption spectrophotometer (AAS), Fourier transform infrared spectrophotometer (FTIR), and ultraviolet (UV) spectrophotometer. The recently established Catalysis and Energy Research lab is equipped with gas chromatograph (GC), gas chromatograph for natural gas analysis (GC-NGA), Karl–Fisher titrator, bomb calorimeter, fluorescence spectrophotometer, high-pressure batch reactor, multizone tube furnace, high-precision weight balance, rotary evaporator, centrifuge, and multimeter for water analysis.

The Department has a computer center equipped with the 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 theses submitted in the past. Latest publications are regularly added to the collection to cope with modern research in the field.

B.Sc. Chemical Engineering

Year 1

Semester 1

Course No	Subject (Prerequisites)	Credit Hours	
		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	3	0
IS-104	Islamic Studies / Ethics (non-Muslim students)	2	0
MA-113	Calculus and Analytic Geometry	3	0
ME-125L	Engineering Drawing	0	1

Semester 2

Course No	Subject (Prerequisites)	Credit Hours	
		Th	Pr
ChE-108	Fluid Flow – I	3	0
ChE-109	Chemical Process Industries	2	1
CS-103	Introduction to Computer Programming for Data Science	2	1
IS-111	Pakistan Studies	2	0
MA-116	Linear Algebra and Differential Equations	3	0
ME-100L	Workshop Practice	0	1
PHY-113	Applied Physics	2	1

Year 2

Semester 3

Course No	Subject (Prerequisites)	Credit Hours	
		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

Semester 4

Course No	Subject (Prerequisites)	Credit Hours	
		Th	Pr
ChE-105L	Occupational Health and Safety	0	1
ChE-208	Fluid Flow – II	2	1
ChE-209	Process Heat Transfer	3	1
ChE-211	Separation Processes – I	3	0
HU-003	International Language	0	0
IS-109L / IS-212L	Fehm-e-Quran – I / Social Ethics – I (non-Muslim students)	0	1
IS-203	Ideology and Constitution of Pakistan	2	0
MA-242	Engineering Statistics	3	0

Year 3

Semester 5

Course No	Subject (Prerequisites)	Credit Hours	
		Th	Pr
ChE-301	Chemical Reaction Engineering	3	1
ChE-304	Chemical Engineering Thermodynamics – II	3	0
ChE-311	Engineering Materials	2	0
ChE-312	Unit Processes	2	1
IS-209L / IS-213L	Fehm-e-Quran – II / Social Ethics – II (non-Muslim students)	0	1
MA-240	Numerical Analysis	2	1
MGT-318	Entrepreneurship and Management	2	0

Semester 6

Course No	Subject (Prerequisites)	Credit Hours	
		Th	Pr
ChE-308	Energy Engineering	3	1
ChE-319	Chemical Engineering Mathematics	2	1
ChE-321	Chemical Process Design and Economics	3	1
ChE-322	Separation Processes – II	3	1
HU-212	Civics and Community Engagement	2	0

Year 4

Semester 7

Course No	Subject (Prerequisites)	Credit Hours	
		Th	Pr
ChE-318	Community / Research Project	0	0
ChE-404	Instrumentation and Control	3	1
ChE-406	Environmental Engineering	3	1
ChE-409	Chemical Process Equipment Design and Rating	3	0
ChE-414	Internship	0	0
ChE-432 to ChE-447	Elective – I	2	0
ChE-461	Final Year Project – I	0	3
MGT-103	Sociology for Engineering	2	0

Semester 8

Course No	Subject (Prerequisites)	Credit Hours	
		Th	Pr
ChE-401	Chemical Reactor Design	2	0
ChE-413	Transport Phenomena	3	0
ChE-421 to ChE-431	Elective – III	3	0
ChE-432 to ChE-447	Elective – II	2	0
ChE-462	Final Year Project – II	0	3
MGT-320	Project Management in Engineering	2	0

List of Elective Subjects

Course No	Subject (Prerequisites)	Credit Hours	
		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-433	Polymer Engineering	2	0
ChE-434	Petroleum Refinery	2	0
ChE-435	Food Engineering	2	0
ChE-436	Membrane Technology	2	0

Course No	Subject (Prerequisites)	Credit Hours	
		Th	Pr
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-442	Machine Learning in Chemical Engineering	2	0
ChE-443	Electrochemical Engineering	2	0
ChE-444	Textile Technology	2	0
ChE-445	Applications of Artificial Intelligence in Chemical Engineering	2	0
ChE-446	Generative AI in Chemical Engineering	2	0
ChE-447	Entrepreneurship in Small and Medium Chemical Enterprises	2	0

DEPARTMENT OF POLYMER ENGINEERING

Dean
Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Asif Ali Qaiser

Professors
Dr. Asif Ali Qaiser
Dr. Farhan Saeed
Dr. Atif Javaid

Associate Professors
Dr. Muhammad Sarfraz
Dr. Yasir Qayyum Gill
Dr. Rabia Nazar
Dr. Umer Mehmood

Assistant Professors
Dr. Muhammad Farooq
Dr. Muhammad Aamir Shehzad

Polymer Chair on Sustainability and Circularity
Head of Chair:
Dr. Muhammad Zeeshan

Research Associates:
Engr. Zumar Ahmad
Engr. Abdul Mabood Hassan Alvi

Lecturers
Engr. 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 defense applications. In Pakistan, the polymer industry is one of the fastest growing sectors comprising more than 10,000 SMEs with 600,000 - 700,000 direct employments and contributing to 15% of national GDP. This large industrial sector needs trained manpower and research support. Keeping this in view this, the undergraduate degree program in Polymer and Process Engineering was launched in 2002 under the Polymer Engineering Division of the 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 that Division into an independent degree awarding department in January 2006. Further to this development, MSc Polymer & Process Engineering was started in 2007 and PhD Polymer Science & Engineering in 2019. Polymer engineering graduates have the highest employability ratio with more than 90% of graduates find jobs in national and international organizations in first couple of months. Moreover, a good number of students also proceed abroad for their higher studies in well recognized universities.

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 in the industrial sectors of plastics processing, packaging, paints, composites, rubber and tyres, pipes and profiles, appliances, automotive parts, foams, defense industries. For further details, please visit Department of Polymer & Process Engineering – University of Engineering and Technology, Lahore (uet.edu.pk).

In 2026, Department formally inaugurated ***Chair on Polymer Sustainability and Circularity*** that brought together leaders from academia and industry. The Chair, first of its kind in Pakistan, established through a collaborative partnership with six (6) major industrial sponsors: Jilani Plastics, SPEL, IPAK, Minhas Pipes, TM Rubbers, and Pak Petrochemicals. These partners have committed funding and support to professorial leadership, research staff, and R&D activities focused on sustainable polymer science, plastics recycling, circular economy practices, and environmentally responsible manufacturing.

Programs being offered,

The Department offers following degree programs:

- B.Sc. Polymer Engineering
- M.Sc. Polymer and Process Engineering
- M. Phil Polymer Science and Technology
- Ph.D. Polymer Science and Engineering

Departments' Core Strengths

- A PEC Accredited (Level-II) program since 2002.
- 100% foreign qualified PhD faculty and state-of-the-art laboratories.
- Wider acceptance as a specialized degree for postgraduate study abroad
- Research oriented product development in Final Year Projects
- Well-established industrial liaison in terms of job placement and collaborative 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 extracurricular activities
- The Chair on Polymer Sustainability and Circularity sponsored by private polymer industries.

Program 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, thical, 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 an effective role in the polymer manufacturing industry and various research organizations in the 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.

State of the Art Laboratories and Other Facilities

The Departmental laboratories are divided into four categories:

1. Undergraduate Teaching Laboratories
2. Research Laboratories
3. Industrial Testing and Product Development
4. Process Engineering Laboratories

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 Laboratory

2. Research Laboratories

Electrochemical and Energy System Testing
Polymer Analysis & Characterization
Polymer Composites and Blends
Conducting Polymers and Membrane Research Laboratory

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

Industrial Based Projects

The faculty and students of Polymer Engineering are undertaking a number of Industrial Projects on Polymer Blends, Recycling of plastic packaging waste to generate plastic grades for packaging, Recycling of Polyethylene-Aluminum for various potential applications, Development of Bioplastic based Nanocomposites through thermal processing for Packaging Industry, Development of a recycled blend from Barrel Wash material and methods for minimizing the barrel wash

wastage, ABS waste valorization through additive-based melt processing for sustainable automotive applications, Effect of Regrind Polyethylene Terephthalate addition on the Transparency and Optical Properties of 19-Liter Polyethylene Terephthalate Bottles for the cumulative worth of more than 25 million. The funding industries include SPEL, Pak petrochemical Ltd, Packages Ltd and Tri-Pak Films Ltd.

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, more than 80% to its 3rd year students and many juniors, as well.

Students Financial Aid/Scholarships

The department offers several need-cum-merit based scholarships in collaboration with polymer industry to the eligible students so each student can continue his/her study free of financial worries. 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:

- Defense related industries (NESOM, KRL, PAEC, SUPARCO)
- Polymer producing companies such as PVC, PET, and other resins
- Polymer packaging industries-flexible packaging
- Plastic products industry (Injection molders)
- Plastic (PVC, PPRC, HDPE,PP.) pipe and profile making industries
- Foams, paints, and flexible films industries
- Elastomers, tyres etc.
- Appliances and Automotives
- Polymer and additives, compounding and marketing industry
- Composite and Sports industry

The reception by the industry to our graduates in the past years has been remarkable and the demand is ever-growing.

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

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PPE-107	Engineering Materials	3	0
HU-111	Communicational Skills	3	0
CSC-100 & CSC-100L	Application of Information and Communication	2	1
CY-161 & CY-106L	Polymer Chemistry-I	2	1
MA-113	Calculus & Analytical Geometry	3	0
IS-104/HU-101	Islamic and Pakistan Studies I /Ethics and Pakistan Studies-I	2	0
IS-109/IS-212L	Fehm-e-Qur'ān-I/ Social Ethics-I	1	0

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PPE-108 & PPE-108L	Fundamentals of Polymer Engineering	3	1
PPE-109	Industrial Stoichiometry	3	0
HU-102	Functional English	3	0
MATH-302	Vector and Tensor Analysis	3	0
ME 100L	Workshop Practice	0	1
CS103 & CS103L	Introduction of Computer Programming for Data Science	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PPE-219 & PPE-219L	Fluid Flow	2	1
PPE-208 & PPE-208L	Polymer Structures & Synthesis	3	1
PPE-217	Polymer & Petrochemical Industries	3	0
PPE-210	Thermodynamics	3	0
MA-228	Differential Equations	3	0
IS-209/IS-213L	Fehm-e-Qur'ān-II/Social Ethics-II	1	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PPE-211 & PPE-211L	Heat Transfer	3	1
MA-242	Engineering Statistics	3	0
PPE-213 & PPE-213L	Polymer Processing Operations	3	1
PPE-218	Engineering Economics	2	0
PPE-219L	Occupational Health and Safety	0	1
IS-203	Ideology and Construction of Pakistan	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PPE-324 & PPE-324L	Mass Transfer	3	1
PPE-314	Mechanical Properties of Polymers	3	0
PPE-315 & PPE-315L	Polymer Reaction Engineering	3	1
PPE-316	Polymer Compounding & Blending	3	0
PPE-317	Transport Phenomena	3	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PPE-318 & PPE-318L	Polymer Analysis & Characterization	3	1
PPE-319 & PPE-319L	Instrumentation & Control	3	1
PPE-320	Polymer Composites	3	0
PPE-321 & PPE-321L	Polymer Rheology	3	1
PPE-323	Total Quality Management	2	0
HU-212	Civics and Community Engagement	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PPE-433	Final Year Design Project-I	0	3
PPE-413 & PPE-413L	Process Plant Design	3	1
PPE-4XX	Elective-I	3	0
PPE-4XX	Elective-II	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
PPE-414	Polymer Product Design	3	0
PPE-415 & PPE-415L	Polymer Processing Design & Simulation	3	1
PPE-419	Entrepreneurial Management	2	0
PPE-434	Final Year Design Project-II	0	3
PPE-4XX	Elective-III	3	0
HU-003	International Language	0	0

Departmental Electives – 9 Credit Hours

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

DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING

Dean
Prof. Dr. Khalid Farooq (Acting)

Chairman
Prof. Dr. Muhammad Asif Rafiq

Professor
Dr.-Ing. Furqan Ahmed

Associate Professors
Dr. Ehsan Ul Haq
Dr. Adnan Maqbool

Assistant Professors
Dr.-Ing. Muhammad Zubair
Dr.-Ing. Khushnuda Nur
Dr.-Ing. Amjad Ali

Lecturers
Dr. Syed Farrukh Alam Zaidi

IPFP Fellow
Dr. Waseem Shehzad

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 170.

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

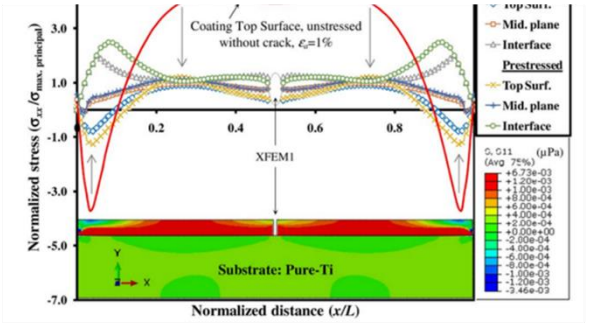
The courses have been designed to produce graduates with strong understanding of science and engineering concepts of both metals and modern materials. The part of metallurgy covers courses ranging from relevant concepts of extractive, industrial, physical, mechanical metallurgy to the science and design of different modern metals and alloys used in engineering applications. Special emphasis is made on foundry & 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.

Programs of Study

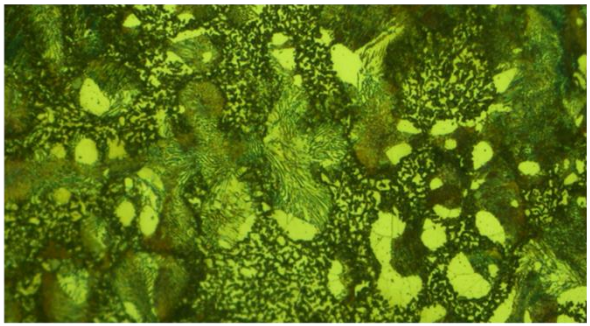
a) B.Sc. Metallurgical and Materials Engineering
b) B.Sc. Materials Science
c) M.Sc. Metallurgical and Materials Engineering
d) M.Sc. Materials Science
e) Ph.D. Metallurgical Engineering

Highlights of industry-academia co-operation and research activities

Simulation of mechanical response of diamond coated Ti and Ti-6Al-4V



Microstructure of Gray Cast Iron



MME participation in the ISAM 2023

Undergrads Shine Nationally: Multiple Wins in Diverse Competitions!

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 & materials 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
- Physical Metallurgy
- 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 modelling, 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. Materials Science Program

This program provides a fundamental understanding of material structure, properties, and applications, cultivating essential skills in characterization, analysis, and processing, with a strong focus on sustainability and interdisciplinary approaches. Utilizing interactive learning and computational methods, students can develop robust problem-solving and analytical abilities, preparing them for diverse careers in academia, research & development, and industries like aerospace, automotive, electronics, biomedical, energy etc. While our established "Metallurgical and Materials Engineering" program offers a strong foundation in the engineering and science of a broad range of materials with an emphasis on practical applications, the B.Sc. in Materials Science provides a distinct, more fundamentally science-driven, and interdisciplinary exploration of the field.

The B.Sc. in Materials Science also offers broader admission criteria compared to our Metallurgical and Materials Engineering program. While the latter primarily admits students with F.Sc. pre-engineering qualifications (with some exceptions like relevant DAE seats), the new program welcomes all students who have completed their intermediate or equivalent education in Science, including those with backgrounds in F.Sc. Pre-engineering, F.Sc. Pre-medical, computer science, and more.

B.Sc. Metallurgical and Materials Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-114	Applied Physics	2	1
EE-197	Basic Electrical and Electronics Engineering	2	1
IS-104	Islamic Studies / Ethics	2	0
MME-101	Introduction to Metallurgy and Materials	3	1
MME-107	Application of Information and Communication Technologies	2	1
MA-111	Applied Mathematics-I	3	0
HU-003	International Language	0	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-111	Pakistan Studies	2	0
HU-111	Communication Skills	3	0
ME-125L	Engineering Drawing	0	1
CY-151	Material Chemistry-I	2	1
ME-100L	Workshop Practice	0	1
MA-112	Applied Mathematics-II	3	0
IS-109L/212L	Fehm-e-Quran-I/Social Ethics-I	0	1
CS-103	Introduction of computer programming for data science	2	1
MME-105L	Occupational Health and safety	0	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MME-206	Mechanics of Materials	2	0
MA-240	Numerical Analysis	2	1
IS202	Ideology and Constitution of Pakistan	2	0
MME-202	Applied Thermodynamics	3	0
HU-200	Technical Report Writing	3	0
MGT-XXX	Social Science Electives	2	0
MME-208	Polymeric Materials	2	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MME-213	Extractive Metallurgy	2	0
MME-217a	Physical Metallurgy	3	1
MME-219	Inspection and Testing of Materials	3	1
MA-242	Engineering Statistics	3	0
HU-212	Civics and Community Engagement	2	0
IS-209L/213L	Fehm-e-Quran-II/Social Ethics-II	0	1
MME-209	Electrical and Magnetic Materials	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MME-312a	Ceramic Materials	3	1
MME-329	Mechanical Behavior of Engineering Materials (MME-219)	3	0
MME-313	Foundry Engineering	3	1
MME-317	Entrepreneurship	2	0
MME-305	Welding and Joining of Materials	3	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MME-310a	Characterization of Engineering Materials	3	0
MME-327a	Heat Treatment and Phase Transformation (MME-217a)	2	1
MME-309a	Computational Methods in Materials Engineering	1	2
MME-316	Corrosion and Corrosion Control	3	1
MME-323	Iron and Steel Making Processes (MME-213)	3	0
MME-306a	Industrial and Financial management	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MME-423a	Solidification of Metals and Alloys (MME-313)	2	0
MME-422b	Advanced Ceramics (MME-312a)	3	0
MME-417	Internship	0	0
MME-429	Metal Working and Removal Processes (MME-329)	3	0
MME-XXX	Engineering Elective 01	2	0
MME-XXX	Engineering Elective 02	2	0
MME-424	Final Project-I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MME-403a	Composite Materials	2	0
MME-XXX	Engineering Elective 03	2	0
MME-XXX	Engineering Elective 04	2	0
MME-XXX	Engineering Elective 05	2	0
MME-XXX	Engineering Elective 06	2	0
MME-XXX	Engineering Elective 07	2	0
MME-425	Final Project-II (MME-424)	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-418 Powder Metallurgy 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-419 Construction and Building 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)

B.Sc. Materials Science

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-114	Applied Physics	2	1
IS-104	Islamic Studies/ Ethics	2	0
HU-102	Functional English	3	0
MAT-111	Introduction to Materials Science	3	0
MME-107	Application of Information and Communication Technologies	2	1
MA-154	Quantitative Reasoning-I	3	0
IS-109L/212L	Fehm-e-Quran-I/Social Ethics-I	0	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-111	Pakistan Studies	2	0
HU-003	International Language	0	0
CY-151	Material Chemistry-I	2	1
MAT-112	Physics of Materials	3	1
HU-111	Communication Skills	3	0
MA-259	Quantitative Reasoning-II	3	0
CS-103	Introduction of computer programming for data science	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IS-203	Ideology and Constitution of Pakistan	2	0
MAT-216	Materials Thermodynamics	3	0
HU-212	Civics and Community Engagement	2	0
MAT-211	Occupational Safety Management	2	1
MAT212	Polymer Science	3	1
HU-XXX/MGT-XXX	Humanities Electives - I	2	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MAT-213	Solid State Phase Transformations	3	1
MAT-214	Computational Materials Science	1	2
MAT-215	Mechanical Properties of Materials	3	0
HU-XXX/MGT-XXX	Humanities Electives – II (Humanities Electives – I)	2	0
IS-209L/213L	Fehm-e-Quran-II/Social Ethics-II	0	1
MME-209	Electrical and Magnetic Materials	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MAT-311	Ceramics and Glasses	3	1
MAT-312	Materials Characterization (MAT-112)	3	0
MAT-313	Theory of Solidification	3	0
MME-317	Entrepreneurship	2	0
MAT-314	Corrosion Science	3	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MAT-315	Science of Nanomaterials	3	0
MAT-316	Surface Chemistry (MAT-314)	3	0
MAT-310	Machine Learning in Materials Science (CS-103)	2	1
MAT-317	Financial Management	3	0
MAT-318	Chemistry of Metal Extraction (MAT-216)	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MAT-411	Materials for Energy Conversion	3	0
MAT-421	Advanced Ceramics (MAT-311)	3	0
MAT-415	Internship	0	3
MAT Elective-1	Elective 01	2	0
MAT Elective-2	Elective 02	2	0
MAT Elective -3	Elective 03	2	0
MAT-403	Composite Materials	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MAT Elective-4	Elective 04	2	0
MAT Elective-5	Elective 05	2	0
MAT Elective-6	Elective 06	2	0
MAT Elective-7	Elective 07	2	0
MAT Elective-8	Elective 08	2	0
MAT Elective-9	Elective 09	2	0
MAT-410	Capstone Project	0	3

Engineering Electives:

MAT-401 Nuclear Science 2(2, 0)
MAT-402 Biomaterials Science 2(2, 0)
MAT-404 Materials for Optoelectronics 2(2, 0)
MAT-405 Vacuum Science 2(2, 0)
MAT-406 Smart Materials 2(2, 0)
MME-410 High Temperature Materials 2(2,0)
MAT-407 Thin film Science 2(2, 0)
MAT-408 Science of Geopolymers 2(2, 0)
MME-414 Functional Materials 2(2,0)
MAT-409 Interface of Materials 2(2, 0)
MAT-413 Metamaterials 2(2, 0)
MAT-414 Textile Materials 2(2, 0)
MAT-412 Quantum Materials 2(2, 0)

DEPARTMENT OF MINING ENGINEERING

Dean

Prof. Dr. Khalid Farooq

Chairman
Prof. Dr. Zulfiqar Ali

Professor
Dr. Zulfiqar Ali
Dr. Yasir Majeed

Associate Professors
Dr. Shahab Saqib

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

Teaching Fellow
Dr. Muhammad Kamran

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
- M.Sc. Mineral Processing
- Ph.D. Mining Engineering
- Ph.D. Mineral Processing

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

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MA-113	Calculus & Analytic Geometry	3	0
ME-125L	Engineering Drawing	0	1
Min-E-100	Geology	3	1
CSC-100	Applications of ICT	2	1
ME-100L	Workshop Practice	0	1
IS-104	Islamic Studies	2	1
HU-111	Communication Skills	3	0
IS-109L / 212L	Fehm-e-Quran / Ethics-I	0	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CS-103	Introduction of Computer Programming for Data Sciences	2	1
EE-197	Basic Electrical and Electronics Engineering	2	1
CY-144	Physical and Industrial Chemistry	2	1
#	Social Science-Elective	2	1
Min-E-122	Stratigraphy and Structural Geology	2	1
Min-E-121	Mining Engineering Fundamentals	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MA-228	Differential Equations	3	0
MA-236	Engineering Mechanics	2	1
CSC-250	Application of Artificial Intelligence	2	1
ME-201	Applied Thermodynamics	2	1
IS-111	Pakistan Studies	2	0
Min-E-241	Surveying	3	2

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MA-234	Linear Algebra	3	0
MA-242	Engineering Statistics	3	0
ME-202	Mechanics of Materials	2	1
HU-200	Technical Writing Report	3	0
CE-231	Fluid Mechanics-I	3	1
IS-203	Ideology and Constitution of Pakistan	2	0
HU-003	International Language	0	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
Min-E-350	Rock Mechanics	3	1
Min-E-354	Mineral Exploration & Reserves Estimation	3	1
MA-346	Numerical Methods	3	0
Min-E-353	Mine Ventilation	3	1
Geo-E-353	Introduction to GIS and Remote Sensing	2	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
Min-E-352	Mine Power Drainage & Material Handling	3	1
Min-E-365	Underground Mine Design	3	0
Min-E-366	Surface Mine Design	3	0
Min-E-364	Drilling and Blasting	3	1
Min_E-472	Mineral Processing	3	1
Min-E-367-L	Mine Design Lab	0	1

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
$	Technical Elective-Breadth	3	0
MGT-349	Entrepreneurship	2	0
Min-E-470	Tunnelling and Excavation Engineering	3	1
Min-E-474	Environmental Management in Mining	2	0
HU-212	Civics and Community Engagement	2	0
Min-E-479	Final Year Design Project -I	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
Min-E-484	Mine Hazards, Safety and Health Management	3	0
Min-E-487L	Occupational Health & Safety	0	1
£	Technical Elective-Depth	3	0
		2	1
Min-E-483	Mining Law	1	0
Min-E-489	Final Year Design Project-II	0	3
MGT-320	Project Management in Engineering	2	0

1. Note: An internship of six to eight weeks after completion of 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 Sciences Electives:

Proposed		
Social Sciences 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

$ Technical Electives Breadth

Proposed		
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-441	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	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

Proposed		
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-423	Flotation and Hydrometallurgy	2+1
Min-E-424	Extractive Metallurgy	2+1
Min-E-431	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. Khalid Farooq

Chairman
Prof. Dr. Muhammad Farooq Ahmed

Associate Professor
Dr. Muhammad Arshad
Dr. Ghulam Mohyuddin Sohail
Dr. Hafiz Muhammad Awais Rashid

Assistant Professors
Dr. Sadia Ismail

Lecturers
Mr. Ahsan Mehmood
Ms. Maryum Zameer Khan

Teaching Fellow
Ms. Iqra Hassan

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
- B.Sc. Remote Sensing and GIS

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, HDIP, NURICON, Punjab Mineral Company, etc., also offer internships and job

Collaboration with International Universities

The Department of Geological Engineering is actively collaborating with Northeast Petroleum University, China, and Saitama University, Japan. These academic and research partnerships focus on promoting joint research initiatives and facilitating the exchange of faculty and students. The collaboration involves close coordination with the Department of Earth Science at Northeast Petroleum University and the Department of Civil and Environmental Engineering at Saitama University, aiming to strengthen research capacity, enhance academic excellence, and foster international engagement.

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)	Credit Hours Th	Credit Hours Pr
CSC-100	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-110	Physical Geology	3	1
IS-109	Fehm – e – Quran I	0	1
ME-100L	Workshop Practice	0	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours 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
HU-111	Communication Skills	3	0
IS -104	Islamic studies	2	0
Geo-E-122L	Engineering Drawing and Graphics	0	2
CS-103	Introduction to Computer Programming for Data Science	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU-200	Technical Report Writing	3	0
MA-236	Engineering Mechanics	2	0
MA-242	Engineering Statistics	3	0
Geo-E-232	Occupational Health and Safety	1	0
Geo-E-231	Mineralogy and Petrology	2	1
HU-212	Civics and Community Engagement	2	0
IS-209	Fehm – e – Quran II	0	1
IS -203	Ideology and Constitution of Pakistan	2	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours 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)	Credit Hours Th	Credit Hours 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

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
Min-E-350	Rock Mechanics	3	1
Geo-E-357	Earthquake Seismology and Risk Assessment	2	1
Geo-E-365	Explosive Engineering and Construction Blasting	3	0
Geo-E-364	Introduction to Geophysical Exploration Techniques	2	1
MGT-349	Entrepreneurship	2	0
IME-371	Engineering Economics	2	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours 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

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours 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		
Geotechnical and Rock Engineering (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*)
Statistical Methods in Geology and Engineering (*Geo-E-476*)	Resource Engineering (*Geo-E-496*)	Exploration and Environmental Geochemistry (*Geo-E-478*)

MAJOR ELECTIVE – 2		
Geotechnical and RockEngineering (GRE)	**Natural Energy ResourceExploration (NERE)**	**Geo-Environmental Engineering (GEE)**
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*)
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		
Geotechnical and Rock Engineering (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*)
Geomorphology and Terrain Analysis (*Geo-E-484*)	Petrogenesis and Metallogenesis (*Geo-E-486*)	Site RemediationEngineering (*Geo-E-487*)

MAJOR ELECTIVE – 4		
Geotechnical and RockEngineering (GRE)	**Natural Energy ResourceExploration (NERE)**	**Geo-Environmental Engineering (GEE)**
Pavement and FoundationEngineering (*Geo-E-481*)	Production Engineering (*Geo-E-488*)	Environmental Data Analysis (*Geo-E-489*)
Analysis of Rock Structures (*Geo-E-491*)	Carbonate Sedimentology (*Geo-E-492*)	Recycling and Sustainable Engineering (*Geo-E-493*)

BS REMOTE SENSING AND GIS (new Program)

Introduction

The Bachelor of Science (BS) in Remote Sensing and Geographic Information Systems (GIS) is a cutting-edge degree program designed to equip students with advanced geospatial skills for analyzing, interpreting, and managing Earth's resources and environment. This program, offered under the Geological Engineering Department integrates GIS, remote sensing, spatial data analysis, and geological applications to address real-world challenges in environmental management, urban planning, geohazards and disaster mitigation, and natural resource exploration. Students will gain hands-on experience with industry-standard software, satellite imagery, drone mapping, and geodatabase management, preparing them for careers in government agencies, urban planning, mining and civil engineering organizations, environmental consulting, and relevant research institutions. By combining theoretical knowledge with fieldwork and research, the program fosters innovation and sustainability, empowering graduates to contribute to smart decision-making and geospatial advancements in a rapidly evolving technological landscape to solve real-world challenges, contribute to sustainable development, and support decision-making in both public and private sectors

Program Mission Remote Sensing and GIS

The mission of the BS in Remote Sensing and GIS program is to provide students with comprehensive knowledge, software skills, and practical expertise in Remote Sensing (RS) and Geographic Information Systems (GIS), and their applications in earth sciences and engineering, environmental management, urban planning, geohazards and disaster mitigation, and natural resource assessment. The program aims to produce highly skilled professionals capable of leveraging geospatial technologies to solve real-world challenges, contribute to sustainable development, and support decision-making in both public and private sectors

Program Education Objectives (PEOs) for B.Sc. Remote Sensing and GIS

PEO-01: Equip students with strong foundational knowledge and hands-on experience in spatial analysis, cartography, and geodatabase management using industry-standard software (e.g., ArcGIS, QGIS, ERDAS Imagine, ENVI).

PEO-02: Enhance the ability to apply GIS and RS techniques in earth sciences and engineering, mineral exploration, hazard mapping, hydrogeology, urban and land-use planning.

PEO-03: Analyze spatial data, interpret satellite/aerial imagery, and develop geospatial models for environmental applications.

PEO-04: Instill an understanding of how GIS and RS contribute to climate resilience, disaster management, and natural resource conservation.

B.Sc. REMOTE SENSING AND GIS

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MA-154	Quantitative Reasoning-I	3	0
GE-RS-111	Introduction to Earth Sciences	3	1
GE-RS-112	Introduction to Geography and Geodesy	3	0
HU-102	Functional English	3	0
CSC-100	Application of Information and Communication Technologies	2	1
IS-109	Fehm – e – Quran I	0	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-117	Applied Physics	2	1
MA-259	Quantitative Reasoning-II	3	0
GE-RS-121	Introduction to Geographic Information System	2	1
CS-101	Computing Fundamentals	2	1
IS -104	Islamic Studies	2	0
GE-RS-122	Map Work and Projections	2	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
GE-RS-231	Cartographic Techniques	2	1
GE-RS-232	Geomorphic Process	3	0
GE-RS-233	Introduction to Remote Sensing	2	1
IS -203	Ideology and Constitution of Pakistan	2	0
HU-212	Civics and Community Engagement	2	0
IS-209	Fehm-e-Quran II	0	1
GE-RS-234	Land Surveying	3	1

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
GE-RS-241	Application of GIS and Remote Sensing	2	1
MA-256	Probability and Statistical Processes	3	0
HU-200	Technical Report Writing	3	0
CY-201	Environmental Sciences	3	0
HU-003	International Language	0	0
GE-RS-242	Geohazards	3	0
GE-RS-243	Fundamentals of Digital Image Processing	3	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
GE-RS-351	Drone mapping and Photogrammetry	2	1
GE-RS-352	Remote Sensing and Space Laws	3	0
CS-355	Data Mining	3	0
GE-RS-353	Microwave and Hyperspectral RS	3	0
GE-RS-354	Spatial Database Management System	3	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
GE-RS-361	GIS Programming and Coding	3	1
GE-RS-362	Digital Terrain Modeling and Topographic Mapping	3	0
MGT-349	Entrepreneurship	2	0
HU-214/ MGT-105	Psychology / Introduction to Economics	2	0
GE-RS-xxx	Major Elective I	3	0
GE-RS-xxx	Major Elective II	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
GE-RS-xxx	Major Elective III	2	1
GE-RS-xxx	Major Elective IV	3	0
GE-RS-471	Spatial Data Modeling	3	0
CRP-309	Research Methods	2	1
GE-RS-472	Application of GIS in Urban Planning	3	0
GE-RS-478	Internship / Field Experience	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
GE-RS-xxx	Major Elective-V	3	0
GE-RS-xxx	Major Elective-VI	2	1
GE-RS-481	Climate Change and Global Warming	2	0
GE-RS-482	Web GIS	2	1
MCT-404	Professional Ethics	2	0
GE-RS-499	Capstone Project	0	3

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 – I		
GE-RS-363	GIS for Forest and Biodiversity Conservation	(3, 0)
GE-RS-364	GIS in Mineral Exploration	(3, 0)
GE-RS-365	GIS for Hydrocarbon Exploration	(3, 0)

MAJOR ELECTIVE – II		
GE-RS-366	Geospatial Time Series Analysis	(3, 0)
GE-RS-367	Spatial Network Analysis and Modeling	(3, 0)
GE-RS-368	Precision Agriculture and Geospatial Technologies	(3, 0)

MAJOR ELECTIVE – III		
GE-RS-473	Application of GIS in Hydrology	(2, 1)
GE-RS-474	Natural Resource Management	(2, 1)
GE-RS-475	Land use and Land Cover Change Analysis	(2, 1)

MAJOR ELECTIVE – IV		
GE-RS-476	Advanced Digital Image Processing	(3, 0)
CS-464	Machine Learning	(3, 0)
GE-RS-477	AI and Deep learning in GIS	(3, 0)

MAJOR ELECTIVE – V		
CMPE-462	Cloud Computing and Big Data Analysis	(3, 0)
GE-RS-483	Advanced Spatial Data Modeling	(3, 0)
GE-RS-484	Database Management System	(3, 0)

MAJOR ELECTIVE – VI		
CRP-308	Climate Change Adaptation and Disaster Management	(3, 0)
GE-RS-485	Geospatial Project Management	(3, 0)
GE-RS-486	Remote Sensing for Hazard Assessment and Monitoring	(3, 0)

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
Dr. Muhammad Kashif Ali

Lecturers
Mr. Muhammad Rizwan Latif
Dr. 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)	Credit Hours	
		Th	Pr.
Pet. E-101	Fundamentals of Petroleum Engineering	3	0
Pet. E-102	Petroleum Geology & Geophysics	3	0
CSC-100	Applications of Information and Communication Technologies	2	1
HU-111	Communication Skills	3	0
IS-104	Islamic Studies	2	0
MA-123	Calculus	3	0
ME-120L	Engineering Drawing & Graphics	0	1

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr.
Pet. E-104	Geo-Energy Resources	3	0
CS-103	Introduction to Computer Programming for Data Science	2	1
XXXXXX	Elective-I*	2	1
IS-109L/ HU-212L	Fehm-e-Quran-I/ Ethics-I	0	1
IS-111	Pakistan Studies	2	0
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)	Credit Hours	
		Th	Pr.
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-221	Technical Writing & Presentation Skills	3	0
IS-203	Ideology and Constitution of Pakistan	2	0
IS-209L/ HU-213L	Fehm-e-Quran-II/ Ethics-II	0	1
MA-225	Differential Equations and Transforms	3	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr.
Pet. E-203	Petrophysics	2	1
Pet. E-210L	Occupational Health and Safety	0	1
CE-233	Fluid Mechanics	2	1
Ch. E-253	Applied Thermodynamics	2	1
HU-212	Civics and Community Engagement	2	0
MGT-210	Organizational Psychology	3	0
MA-240	Numerical Analysis	2	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr.
Pet. E-310	Reservoir Geomechanics	2	0
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

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		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
XXXXXX	Elective -II*	3/ 2	0/ 1

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		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)	Credit Hours	
		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
Pet. E–499	Final Year Project (Phase-II) (Pet. E–498)	0	3

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

Elective I
CY-171 Petroleum Chemistry
Min-E-101 Applied Geology

*** One subject will be offered**

Elective II:
Pet. E-302 Unconventional Resources
Pet. E-303 Well Completion
Pet. E-304 Offshore Field Development
Pet. E-305 Principles of Corrosion Control
Pet. E-308 Energy Storage
Ch. E-352 Chemical Technology of Petroleum
Ch. E-361 Instrumentation and Control
Min-E-359 Surveying & Levelling

DEPARTMENT OF ARCHITECTURE

Dean
Prof. Dr. Shahid Rafique

Chairperson
Dr. Munazzah Akhtar

Professor Emeritus
Dr. Neelam Naz

Associate Professors
Dr. Munazzah Akhtar
Ar. Quratulain Asghar

Assistant Professors
Dr. Malik Usman Mehmood Awan
Dr. Mamuna Iqbal
Dr. Sarah J. Shah
Dr. Fatima Javeed
Dr. Maryam Siddiq
Ar. Madiha Zaman
Ar. Qudsia Asif

Lecturer
Ar. Hina Nabeel
Ar. Afnan Ahmed

The Department of Architecture has a history spanning over more than 60 years. Established in 1962, it is notable for providing Pakistan's first professional five-year architecture degree program (B.Arch). As a result, the Department has played a key role in the development and creation of the architectural profession in the nation. With about 1,700 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 specialized courses it offers. In the same vein, the new professional degree of Bachelor's in interior design (BID) was introduced in the Fall of 2025, along with the specializations offered in its Master's and Ph.D. programs.

The programmes offered in the department are listed as below:

- Bachelor of Architecture (B.Arch)
- Bachelor of Interior Design (BID)
- Master of Architecture (M.Arch)
- PhD in Architecture

Bachelor Degree Program in Architecture (B.Arch)

The B.Arch program is a five-year course of study that culminates in a professional degree in Architecture. Graduates of this program meet all licensing requirements of the Pakistan Council of Architects and Town Planners (PCATP) and, upon registration, are eligible to practice architecture throughout Pakistan.

This program is highly demanding and is recommended only for students who are prepared to commit to long hours of study. A significant portion of the curriculum involves fieldwork, requiring students to visit construction sites, conduct field surveys, and participate in study tours outside the city. Additionally, the B.Arch degree requires 6-8 weeks of internship at a professional establishment, typically completed during summer vacations.

B.Arch Program Objectives

The Bachelor of Architecture (B.Arch) degree program offers a comprehensive introduction to the field of architecture, aiming to produce well-rounded individuals capable of leading efforts to create a healthier society. Students develop a critical and ethical understanding of architecture, addressing many of today's most pressing societal challenges. The program equips students for careers in various design fields and related disciplines and serves as a foundation for those pursuing a Master of Architecture degree. The curriculum includes courses in Basic Design, Architectural Design, History of Architecture, Materials and Construction, Physical Environmental Studies, Structural Systems, Theory of Architecture, Interior Design, Landscape Architecture, Research Methodology, and more. The first year introduces the fundamentals, followed by advanced studies where students design projects of different typologies. This approach helps students integrate various aspects such as function, form, structure, techniques, context, and culture, fostering a holistic design perspective.

The Department of Architecture provides a pleasant and intimate working environment. Students spend a significant amount of time in design studios, which, along with the low student intake, promotes high interaction levels between students and faculty. The spacious internal courtyard serves as a social space for design and drawing activities, enhancing student interactions. The departmental pedagogy emphasizes that university education should extend beyond professional training to broaden intellectual horizons and produce enlightened, progressive members of society. Teaching practices aim to achieve these objectives by providing a solid knowledge base through the formal curriculum and a rich social and intellectual environment maintained through informal and co-curricular activities. Students are encouraged to participate in national and provincial activities under the patronage of the Pakistan Council of Architects and Planners (PCATP) and the Institute of Architects of Pakistan (IAP).

Bachelor Degree Program in Interior Design (BID)

BID 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 weeks internship at a professional organization during the summer months.

BID 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

The built environment significantly influences and facilitates quality education. The Department of Architecture features well-furnished design studios, lecture theatres, a library, and well-equipped computer and physical environmental studies labs. The department's library is well-stocked with many books and magazines covering topics such as Basic Design, Architectural Design, History of Architecture, Building Construction, Physical Environmental Studies, Theory of Architecture, Urban Planning & Design, Research Methodology, Landscape Architecture, Interior Design, and more. Additionally, a separate section contains B.Arch and M.Arch theses on a variety of topics, providing valuable research resources for students.

BACHELOR OF ARCHITECTURE (B.ARCH)

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		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)	Credit Hours	
		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)	Credit Hours	
		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)	Credit Hours	
		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)	Credit Hours	
		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)	Credit Hours	
		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)	Credit Hours	
		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)	Credit Hours	
		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)	Credit Hours	
		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)	Credit Hours	
		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

Architecture Electives			
		Cr. Hrs Th	Cr. Hrs. Pr
	Pool of Courses for Elective: I, II & V		
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:560L	Architectural Photography	0	3
Arch:561L	Digital Design Studio	0	3
Arch:562L	Architecture and Digital Fabrication	0	3
Arch:563L	Digital Tools in Heritage	0	3
	Pool of Courses for Elective: III, IV & VI		
Arch:380	Environmental Psychology	3	0
Arch:381	History of European Architecture	3	0
Arch:382	History of Islamic Architecture	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:480	Architecture in Pakistan	3	0
Arch:481	Entrepreneurship in Architecture	3	0
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

Interdisciplinary Electives Pool for B.Arch* (UET Courses from other Departments & Programs)			
		Cr. Hrs Th	Cr. Hrs. Pr
CRP-308	Climate Change Adaptation & Disaster management	2	0
CE-101A	Engineering Surveying	2	1
SE- 221	Introduction to Human Computer Interaction	2	1
IME:253	Work, Study and Ergonomics	2	1
BUS 131	Principles of Management	3	0
TE-141	Introduction to Transportation Engineering	3	0
PID:317	Graphics Design	1	2
PID:403	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
CSC319	Computer Graphics	3	0
CSC393	Game Programming	3	0
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
PPE-422	Nanotechnology	2	1
* Courses offered under Interdisciplinary Electives will be selected by the Department from this pool			

BACHELOR IN INTERIOR DESIGN (BID)

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
ID:100L	Foundation Studio – I	0	6
ID:130L	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	Credit Hours Pr
ID:110L	Foundation Studio – II	0	6
ID:150	Spatial Perception: Light & Colour	2	0
ID:131L	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	Credit Hours Pr
ID:200L	Interior Design Studio – I	0	6
ID:250	History of Interior Design	2	0
ID:220	Materiality in Interior Environments	1	1
ID:230L	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	Credit Hours Pr
ID:210L	Interior Design Studio – II	0	6
ID:231L	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	Credit Hours Pr
ID:300L	Interior Design Studio – III	0	6
ID:320	Interior Lighting & Acoustics	2	1
ID:350	Indoor Landscaping	1	1
ID:ABC	Elective - II	3	
QT-301	Translation of the Holy Quran– III	1	0
DD ABC	Interdisciplinary Elective – I	3	

Summer Internship

ID:330L	Internship		0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
ID:310L	Interior Design Studio – IV	0	6
ID:321L	Working Set	0	2
ID:ABC	Elective - III	3	
HU-200	Technical Report Writing	3	0
DD ABC	Interdisciplinary Elective – II	3	

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
ID:400L	Interior Design Studio – V	0	6
ID:401	Design Research Strategies	2	1
ID:450	Interior Urbanism	2	1
QT-401	Translation of the Holy Quran– IV	1	0
DD ABC	Interdisciplinary Elective – III	2	1

Semester 8

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

Interior Design Electives			
		Cr. Hrs Th	Cr. Hrs. Pr
	Pool of Courses for Elective: I		
ID:170	Interior Architecture in Pakistan	2	0
ID:171	Contemporary Issues in Design	2	0
ID:270	History of Design in Non-western Cultures	2	0
ID:271	History of Design in Western Cultures	2	0
ID:272	Futuristic Interiors	2	0
ID:273	Evolving Issues in Interior Design	2	0
	Pool of Courses for Elective: II & III		
ID:370	Interior Architectural Design for Adaptive Reuse	1	2
ID:371L	Designed Objects for Interiors - Studio	0	3
ID:372	Thermal Design for Interior Environments	2	1
ID:373	Scenography	1	2
ID:374	Photography for Architectural Interiors	0	3
ID:375L	Prototyping for Furniture	0	3
ID:376	Sustainability in Interior Design	1	2
ID:377	Hospitality Design Seminar	1	2
ID:378	Building Systems and Services	2	1

Interdisciplinary Electives Pool for BID* (UET Courses from other Departments & Programs)				
			Cr. Hrs Th	Cr. Hrs. Pr
Arch:321	Building Services	Functional Integration	2	1
Arch:360L	Immersive Technologies Studio	Experiential Design	0	3
Arch:361L	Introduction to Grasshopper	Product Design	0	3
Arch:362L	BIM Scripting	Workflow Automation + Product Design	0	3
Arch:363L	Architectonics	Model Making	0	3
Arch:380	Environmental Psychology	Human Behavior	3	0
Arch:443	Climate Change and the Built Environment	Indoor Comfort	3	0
Arch:450	Intelligent System Design	Smart Systems	3	0
Arch:451	Computational Scripting in Architecture	Design logic + Product Design	3	0
Arch:452	Advanced Visual Scripting	Product Design	3	0
Arch:560L	Architectural Photography	Visual Literacy	0	3
Arch:561L	Digital Design Studio	Creative Expression	0	3
Arch:562L	Architecture and Digital Fabrication	Prototyping Skills	0	3
Arch:580	Theories of Digital Design	Conceptual Foundation	3	0
Arch:581	Housing Issues in Pakistan for Architects	Local Relevance	3	0
Arch:582	Universal Design Principles	Inclusive Access	3	0
Arch:584	Sustainable Architecture	Environmental Ethics	3	0
Arch:585	Anthropology	Cultural Context	3	0
IME:253	Work, Study and Ergonomics	User Comfort	2	1
PID-216	Aesthetics	Design Sensibility	2	0
PID:403	3. Furniture Design / 4. Digital Interactive Design / 7. Additive Manufacturing / 8. Game Design	3. Interior Elements 4. User Engagement 7. Prototyping 8. Spatial Narratives	2	2
CSC102	Programming Fundamentals	Logical Thinking	3	1
CS103	Introduction to Computer Programming for Data Science	Data Skills	2	1
CSC103	Object Oriented Programming (Pre-Req CSC102)	Modular Coding	3	1
CSC250	Applications of Artificial Intelligence (Pre-Req CS103)	AI Design	2	1
CSC491	3D Game Development	Virtual Spaces	3	0
ES-204	Ecology & Environment	Ecological Awareness	3	0
ES-402	Environmental Impact Assessment	Design Responsibility	2	1
* Courses offered under Interdisciplinary Electives will be selected by the Department from this pool				

DEPARTMENT OF CITY & REGIONAL PLANNING

Dean
Prof. Dr. Muhammad Shahid Rafique

Chairman
Prof. Dr. Obaidullah Nadeem

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

Associate Professors
Dr. Muhammad Asim

Assistant Professors
Dr. Humaira Tabassum
Ms. Saima Rafique

Visiting Faculty
Dr. Hania Arif
Mr. Murad Ali
Dr. Kashif Ali
Mr. Ali Zaib

Introduction
The Department of City and Regional Planning (DCRP) has been contributing to nation building through its graduates since 1962. It is a well-established and 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 also 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/.

Mission
DCRP provides leadership in planning education by sharing knowledge and applied research. The department is committed to produce knowledgeable and skilful planners capable of resolving issues of urbanization, planning and development, housing, regeneration, land use change, transportation, and promote sustainable development.

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 Higher Education Commission (HEC). The B.Sc. degree is also accredited by professional bodies, namely 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 the 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 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. Recently, 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:

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

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 Program Educational Objectives (PEOs)

1) To produce graduates who possess thorough understanding of the theoretical concepts of City and Regional Planning and practical issues pertaining to urban and rural areas.
2) To produce graduates who possess expertise to visualize, formulate and implement realistic policies and plans for developing new urban areas as well as managing contemporary settlements to ensure sustainable development.
3) To produce graduates who are sensitive and responsible towards the society, culture, and environment.

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 have been introduced, considering the market demand, 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, Planning of New Towns, 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, Photoshop, Primavera, Amos and languages such as Python and SQL. Along with this 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 of New Towns, Industrial Estate Planning, and Landscape

Design. These also involve extensive use of spatial and planning data analysis softwares. 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 arranged 6-8 weeks internships 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
- Transport Department
- Federal Government Employees Housing Authority
- Armed Forces (Pakistan Army, Military Engineer Services and Design Directorates)
- Estate Management Directorates of Civil Aviation Authority
- NDMA, PDMAs and Punjab Emergency Services
- Rescue 1122
- Development Authorities (LDA, CDA, MDA, GDA, KDA, SDA, RDA, RUDA, PCBDDA 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, UPDL, The Urban Solutions, Everon Consultants, BiaSain Design Studio, Mott MacDonald, Bahria Town, DHAs, Al Kabir Town, Lake City Holdings, Eastern Housing, Urban Developers, Bismillah Developers, Ittehad Developers, MAS Group 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 has been 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 5000 books including a wide range of latest books, online access to 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	Credit Hours	
		Th	Pr
CRP-101	Introduction to City and Regional Planning	2	0
CRP-102	Technical Drawing	0	2
HU-111	Communication Skills	3	0
CRP-103	Computer Aided Design and Modeling	0	2
CE-101L	Elementary Surveying	3	1
MA-114	Applied Mathematics	3	0
MGT-105	Introduction to Economics	2	0
HU-003	International Language	0	0

Semester 2

Course No.	Subject	Credit Hours	
		Th	Pr
CRP-104L	Mapping and Remote Sensing	1	2
CRP-105	History of Urban Planning	2	0
CRP-106L	Transportation Engineering	2	1
IS-104	Islamic Studies / Ethics	2	0
MA-153	Statistics for Data Science-I	3	0
CY-131/PHY-102	Environmental Chemistry-I / Physics for Architectural Engineers	2	1
IS-109L	Fehm-e- Quran-I/Social Ethics-I	0	2

Year 2

Semester 3

Course No.	Subject	Credit Hours	
		Th	Pr
CRP-201L-A	Environmental Planning and Management	2	1
Arch-240L	Architectural Design	1	2
CRP-203	Applied Geography	2	0
CRP-204	Information Technology and Database Management	0	3
HU-221	Technical Writing and Presentation Skills	3	0
MA-258	Statistics for Data Science-II	3	0
PID-207	Workshop Practice (Model Making)	0	1

Semester 4

Course No.	Subject	Credit Hours	
		Th	Pr
CRP-206	Sociology	2	0
CRP-207L- A	Housing and Built Environment	2	1
CRP-208L	Transportation Planning	2	1
CRP-209L	Introduction to GIS	1	1
HU-201	Functional English	3	0
CRP-210L	Planning Surveys	1	2
IS-209L	Fehm -e- Quran-II / Social Ethics-II	0	2

Year 3

Semester 5

Course No.	Subject	Credit Hours	
		Th	Pr
EnE-308L	Environmental Engineering	3	1
CRP-304-A	Planning Law	2	0
CRP-313L- A	Urban Design	2	1
CRP-311L- A	Landscape Design	1	1
CRP-307L	GIS Analysis and Applications	1	1
CRP-308	Climate Change Adaptation & Disaster management	2	0
CRP-315	Smart Cities	2	1

Semester 6

Course No	Subject	Credit Hours	
		Th	Pr
CRP-309L	Research Methods	2	1
CRP-310L	Industrial Estate Planning and Design	1	1
CE-301L	Building Construction and Technology	2	1
CRP-305L-A	Urban Renewal	2	1
CRP-306L -A	Planning of New Cities	2	1
CRP-316	Community Health and Safety	0	2
CRP-314	Active Citizenship and Development Planning	2	0

Year 4

Semester 7

Course No.	Subject	Credit Hours	
		Th	Pr
CRP-401L -A	Master Planning – I	1	2
MGT-457L	Finance Planning and Management	2	1
CRP-403L	Project Planning and Management	1	1
IS-203	Ideology & Constitution of Pakistan	2	0
CRP-405L- A	Rural Development Planning	2	1
CRP-409L- A	Estate Management	1	1
CRP-498	Project –I	0	3

Semester 8

Course No.	Subject	Credit Hours	
		Th	Pr
CRP-499	Project-II	0	3
CRP-408L- A	Master Planning – II	1	2
CRP-404L- A	Professional Planning Practice	1	1
CRP-410L	Land use and Building Control	2	1
MGT-318	Entrepreneurship and Management	2	0
IS-111	Pakistan Studies	2	0
CRP-411L	Regional Planning	2	1

DEPARTMENT OF PRODUCT AND INDUSTRIAL DESIGN

Dean
Prof. Dr. Muhammad Shahid Rafique

Chairman
Prof. Dr. Rizwan Hameed

Associate Professor
Dr.-Ing. Atif Bilal Aslam*

Assistant Professor
Ms. Fariha Saeed
Ms. Asma Khalid
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 2006 with the aim of producing professionals in the field of Product Design with technological, managerial, and entrepreneurial skills to meet the emerging needs of industry. The Department provides standard Product Design education at the bachelor level and commenced postgraduate program in the year 2016. The courses offered 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, entrepreneurs, designers for product manufacturers, and design consultants for trading companies.

Broadly speaking, the role of the product designer combines art, science, and technology to create tangible three-dimensional goods. The Master's Program in Product and Industrial Design involves research and design of the whole range of consumer and capital products. These are as diverse as telephones and transportation and 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 the 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 is an innovative four-year full-time undergraduate program of study. The Bachelor's degree in 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 and Industrial Design provide 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 Product & Industrial Design can work as Product & Industrial Designers, graphic designers, packaging designers, project coordinators, 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 Lab
- Digital Graphics Lab
- Woodwork Lab
- Postgraduate Research Lab

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 use by the students and faculty.

Guest Lectures

Industrial and consumer products are being introduced daily to meet the evolving needs of the public. Continuous design innovations are transforming the form, functionality, and aesthetic appeal of these products. In response, industry is actively embracing change by updating product designs to align with the aspirations and expectations of society. To keep students informed about the latest developments and to enhance their professional skills in preparation for employment, seasoned designers and allied professionals from government departments as well as private consultancies are regularly invited to deliver lectures and conduct workshops.

Internship Program

The Department also arranges internships for third-year students to ensure they gain meaningful and hands-on exposure in the field of product and industrial design. These internships are designed to enhance practical skills and prepare students to become competent and employable graduates upon completion of their studies. Additionally, such placements enable students to interact with professional role models and mentors from the product and industrial design industry, thereby strengthening their professional outlook and career readiness. All students are required to complete a mandatory internship of 6–8 weeks during the summer vacation period.

B.Sc. Product & Industrial Design

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PID-121	Fundamentals of Design -I	2	2
PID-110L	Visual Communication	0	2
MME-106	Material Fundamentals-I	2	1
PID-124	History of Creative Art and Design – I	1	0
CSC-100	Applications of Information and Communication Technologies	2	1
IS-104	Islamic Studies/Ethics	2	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PID:122	Fundamentals of Design -II	2	2
PID-123L	Technical Drawing	0	2
MME-116	Material Fundamentals- II	2	1
PID-120L	Digital Graphics	0	3
ME-100L	Workshop Practice	0	1
MA-154	Quantitative Reasoning -I	3	0
HU-214	Psychology	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		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

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		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-203	Ideology and Constitution of Pakistan	2	0
IS-109L / IS-212L	Fehm-e-Quran-I / Social Ethics-I	0	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		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

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		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

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PID-498	Final Year Project -I	0	4
PID-404	Industrial Design	1	3
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
PID-406L	Internship	0	3

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PID-499	Final Year Project -II	0	8
PID-414	Professional Practice	2	2
PID-413	Sustainable Design Practices	2	0
IS-209L / IS-213L	Fehm-e-Quran II/ Social Ethics-II	**0**	1

DEPARTMENT OF CHEMISTRY

Dean
Prof. Dr. Muhammad Shahid Rafique

Professor Emeritus
Dr. Fazeelat Tahir

Chairperson
Prof. Dr. Farhat Yasmeen

Professor
Dr. Farhat Yasmeen
Dr. Aneela Anwar

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
Dr. Komal Rizwan

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. In 2025 BS industrial Chemistry started with 30+ 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	Credit Hours Pr
CY-111	Introduction to Physical Chemistry	2	1
Math-123	Calculus	3	0
CS-103	Introduction to Computer Programming for Data Science	2	1
	Natural Sciences**	2	1
HU-201	Functional English	3	0
IS-111	Pakistan Studies	2	0
IS-109	Fehm-e-Quran-I	0	1

**CY-112: Mineral Extraction (2+1)

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CY-122	Introduction to Inorganic Chemistry	2	1
CY-123	Introduction to Organic Chemistry	2	1
CY-124	Introduction to Analytical Chemistry	2	1
Phys-101	Mechanics	3	1
MA-154	Quantitative Reasoning-I	3	0
IS-203	Ideology and Constitution of Pakistan	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CY-231	Physical Chemistry-I	2	1
CY-232	Inorganic Chemistry-I	2	1
CY-233	Organic Chemistry-I	2	1
CY-234	Analytical Chemistry-I	2	1
CY-235	Environmental Chemistry	2	0
IS-104	Islamic Studies (Ethics for Non- Muslims)	2	0
	Arts and Humanities***	2	0

Anyone of the following courses will be offered in the domain of Arts and Humanities***.

HU-213 Anthropology
HU-214 Psychology
HU-215 Social Work
MGT-104 Word Today

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CY-241	Physical Chemistry – II	2	1
CY-242	Inorganic Chemistry – II	2	1
CY-243	Organic Chemistry-II	2	1
MGT-202	Principles of Management	2	0
CSC-100	Applications of ICT	2	1
HU-212	Civics and Community Engagement	2	0
	Social Sciences****	2	0

Anyone of the following courses will be offered in the domain of Social Science****.

MGT-105 Introduction to Economics
MGT-106 Economy of Pakistan
MGT-107 Business and Society

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CY-352	Inorganic Chemistry-III	3	1
CY-353	Organic Chemistry-III	3	1
CY-354	Analytical Chemistry-II	3	1
HU-200	Technical Report Writing	3	0
MA-259	Quantitative Reasoning-II	3	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
CY-361	Physical Chemistry-III	3	1
CY-362	Inorganic Chemistry-IV	3	1
CY-364	Analytical Chemistry-III	3	1
CY-365	Workplace Hazardous Materials	2	0
Math-155	Statistics for Chemists	3	0
IS-209	Fehm-e-Quran-II	0	1

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
	Elective I	3	0
	Elective II	3	0
	Elective III	3	0
CY-491	Scientific Report Writing (Elective IV)	3	0
MGT-349	Entrepreneurship	2	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
	Elective V	3	0
	Elective VI	3	0
	Elective VII	3	0
Math-205	Ordinary Differential Equations	3	0
CY-499	Capstone	0	3

Final Year Subject Specializationn

Final Year Specialization
Specialization Subjects (Elective)
Inorganic & Analytical Chemistry, Organic and Food Chemistry Physical & Electrochemistry Environmental, Polymer and Industrial Chemistry

Inorganic & Analytical Chemistry	
Course No.	Specialization Subjects
CY-411	Spectroscopic Techniques
CY-412	Thermal Analysis
CY-413	Electroanalytical Techniques
CY-414	Statistical Data Handling
CY-415	Vacuum Techniques In Analytical Chemistry
CY-416	Chromatographic Methods of Analysis
CY-421	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

Environmental, Polymer and Industrial Chemistry	
Course No.	Specialization Subjects
CY-431	Organic Based Industries
CY-432	Agro Based Industries and Pollution Control
CY-433	Industrial Process
CY-434	Projects and Applied Chemistry
CY-435	Experimental 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-497	Soil Chemistry
CY-498	Sustainable Agriculture
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	Advanced 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	Chemical Microbiology
CY-440	Principles of Biochemistry and Biotechnology
CY-441	Structural Biochemistry
CY-442	Biochemistry of Metabolism
CY-443	Informational Macromolecules
CY-444	Bioenergetics
CY-445	Nutritional Biochemistry
CY-446	Advanced Protein Chemistry
CY-447	Enzymes and Enzymology
CY-448	Metabolism and Related Diseases
CY-449	Experimental Methods in Biochemistry
CY-450	Experimental Methods in Microbiology

Physical & Electrochemistry	
Course No.	Specialization Subjects
CY-451	Solid State and Material Chemistry
CY-452	Statistical Thermodynamics
CY-453	Electrochemistry and Clean Energy
CY-454	Applied Electrochemistry
CY-455	Electro-Kinetics Phenomena
CY-456	Electrochemical Industrial Processes
CY-457	Quantum Chemistry
CY-458	Experimental Methods in Electrochemistry
CY-459	Experimental Methods in Physical Chemistry
CY-460:	Contemporary Physical Chemistry

BS Industrial Chemistry

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IC-101	Industrial Chemistry-I	2	0
IC-102 IC-102L	Introduction to Inorganic Chemistry	2	1
HU-200	Technical Report Writing	3	0
CSC-103	Introduction to Computer Programming for Data Science	2	1
MA-123	Calculus	3	0
IS-111	Pakistan Studies	2	0
IS-106	Understanding of Quran-I (Fehm-e-Quran-I)	0	1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IC-121	Industrial Chemistry-II	2	0
IC-122 and IC-122L	Introduction to Analytical Chemistry	2	1
IC-123	Introduction to Physical Chemistry	2	0
CY-112	Mineral Extraction	2	0
MA-154	Quantitative Reasoning-I	3	0
IS-203	Ideology and Constitution of Pakistan	2	0
Phys-101	Mechanics	3	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IC-201 and 201L	Physical Chemistry-I	2	1
IC-203 and IC-203L	Organic Chemistry-I	2	1
IC-204	Industrial Chemistry-III	2	0
IC-205 and IC-205L	Analytical Chemistry-I	2	1
IS-104	Islamic Studies (Ethics for Non- Muslims)	2	0
	Social Science Elective*	2	0
CSC-100	Applications of ICT	2	1

Social Science*: *Any one of the following courses will be offered.*

MGT-103 Sociology and Engineering
MGT-104 World Today
MGT-105 Introduction to Economics
MGT-106 Economy of Pakistan

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IC-353	Green Chemistry	3	0
IC-252	Analytical Chemistry-II	2	0
IC-202	Inorganic Chemistry-I	2	1
	Management Science Elective*	2	0
MA-155	Statistics for Chemists	3	0
HU-212	Civics and community engagement	2	0
HU-111	Communication Skills	3	0

Management Science*: Any one of the following courses will be offered:

MGT-320 Project Management in Engineering
MGT-202 Principles of Management
MGT-203 Principles of Marketing
MGT-204 Business and Corporate Law

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IC-303	Applied Organic Chemistry	3	1
IC-304	Applied Analytical Chemistry-I	3	1
IC-351	Workplace Hazardous Materials	3	0
CHE-106	Chemical Process Industries	2	1
IS-209	Understanding of Quran-II (Fehm-e-Quran-II)	0	1
MA-259	Quantitative Reasoning-II	3	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IC-254	Industrial Chemistry-IV	2	0
IC-354	Environmental Chemistry	3	0
IC-355	PolymerChemistry	3	0
IC-356	Applied Analytical Chemistry-II	3	1
IC-357	Scientific Report Writing	3	0
CHE-211	Separation Process-I	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IC-401	Advanced Spectroscopic Techniques	3	0
IC-**	Elective-I	3	0
IC-**	Elective-II	3	0
IC-450	Internship and ReportWriting	0	3
IC-358	Energy Resources of Pakistan and its management	2	0
MA-205	Ordinary Differential Equations	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
IC-**	Elective-III	3	0
IC-**	Elective-IV	3	0
IC-**	Elective-V	3	0
IC-**	Elective-VI	3	0
IC-466	Capstone	0	3
MGT-349	Entrepreneurship	2	0

ELECTIVE COURSES

Code	Title	Theory	Lab
IC-451	Pharmaceutical Industry	3	0
IC-452	Food and Beverage Industry	3	0
IC-453	Leather and Tanning Industry	3	0
IC-454	Textile Industry	3	0
IC-455	Paper Industry	3	0
IC-456	Polymer and Plastics Industry	3	0
IC-457	Electrochemical Industry	3	0
IC-458	Fertilizer Industry	3	0
IC-456	Petrochemical Industry	3	0
IC-460	Mining and Geology	3	0
IC-461	Nanotechnology	3	0
IC-462	Cement Industry	3	0
IC-463	Cosmetics Industry	3	0

DEPARTMENT OF MATHEMATICS

Dean
Prof. Dr. Muhammad Shahid Rafique

Chairman
Prof. Dr. Asma Rashid Butt

Professor
Dr Muhammad Mushtaq
Dr. Sabir Hussain
Dr. Qasim Ali Ch.

Associate Professors
Dr. Muhammad Irfan Qadir
Dr. Shafique–ur–Rahman
Dr. Mustafa Habib
Dr. Samia Riaz
Dr. Saadia Farid

Assistant Professors
Ms. Rubina Fayyaz
Ms. Saima Nazir
Dr. Shamaila Samreen
Dr. Kashif Ali Khan
Dr. Muhammad Shabbir

Lecturers
Mr. Abdur Rehman Khan Salari
Dr. Ali Ovais

Teaching Fellows
Ms. Rameen Aslam
Ms. Iram Yaqoob
Mr. Rizwan Khalid
Ms. Nimra
Mr. Abdul Manan
Ms. Nimra
Mr. Muhammad Naseem Aftab
Ms Gul e Zehra Rizvi
Ms Farwa Ilayas

Introduction

The Department of Mathematics is one of the oldest academic departments at the University of Engineering and Technology (UET), Lahore, having been established in 1961. The Department offers its own degree programs, including BS Mathematics, M.Phil. in Applied Mathematics, and Ph.D. in Mathematics. In addition, it plays a pivotal service role by supporting students from all disciplines of engineering, technology, and business, equipping them with strong mathematical foundations and analytical tools necessary to address problems in their respective fields.

The academic quality and research standing of the Department continue to gain international recognition. According to the QS World University Rankings by Subject 2026, the Department of Mathematics at UET Lahore is ranked in the 401–450 range globally, reflecting a notable improvement in the institution's standing in the mathematical sciences.

To remain aligned with emerging global trends and future academic and industry requirements, the Department is pleased to introduce an updated BS Mathematics program with new specializations in Data Science, Artificial Intelligence, and Information Technology, effective from Fall 2025.

Program Educational Objectives (PEOs)

PEO-01: 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-02: Enable them to use the equations of Mathematics describing general laws applying, mainly, inductive logic.

PEO-03: Modeling of Engineering Problems from the Fundamental Laws to create practical system.

PEO-04: 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 constitutes a core component of the academic activities of the faculty members and postgraduate students of the Department. Faculty research outcomes are regularly published in reputable national and international journals, reflecting the Department's active engagement in scholarly pursuits.

The Department is equipped with a modern computer laboratory featuring up-to-date computing facilities with reliable internet access to support teaching, learning, and research activities. This infrastructure plays a vital role in strengthening students' analytical capabilities, practical understanding, and confidence during assessments, including viva voce examinations.

BS Mathematics

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-101	Calculus-I	3	0
MATH-102	Elements of Set Theory and Mathematical Logic	3	0
CSC-100 & 100L	Applications of Information and Communication Technologies	2	1
HU-111	Communication Skills	3	0
IS-102	Islamic Studies / Ethics for Non-Muslims	2	0
PHYS-101 &101L	Mechanics	3	1
QT-101	Translation of the Holy Qur'an-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-104	Calculus-II	3	0
MATH-105	Statistics	3	0
HU-214 / MGT-105	Psychology / Introduction to Economics	2	0
CS-103 & 103L	Introduction of Computer Programming for Data Science	2	1
HU-200	Technical Report Writing	3	0
IS-202	Ideology and Constitution of Pakistan	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-201	Calculus-III	3	0
MATH-203	Scientific Programming	2	1
MATH-204	Linear Algebra	3	0
PHYS-201 & 201L	Waves and Oscillations	3	1
HU-212	Civics and Community Engagement	2	0
HU-204	Any Foreign Language	1	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-205	Ordinary Differential Equations	3	0
MATH-206	Discrete Mathematics	3	0
MATH-211	Operation Research-I	3	0
CSC-250 & 250L	Applications of Artificial Intelligence	2	1
PHYS-202	Heat and Thermodynamics	3	0
QT-201	Translation of the Holy Qur'an-II	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-301	Real Analysis-I	3	0
MATH-302	Vector and Tensor Analysis	3	0
MATH-303	Probability	3	0
MATH-304	Topology	3	0
MATH-312	Operation Research-II	3	0
MATH-305	Modern Algebra-I	3	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-307	Classical Mechanics	3	0
MATH-308	Partial Differential Equations	3	0
MATH-309	Complex Analysis	3	0
MATH-310	Differential Geometry	3	0
MATH-311	Real Analysis-II	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

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-401	Numerical Analysis	3	0
MATH-402	Fluid Mechanics-I	3	0
MATH-403	Mathematical Physics	3	0
	Elective -1	3	0
	Elective -2	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-404	Fluid Mechanics-II	3	0
MATH-405	Integral Equations	3	0
	Elective – 3	3	0
	Elective – 4	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

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-101	Calculus-I	3	0
MATH-102	Elements of Set Theory and Mathematical Logic	3	0
CSC-100 & 100L	Applications of Information and Communication Technologies	2	1
HU-111	Communication Skills	3	0
IS-102	Islamic Studies / Ethics for Non-Muslims	2	0
PHYS-101 &101L	Mechanics	3	1
QT-101	Translation of the Holy Qur'an-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-104	Calculus-II	3	0
MATH-105	Statistics	3	0
HU-214 / MGT-105	Psychology / Introduction to Economics	2	0
CSC-102&102L	Programming Fundamentals	3	1
HU-200	Technical Report Writing	3	0
IS-202	Ideology and Constitution of Pakistan	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-201	Calculus-III	3	0
CSC-103&103L	Object Oriented Programming	3	1
MATH-204	Linear Algebra	3	0
PHYS-201 & 201L	Waves and Oscillations	3	1
HU-212	Civics and Community Engagement	2	0
HU-204	Any Foreign Language	1	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-205	Ordinary Differential Equations	3	0
MATH-206	Discrete Mathematics	3	0
MATH-211	Operation Research-I	3	0
CSC-200 & 200L	Data Structures and Algorithms	3	1
PHYS-202	Heat and Thermodynamics	3	0
QT-201	Translation of the Holy Qur'an-II	1	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-301	Real Analysis-I	3	0
MATH-302	Vector and Tensor Analysis	3	0
MATH-303	Probability	3	0
MATH-304	Topology	3	0
MATH-441	Functional Analysis	3	0
CSC-202 & 202L	Artificial Intelligence	2	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-307	Classical Mechanics	3	0
MATH-308	Partial Differential Equations	3	0
MATH-309	Complex Analysis	3	0
MATH-311	Real Analysis-II	3	0
MGT-349	Entrepreneurship	2	0
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

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-401	Numerical Analysis	3	0
MATH-402	Fluid Mechanics-I	3	0
MATH-403	Mathematical Physics	3	0
	Elective -2	3	0
	Elective -3	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MATH-404	Fluid Mechanics-II	3	0
MATH-405	Integral Equations	3	0
	Elective – 4	3	0
MATH-460	Project	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 Shahid Rafique

Chairperson
Prof. Dr. Rehana Sharif

Professors
Dr. Rehana Sharif

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

Courses of study

Undergraduate programs

- Bachelor of Science (B.S.) Physics (4 Years Program)

Postgraduate programs

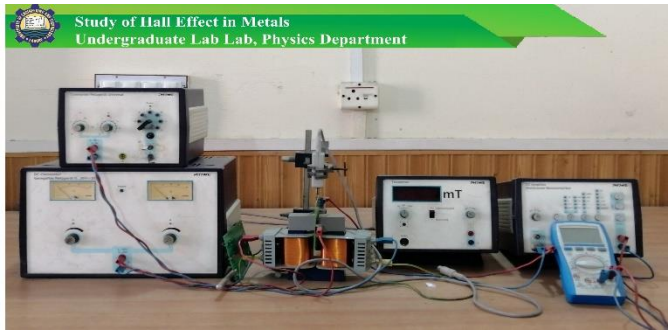
- M.Phil. Applied Physics
- M.Phil. Nano Science and Technology
- Ph.D. Physics

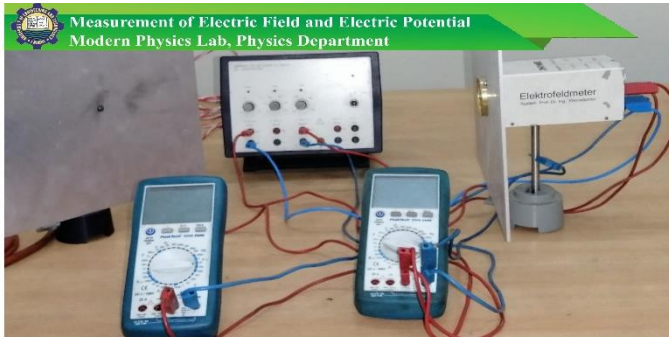
The faculty is highly qualified and motivated. The interdisciplinary curriculum draws on faculty expertise in many areas of Applied Physics which includes advanced courses such as Laser Physics, Plasma Physics, Nanotechnology, Health & Medical Physics, Photonics & Optoelectronics, Applied Optics, Applied 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	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 &Lab		1

Semester 1

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

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	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	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	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	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

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	Name of Subjects offered to Engineering Departments by Physics Faculty	Credit Hours		Respective Engineering/Non-Engineering Departments in UET
		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:

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.

Sr. No.	Laboratory Name	Name of Faculty Director/In-charge
1.	Nanomaterials Synthesis Laboratory	Dr. Rashid Jalil, Director
2.	Density Functional Theory Laboratory	Dr. Abdul Waheed Anwar, Director
3.	Nanotechnologies Research Centre	Dr. IbtsamRiaz, Director
4.	Advanced Physics Laboratory	Dr. Usman Ilays, Director
5.	Solid State Batteries Laboratory	Dr. MuneebIrshad, Director

LASER AND OPTRONICS CENTRE

Dean
Prof. Dr. Muhammad Shahid Rafique

Director
Prof. Dr. Khurram Siraj

Professors
Dr. Khurram Siraj

Assistant Professors
Dr. Khadija Tul Kubra
Dr. Jaweria Zartaj Hashmi
Dr. Sofia Siddique

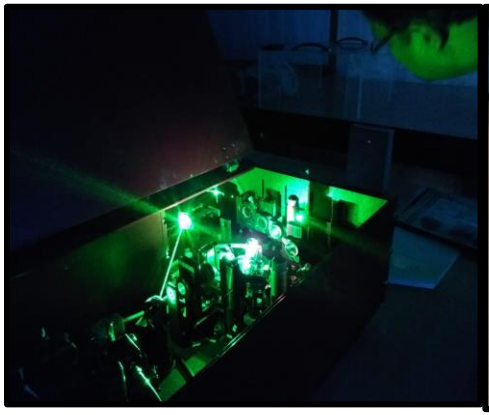
Introduction
Laser and Optronics Centre was established at the University of Engineering and Technology, Lahore in 2007. The centre is of its own kind in any educational institute of Pakistan having state-of-art laboratories equipped with Laser systems including Ti: Sapphire Laser (Femtosecond Laser), Excimer Lasers, Nd: YAG Lasers, Nitrogen Laser, and fibre optic coupled diode laser. There is well-equipped Advance Electronics Lab in the Centre along with a Library with comprehensive collection of books on the topics related to Laser and Opto-electronics, which provide favorable environment for reading, learning and skill development. With the facilities available at the Laser and Optronics Centre, research is presently being carried out in the fields of Laser Matter Interaction, Laser induced Plasma, Pulsed Laser Deposition, Laser Material Processing and Fabrication, Laser spectroscopy, Photonics, Optoelectronics, and optical materials etc. These facilities collectively provide an intellectually stimulating environment that supports advanced learning, hands-on experimentation, and high-level research training. Recently, the Centre has planned its first postgraduate degree program to incorporate AI-driven and Generative AI tools into experimental design, data analysis, simulation, and optimization of laser and optronics systems. This step is promising for enhancing both research quality and innovation to benefit the society and country in general. This centre also collaborates with numerous national / international institutions and research centres.

Laboratories
The Centre has well equipped laboratories with the latest available techniques and instruments. These 4 laboratories are as follows:

1. Laser Laboratory
2. Femtosecond Laser Laboratory
3. Diagonostic Laboratory
4. Advance Electronics Lab
5. Synthesis Laboratory

Other Lab Equipments:

Optical Microscope, Pulse Laser Deposition System, Turbomolecular Pump, Vacuum chambers, Laser-Monochromator System, Faraday Cage, Four-Probe Instrument, Centrifuge System, Plasma Setups, Spin Coater, Magnetic Stirrer, High temperature Furnace, Hydraulic Press, Vacuum System, and Hot Plates.



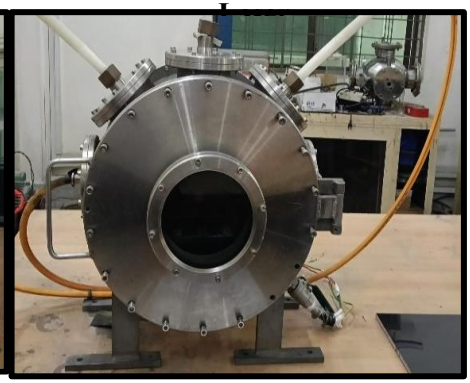
Femtosecond Laser

Nitrogen Laser

KrF Excimer Laser

Laser-Monochromator

XeCl Excimer Laser



Plasma Chamber

CENTRE FOR NANOTECHNOLOGY AND ADVANCED MATERIALS RESEARCH (CNAMR)

Dean
Prof. Dr. Muhammad Shahid Rafique

Director
Prof. Dr. Khurram Siraj

University of Engineering and Technology has established a modern and state of the art Centre for Nanotechnology and Advanced Materials Research (CNAMR) at its Main Campus in the building of Laser and Optronics Centre. This centre has latest High-tech equipments, Field Emission Scanning Electron Microscope (FESEM), High Resolution-Transmission Electron Microscope (HR-TEM) and Optical Microscopes, Ion beam Milling, Sample Preparation Units, X-ray Diffractometer, and Nano-Indentor. Local and foreign-trained experts, including Prof. Dr. Khurram Siraj, Dr. Khadija Tul Kubra, Dr. Sofia Siddique, Dr. Jaweria Zartaj Hashmi, Dr. Umber Kalsoom, and Dr. Amina Afzal are actively contributing their expertise to the operation and advancement of these high-tech equipment

Field Emission Scanning Electron Microscope

Delivers high quality and detailed imaging of conductive and non-conductive specimens.

- **Magnification:** × (33-2M),
- **Resolution:** down to 0.8 nm
- Statistic/Numeric data of EDS reports.

High Resolution Transmission Electron Microscope

Provides high quality and detailed information about the topographical, morphological, compositional and structural features of powdered and thin film specimens.

- **Modes:** TEM, HR-TEM and STEM
- **Resolution:** down to 0.16 nm
- **Magnification:** TEM mode (up to 1.05M), HR-TEM mode (up to 2.5M) and STEM mode (up to 2.7M)

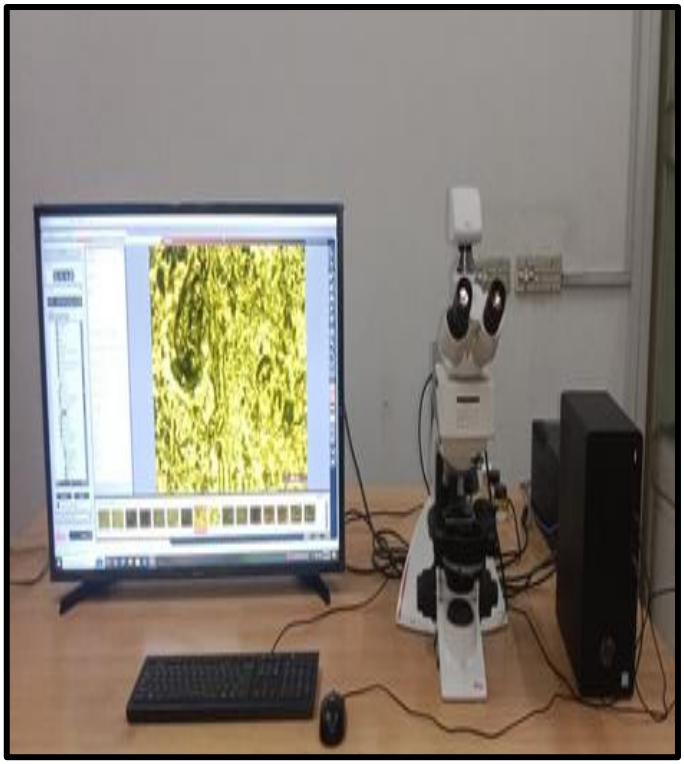
X-Ray Diffractometer (XRD)

- XRD of powdered, bulk and thin film samples.
- Grazing incidence X ray diffraction.
- Pole figures through texture measurements.
- Reflection mode for multilayer surfaces having roughness not greater than 5nm.

Nano-Indenter/AFM

- Mechanical properties testing tool at nanoscale.
- In-situ SPM using low load transducer.
- Quasi static and dynamic nano-indentation.
- Scanning wear test.

CCD Fitted Digital Optical Microscope



- Surface morphology and topography in micron level for all kinds of specimens.
- Magnification 50× to 1000×.
- Advanced LED technology with resolution up to 10 µm.

Sample Preparation Lab

- Gold, palladium and carbon coating for SEM sample preparation.
- Precise cutting with cutting capacity 50 mm.
- Standard mounting with maximum pressure of 300 bars and mould assembly 25 to 50 mm.
- Advanced cutting features with x-y-z three axis cutting capability.
- Automatic grinding and polishing with smooth speed variations 50-600 rmp.

DEPARTMENT OF HUMANITIES, MANAGEMENT AND SOCIAL SCIENCES

Dean
Prof. Dr. Muhammad Shahid Rafique

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, 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.

In addition, the Department of Humanities, Social Sciences, and Modern Languages launched a four-year BS in English Language and Literature program in 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 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.

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 Shahid Rafique

Chairman
Dr. Hafiz Zahid Latif

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

Assistant Professors
Dr. Muhammad Nadeem Shah
Dr. Hafiz Qudratullah

The Department of Islamic Studies at University of Engineering and Technology Lahore is committed to providing quality education that combines the rich intellectual heritage of Islamic civilization with contemporary academic and technological developments. Our programs are designed to produce graduates who possess a deep understanding of Islamic thought, research methodology, ethical values, and modern technological competencies.

The Department offers innovative and research-oriented academic programs that prepare students for leadership roles in education, research, academia, public service, media, community development, and emerging digital fields.

About the Department
The Department of Islamic Studies at UET Lahore strives to:

- Promote authentic understanding of Islam based on the Qur'an and Sunnah.
- Encourage critical thinking and academic research.
- Integrate Islamic knowledge with contemporary disciplines and technological advancements.
- Develop graduates capable of addressing modern intellectual, social, and ethical challenges.
- Produce scholars and researchers who contribute positively to society and academia.

Academic Programs Offered:

- BS Islamic Studies with Computer Technology (4-Year Program)
- M.Phil Islamic Studies
- PhD Islamic Studies

Program Overview

The BS Islamic Studies with Computer Technology is a unique interdisciplinary degree that combines classical and contemporary Islamic studies with modern computer and information technologies.

This innovative program equips students with comprehensive knowledge of Islamic sciences while developing practical skills in computing, digital technologies, data management, and information systems.

Objectives

The program aims to:

- Develop a strong foundation in Islamic knowledge and scholarship.
- Provide modern technological competencies.
- Prepare graduates for the digital transformation of Islamic education and research.
- Train students in contemporary communication and information technologies.
- Enable students to contribute to Islamic digital content development and educational technologies.
- Core Areas of Study
- Islamic Studies Component
- Qur'anic Studies
- Tafsir al-Qur'an
- Hadith Studies
- Usul al-Hadith
- Seerah of the Prophet ﷺ
- Islamic Jurisprudence (Fiqh)
- Usul al-Fiqh
- Islamic Theology
- Comparative Religion
- Islamic Civilization and Culture
- Contemporary Islamic Thought
- Islamic Ethics and Values
- Computer Technology Component
- Introduction to Computing
- Programming Fundamentals
- Database Management Systems
- Web Development
- Information Technology
- Artificial Intelligence Applications
- Digital Research Tools
- Data Analysis
- E-Learning Technologies
- Information Systems

- Career Opportunities
- Graduates may pursue careers as:
- Islamic Studies Educators
- Research Associates
- Curriculum Developers
- Educational Technologists
- Digital Content Developers
- Islamic Media Specialists
- Web and Educational Platform Managers
- Public Service Officers
- Community Development Professionals
- Researchers in Islamic and Digital Humanities

"Integrating Islamic Scholarship with Modern Knowledge and Technology for the Betterment of Humanity."

Course Codes for all subjects

S. No	Subject Title	Course Codes	Credit Hrs
1	Ideology and Constitution of Pakistan.	IS-202 (3cr.h)	3+0
2	Ideology and Constitution of Pakistan.	IS-203 (2cr. h)	2+0
3	Pakistan Studies.	IS-111	2+0
4	Islamic studies.	IS-102 (3cr.h)	3+0
5	Islamic studies.	IS-104 (2cr.h)	2+0
6	Quran translation-I	QT-101	1+0
7	Quran translation-II	QT-201	1+0
8	Quran translation III.	QT-301	1+0
9	Quran translation IV.	QT-401	1+0
10	Social Ethics I.	SE-101	1+0
11	Social Ethics II.	SE-201	1+0
12	Social Ethics III.	SE-301	1+0
13	Social Ethics IV.	SE-401	1+0
14	Fehm e Quran I.	IS-109L	0+1
15	Social Ethics I.	IS-212L	0+1
16	Fehm e Quran II.	IS- 209L	0+1
17	Social Ethics II.	IS-213L	0+1
18	Islamic and Pakistan Studies - I	IS-101	3+0
19	Islamic and Pakistan Studies-II	IS-201	3+0
20	Fehm e Quran-I	IS-615L (for M.Phil. + PhD)	0+1
21	Fehm e Quran-II	IS-616L (for M.Phil. + PhD)	0+1

INSTITUTE OF BUSINESS AND MANAGEMENT

Dean
Prof. Dr. Muhammad Shahid Rafique

Director
Prof. Dr. Muhammad Nasir Malik

Assistant Professors
Dr. Amir Ikram
Dr. Asma Abdul Rehman
Dr. Farman Afzal
Dr. Mishal Ahmad
Dr. Muhammad Shoaib Farooq
Dr. Naeem Akhtar
Dr. Rabia Naseem
Dr. Shahzad Jamil

Lecturers
Dr. Aftab Shoukat
Dr. Maria Khan
Dr. Quratulain Akhtar
Dr. Rizwana Hameed
Dr. Sadaf Razzaq
Ms. Aeisha Altaf
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

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 102	Functional English	3	0
CSC100 BIT 101	Applications of Information and Communication Technologies **OR** Digital Toolbox for Business	2 3	1 0
BUS101	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 (Pre-requisites)	Credit Hours Th	Credit Hours 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 XXX	Islamic Studies / Ethics	2	0
QT 101	Translation of Holy Quran-I	1	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MA 154 MA 151	Quantitative Reasoning-I **OR** Business Mathematics	3	0
HU 200	Technical Report Writing	3	0
BUS 262	World Today	3	0
BUS 231	Human Resource Management	3	0
IS XXX	Ideology and Constitution of Pakistan	2	0
BUS 261	Academic and Professional Development-II	1	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MA 259 MA 257	Quantitative Reasoning-II **OR** 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 (Pre-requisites)	Credit Hours Th	Credit Hours 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 (Natural Science Domain)	3	0
BUS 361	Academic and Professional Development-III	1	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours 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		
QT 301	Translation of Holy Quran-III	1	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BUS 411	Taxation Management	3	0
BUS 471	Entrepreneurship	3	0
	Elective-I	3	0
	Elective-II	3	0
BUS 498	Experiential Learning-I (Internship)	3	0
BUS 461	Academic and Professional Development-IV	1	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 400	International Language	3	0
BUS 431	Strategic Management	3	0
	Elective -III	3	0
	Elective -IV	3	0
BUS 499	Experiential Learning-II (Project)	3	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

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 102	Functional English	3	0
MA 154 MA 151	Quantitative Reasoning-I **OR** Business Mathematics	3	0
CSC 100 BIT 101	Applications of Information and Communication Technologies **OR** Digital Toolbox for Business	2 3	1 0
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)	Credit Hours Th	Credit Hours Pr
HU 211	Business Communication	3	0
MA 259 MA 257	Quantitative Reasoning-II Business Statistics	3	0
BIT 172 CS 103	Introduction to Programming **OR** Introduction of Computer Programming for Data Science	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)	Credit Hours Th	Credit Hours Pr
HU 200	Technical Report Writing	3	0
BIT 271	Object Oriented Programming	2	1
BIT 275	Data Communication and Computer Networking	3	0
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)	Credit Hours Th	Credit Hours Pr
BIT 272	Database Systems	2	1
BIT 277	Data Structures and Algorithms	3	0
BUS 262	World Today	3	0
BUS 211	Managerial Accounting	3	0
BUS 232	Organizational Behavior	3	0
IS XXX	Ideology and Constitution of Pakistan	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BUS 362	Research Methods for Social Sciences	3	0
BIT 366	Web Development	3	0
BIT 361	Software Engineering	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)	Credit Hours Th	Credit Hours Pr
BIT 302	Enterprise Systems	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
BUS 263	Law and Society	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Prt
	Elective-I	3	0
	Elective-II	3	0
BUS 471	Entrepreneurship	3	0
	Free Elective-I (Natural Science Domain)		
BUS 461	Academic & Professional Development-IV	1	0
QT 401	Translation of Holy Quran-IV	1	0
BIT 498	Experiential Learning-I (Internship)	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Prt
BUS 431	Strategic Management	3	0
HU 400	International Language	3	0
	Elective-III	3	0
	Free Elective(s)-II		
BIT 499	Experiential Learning-II (Project)	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)	Credit Hours Th	Credit Hours 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)	Credit Hours Th	Credit Hours 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)	Credit Hours Th	Credit Hours 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)	Credit Hours Th	Credit Hours 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)	Credit Hours Th	Credit Hours 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)	Credit Hours Th	Credit Hours 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)	Credit Hours Th	Credit Hours 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)	Credit Hours Th	Credit Hours 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 Natural Sciences and Humanities
- Department of Management Sciences
- Department of Computer Sciences
- Institute of Machine Learning, Artificial Intelligence, and Cyber Security

Campus Coordinator
Prof. Dr. Amjad Hussain

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. Farrukh Arsalan
Dr. Haris Anwaar
Mr. Rafay Chughtai
Mr. Bilal Anwar
Dr. Ifrah Liaqat
Dr. Muhammad Salim Butt
Dr. Rizwan Khan

Lecturer
Dr. Umar Rashid
Mr. Fahad Ijaz
Mr. Farhan Ahmed Butt
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 (PEC)
- B.Sc. Computer Engineering (NCEAC)
- 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-1: Graduates demonstrate proficiency in applying engineering knowledge, analytical thinking, and modern tools to solve complex electrical engineering problems and pursue higher studies or research in engineering and related disciplines.

PEO-2: Graduates exhibit technical competence through hands-on skills, design and development of engineering solutions, and effective use of modern engineering tools and technologies in professional practice.

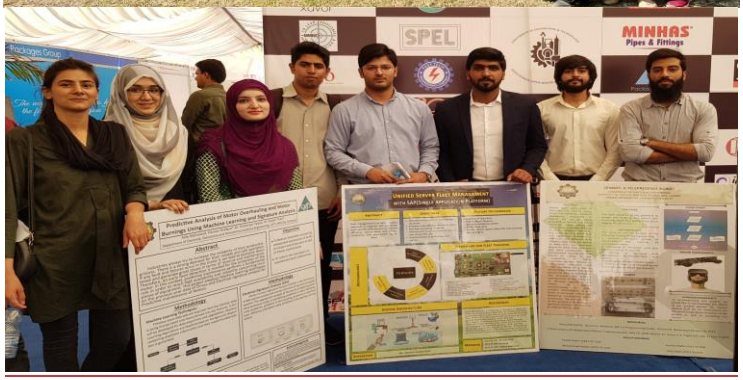
PEO-3: Graduates uphold professional ethics, demonstrate leadership and teamwork, communicate effectively, and commit to lifelong learning and societal contribution with a sense of responsibility and sustainability.

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



Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Energy Engineering

Chairman/Associate Professor
Dr. Hasan Erteza Gelani

Assistant Professor
Dr. Haris Mahmood Khan
Dr. Isra Nazir

Lecturers
Ms. Anam Anwar
Mr. Umair Furqan

The initiation of the BSc Energy Systems Management program in Pakistan marks a transformative step toward building a structured, indigenous pipeline of qualified energy managers, a role that has become critical as the country pushes for energy efficiency and conservation under the mandates of NEECA and PEECA. Previously, aspiring energy managers had to rely on general engineering degrees or foreign certifications, which often lacked a holistic integration of technical, economic, and policy dimensions specific to Pakistan's energy landscape. This new degree fills that gap by offering a dedicated, HEC guided curriculum that blends energy and power systems, mechanical and chemical technologies, and energy economics with hands-on training in audits, modeling, and regulatory

compliance. Consequently, graduates emerge as job-ready professionals equipped to lead energy management initiatives in industries, commercial buildings, and government agencies. By institutionalizing this pathway, the program not only enhances the credibility and standardization of the energy manager profession but also directly supports national goals for reducing energy intensity, lowering carbon emissions, and achieving sustainable development making it a cornerstone for Pakistan's future energy workforce. Therefore, the 'Energy Systems Management' program was launched in 2023 under the Department of Energy Engineering which aims to provide knowledge integrating energy and power, mechanical and chemical technologies, along 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 sciences in devising solutions 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 sciences.

Career Opportunities

Graduates of the BSc Energy Systems Management program have diverse and promising career opportunities across Pakistan's public and private sectors. They can work as energy managers, energy auditors, or sustainability officers in industries such as textiles, cement, and fertilizers, helping businesses reduce energy costs and comply with NEECA and PEECA regulations. Government organizations like NEECA, AEDB, and provincial energy agencies actively recruit these graduates for policy implementation and program management roles. Additionally, renewable energy companies, international development organizations (e.g., GIZ, UNDP), and energy consulting firms offer positions in project development, energy modeling, and carbon accounting. With the added advantage of professional certifications like Certified Energy Manager (CEM), graduates can also pursue entrepreneurial ventures in energy auditing and efficiency solutions, making this degree a gateway to a high-impact, in-demand career.

Programs Offered:

- B.Sc. Energy Systems Management

B.Sc. Energy Systems Management

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CS-103	Introduction to Computer Programming for Data Science	2	1
PHY-103	Applied Physics	2	1
ESM-112	Electric Circuits	3	1
HU-102	Functional English	3	0
IS-104	Islamic Studies / Ethics for NM	2	0
MA-154	Quantitative Reasoning 1	3	0

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ME-238	Thermodynamics (2+1)	2	1
MA-259	MA-259 Quantitative Reasoning 2	3	0
CS-100	Applications of Information and Communication Technologies	2	1
IS-111	Pakistan Studies	2	0
MGT-103	Sociology for Engineering	2	0
CS-162	Object Oriented Programming	3	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ESM-211	Electronics Devices and Circuits	2	1
HU-200	Technical Report Writing	3	0
HU-111	Communication Skills	3	0
IS-203	Ideology & Constitution of Pakistan	2	0
MGT-211	Principles of Management	3	0
BIT-277	Data Structures and Algorithms	3	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ESM-214	Electric Machinery	2	1
ESM-215	Heat and Mass Transfer	3	1
MGT-220	Human Resource Management	3	0
ESM-216	Fundamentals of Energy Systems	3	0
MGT-210	Organizational Psychology	3	0
HU-212	Civic and Community Engagement	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ESM-311	Control Systems	3	1
ESM-312	Renewable Energy Systems	3	0
ESM-315	Power Transmission, Distribution and Utilization	3	1
ESM-321	Energy Conservation & Auditing	3	0
ES-309	Environmental Management Systems	2	1
IS-109 / SE-212L	Fehm-e-Quran I / Social Ethics I (for NM)	0	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
ESM-316	Heating, Ventilation and Air Conditioning Systems	3	0
ESM-324	Energy Finance	3	0
ESM-322	Energy Economics, Policy and Management	3	0
BIT-272	Database System	2	1
ESM-319	Power Electronics for Energy Systems	3	1

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
MGT-349	Entrepreneurship	2	0
MGT-410	Project Management	3	0
BIT-487	Data Science	2	1
	Elective I	3	0
ESM-401a	Internship/Capstone Project	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
	Elective II	3	0
	Elective III	3	0
IS-209 / SE-213L	IS-209 Fehm-e-Quran II / SE-213L Social Ethics II (for NM)	0	1
MGT-370	MGT-370 Management Information System	3	0
MGT-310	MGT-310 Production & Operations Management	3	0
ESM-401b	ESM-401b Internship/Capstone Project	3	0

Elective I	Elective II	Elective III
1.ESM-318 Energy System Planning and Operation 2.ESM-313 Power System Analysis and Design (Pre-requisite: Power Transmission, Distribution and Utilization) 3.ESM- 315 Smart Grid Systems	1.ESM-412 Clean Fuel Technology 2.ESM-413 Fuel Cells and Hydrogen Energy 3.ESM-414 Biofuels and Bio Refineries	1.MGT-313 Total Quality Management 2.MGT-420 Conflict Management 3.MGT-426 Performance Management 4.MGT-427 Training and Development 5.MGT-424 Leadership Strategies 6.MGT-315 Technology Management

Department of Bio-Medical Engineering

Dean:
Prof. Dr. Khalid Farooq

Chairperson:
Dr. Nida Iqbal

Head of Biomedical Engineering Program
Dr Asim Ghaffar

Associate Professors:
Dr. Nida Iqbal

Assistant Professors:
Dr Asim Ghaffar
Dr. Asad-Ullah Khan
Mr. Adnan Rauf

Lecturers:
Dr. Namra Afzal
Ms. Affifa Barakullah
Mr. Muhammad Abdullah
Mr. Farhan Yousaf
Ms. Eman Shahid

Teaching Fellows
Ms. Meezan Hamid
Ms. Sitara Ijaz

Course of Study

Undergraduate Programs

- B.Sc. in Biomedical Engineering
- BS. in Biomedical Sciences

1: B.Sc. in BIOMEDICAL Engineering (4 Years Program)

Program Mission of the Program (Biomedical Engineering)

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.

Educational Objectives (PEOs)

PEO01: Our graduates will solve problems related to Biomedical Engineering.

PEO02: Our graduates will work effectively as a team member and lead multidisciplinary teams while demonstrating the interpersonal and managerial skills, and ethical responsibilities.

PEO03: Our graduates will pursue higher education, research and professional advancement to develop sustainable solutions fulfilling societal needs.

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.

- **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.

B.Sc. in Biomedical Engineering

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
PHY-111	Applied Physics	2	1
CSC-100	Application of Information and Communication Technologies	2	1
EE-100	Electric Circuits	3	1
BME- 104 / MA-110	Basic Biology / Basic Mathematics	2,3	1,0
BME-101	Introduction of Biomedical Engineering	1	0
IS-104	Islamic Studies	2	0
QT-102	Quran Translation	0	0

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
BME-105	Human Physiology & Anatomy 1	2	1
MA-113	Calculus & Analytical Geometry	3	0
EE-110	Circuit Analysis & Design	3	1
CS-103	Intro. to computer programming for data science	2	1
HU-111	Communication Skills	3	0
IS-111	Pakistan Studies	2	0

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-202	Quran Translation	0	0
ME-100L	Workshop Practice	0	1
HU-212	Civic and Community Engagement	2	0

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
IS-109	Fehm - e – Quran - I	0	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
BME-212	Biomechanics	2	1
EE-273	Microprocessor Systems	3	1
EE-220	Signals & Systems	3	0
QT-302	Quran Translation	0	0

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-402	Quran Translation	0	0
IS-209	Fehm - e - Quran - II	0	1

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
IS-203	Ideology & Constitution of Pakistan	2	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
BME-XXX	Technical Elective 3	3	0
	International Language	0	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
BME-441	Biosafety in Healthcare Environment	2	0

2: Program Name: BS in BIOMEDICAL SCIENCES (4 Years Program)

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

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
Dr. Rabia Shaukat

Assistant Professors
Dr. Adnan Qamar
Dr. Muhammad Mujtaba Abbas
Dr. Adeel Munir
Mr. Hafiz Muhammad Shahid Akbar
Mr. Muhammad Moeen Sultan

Lecturers
Dr. Gulzar Ahmad
Dr. Samina Ishaq
Mr. Sheeraz Ali
Ms. Tamseela Habib

Introduction
Mechanical engineering is one of the oldest and broadest engineering disciplines. The Department was established in 2007. The department has procured the latest laboratory equipment in order to conduct laboratory work for 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 and 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. In 2025, the department hosted EFx ASME event; more than 300 participants from different universities across Pakistan attended the event. The department has a fully functional research laboratory, departmental 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

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Chemical, Polymer and Composite Materials Engineering

Chairman
Dr. Hamayoun Mahmood

Professor
Dr. Tanveer Iqbal
Dr. Syed Mohsin Ali Kazmi

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. Zohaib Atiq Khan
Dr. Muhammad Irfan
Dr. Muhammad Sulaiman
Dr. Muhammad Raashid
Dr. Fahad Ali Rabbani
Dr. Saqib Javed

Lecturer
Mr. Ahmed Hassam Khan
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 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 the 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

Chairman	Assistant Professor	Lecturer	Teaching Fellows	IPFP Fellow
Prof. Dr. Sikander Rafiq	Dr. Asma Khan Dr. Adeel Anwar Dr. Momna Rubab	Ms. Zoufishan Latif	Mr. Abdullah Wali Khan Ms. Khola Mohyuddin	Dr. Touseef Iqbal Khan

Introduction

The Department of Food Engineering and Biotechnology was established in 2022. The department is committed to promoting excellence in education, research, and innovation in the field of food science and technology. The department is currently offering BSc Food Science and Technology, a four-year undergraduate program that provides a strong foundation in all food technology areas. The program is supported by well-equipped, dedicated laboratories where students gain hands-on experience through practical sessions and applied learning. It equips students with the technical knowledge, practical skills, and professional

competencies required to meet industry demands and pursue successful careers and entrepreneurial opportunities, while also promoting holistic development through general education, co-curricular activities, and participatory learning.

Course of Study

Undergraduate Program

- B.Sc. Food Science and Technology

Mission

Mission 1: Deliver high-quality undergraduate education integrating food science, technology, and human nutrition to produce industry-ready and socially responsible graduates.

Mission 2: Foster skilled, ethical, and innovative professionals through hands-on training, leadership development, and research exposure for careers in industry, research, public health, and regulatory sectors.

Mission 3: Advance interdisciplinary research and stakeholder engagement with industry, government, and communities to strengthen food safety, food security, value addition, sustainability, and public nutrition awareness.

Program Educational Objectives (PEOs)

PEO-1: To prepare graduates with strong foundational knowledge and practical skills in food science and technology for professional practice in the food industry.

PEO-2: To equip graduates with problem-solving ability and the use of modern tools for food processing, quality assurance, and innovation.

PEO-3: To enable graduates to pursue lifelong learning, higher education, research, and professional development.

PEO-4: To develop ethically responsible professionals with effective communication, teamwork, and societal awareness.

B.Sc. Food Science and Technology

Year 1

Semester 1

Course No	Subject	Credit Hours	
		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
FST-203(24)	Basic Biology	2	1
IS-104	Islamic Studies	3	0
ES-105	Psychology & Ethics	2	0
IS-109 IS-212	Fehm-e-Quran-1 Or Social Ethics-I	0	1

Semester 2

Course No	Subject	Credit Hours	
		Th	Pr
FST-103	Principles of Human Nutrition	3	0
HU-111	Communication Skills	3	0
FST-104	Food Chemistry	2	1
CSC-100	Application of Information and Communication Technologies	2	1
MA118	Applied Mathematics and Statistics	3	0
PHY-113	Applied Physics	2	1

Year 2

Semester 3

Course No	Subjec	Credit Hours	
		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-203	Ideology and Constitution of Pakistan	2	0
IS-209 IS-213	Fehm-e-Quran-II Or Social Ethics-II	0	1
IS-104	Islamic Studies	3	0

Semester 4

Course No	Subject	Credit Hours	
		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 206(24)	Food Biotechnology-I	2	1
FST-210	Unit Operations in Food Processing	2	1
HU-300	Technical Report Writing	3	0

Year 3

Semester 5

Course No	Subjec	Credit Hours	
		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	Credit Hours	
		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	Credit Hours	
		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	Credit Hours	
		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

Department of Natural Sciences and Humanities

Chairman
Prof. Dr. Muhammad Mushtaq

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. Zulfiqar Ali
Dr. Imran Sajid
Dr. Anam Sajid
Dr. Shahid Ch.

Lecturer
Ms. Saba Ajmal
Dr. Muhammad Usman
Mr. Habib-ur-Rehman
Mr. Hassan Imtiaz

Teaching Fellow
Ms. Hamna Naheed
Ms. Shami Khalid
Syed Waqar Shah
Ms. Sobia Parveen
Mr. Babar Farooq Rahimi
Hafiz Abdul Jabbar
Mr. Abu Bakar Siddique
Mr. Abdul Muneeb

Visiting Faculty
Ms. Amna Safdar
Mr. Usman Majeed

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 a comprehensive array of subjects.

Programs Offered
The Department of Natural Sciences and Humanities is going to start a new program titled **BS Mathematics with Data Science** from Fall 2026.
The curriculum of BS Mathematics with Data Science can be found at the link given below: https://mathematics.uet.edu.pk/wp-content/uploads/2025/11/Scheme-of-Studies-of-BS-Mathematics-with-Specialization-in-Data-Science-Artificial-Intelligence-and-Information-Technology.pdf
The Department has been offering a wide variety of programs designed to bridge the disciplines of engineering, natural sciences, and humanities. These programs are given below:

- Ph.D. Chemistry
- Ph.D. Physics
- Ph.D. Mathematics
- M.Phil. Applied 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 the 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 a 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. The 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
Prof. Dr. Muhammad Shahid Rafique

In-charge
Dr. Abdul Aziz Khan Niazi

Assistant Professor
Dr. Abdul Aziz Khan Niazi
Dr. Kanwal Iqbal Khan
Dr. Bilal Aziz
Dr. Abdul Sami

Teaching Fellows
Mr. Muhammad Usman Mubarik
Ms. Hira Tanweer Butt
Ms. Sara Atif Syed
Mr. Nabeel Hassan Slehria
Dr.. Asmara Irfan

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 courses 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 programs 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.

Bachelor of Business Administration (BBA)

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 102	Functional English	3	0
CSC100 BIT 101	Applications of Information and Communication Technologies **OR** Digital Toolbox for Business	2 3	1 0
BUS101	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 (Pre-requisites)	Credit Hours Th	Credit Hours 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 104	Islamic Studies / Ethics	2	0
IS 111	Pakistan Studies	2	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MA 154 MA 151	Quantitative Reasoning-I **OR** Business Mathematics	3	0
HU 200	Technical Report Writing	3	0
BUS 262	World Today	3	0
BUS 231	Human Resource Management	3	0
IS 203	Ideology and Constitution of Pakistan	2	0
IS-109 IS-212L	Fehm-e-Quran-I **OR** Social Ethics-I	0	1
BUS 261	Academic and Professional Development-II	1	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
MA 259 MA 257	Quantitative Reasoning-II **OR** 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
IS-209 IS-213L	Fehm-e-Quran-II **OR** Social Ethics-II	0	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours 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
	Natural Science Elective	3	0
BUS 361	Academic and Professional Development-III	1	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours 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

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BUS 411	Taxation Management	3	0
BUS 471	Entrepreneurship	3	0
	Elective-I	3	0
	Elective-II	3	0
BUS 498	Experiential Learning-I (Internship)	3	0
BUS 461	Academic and Professional Development-IV	1	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 400	International Language	3	0
BUS 431	Strategic Management	3	0
	Elective -III	3	0
	Elective -IV	3	0
BUS 499	Experiential Learning-II (Project)	3	0

- Natural Science Elective must be minimum 3 credit hours.
  Free Elective-II must be minimum 3 credit hour.

Bachelor of Business Information Technology (BBIT)

Year 1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 102	Functional English	3	0
MA 154 MA 151	Quantitative Reasoning-I OR Business Mathematics	3	0
CSC 100 BIT 101	Applications of Information and Communication Technologies OR Digital Toolbox for Business	2 3	1 0
BUS 101	Microeconomics	3	0
BUS 162	Business and Society	3	0
BUS 161	Academic and Professional Development-I	1	0

Semester 2

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 211	Business Communication	3	0
MA 259 MA 257	Quantitative Reasoning-II Business Statistics	3	0
BIT 172 CS 103	Introduction to Programming OR Introduction of Computer Programming for Data Science	2	1
BUS 102	Macroeconomics	3	0
BUS 131	Principles of Management	3	0
IS 104	Islamic Studies / Ethics	2	0
IS-109 IS-212L	Fehm-e-Quran-I OR Social Ethics-I	0	1

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
HU 200	Technical Report Writing	3	0
BIT 271	Object Oriented Programming	2	1
BIT 275	Data Communication and Computer Networking	3	0
BUS 111	Principles of Accounting	3	0
BUS 231	Human Resource Management	3	0
BUS 261	Academic and Professional Development-II	1	0
IS 111	Pakistan Studies	2	0

Semester 4

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BIT 272	Database Systems	2	1
BIT 277	Data Structures and Algorithms	3	0
BUS 262	World Today	3	0
BUS 211	Managerial Accounting	3	0
BUS 232	Organizational Behavior	3	0
IS 203	Ideology and Constitution of Pakistan	2	0
IS-209 IS-213L	Fehm-e-Quran-II OR Social Ethics-II	0	1

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BUS 362	Research Methods for Social Sciences	3	0
BIT 366	Web Development	3	0
BIT 361	Software Engineering	3	0
BUS 321	Business Finance	3	0
BUS 241	Principles of Marketing	3	0
BUS 361	Academic & Professional Development-III	1	0

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BIT 302	Enterprise Systems	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
BUS 263	Law and Society	3	0

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Prt
	Elective-I	3	0
	Elective-II	3	0
BUS 471	Entrepreneurship	3	0
	Natural Science Elective	3	0
BUS 461	Academic & Professional Development-IV	1	0
BIT 498	Experiential Learning-I (Internship)	3	0

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours Th	Credit Hours Pr
BUS 431	Strategic Management	3	0
HU 400	International Language	3	0
	Elective-III	3	0
	Free Elective(s)-II	3	0
BIT 499	Experiential Learning-II (Project)	3	0

- Natural Science Elective must be minimum 3 credit hours.
- Free Elective-II must be minimum 3 credit hour.

List of Elective Courses for BBA/BBIT

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 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 Chairperson

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 Chairperson

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 Chairperson

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 Chairperson

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. Hafiz Muhammd Shahzad Asif

Professor
Dr. Muhammad Umar Qasim

Assistant Professor
Dr. Muhammad Irfan Yousuf
Dr. Qurat-ul-Ain Akram
Dr. Zeeshan Ramzan

Lecturer
Ms. Anam Iftikhar
Ms. Drakhshan Bokhat
Mr. Nadeem Iqbal
Mr. Aizaz Akmal
Ms. Alina Munir
Hafiz Muhammad Danish
Ms. Rimsha Noreen
Mr. Muzammil Dilawar
Ms. Sana Afzal

Teaching Fellow
Ms. Rida
Ms. Shanfa
Ms. Mariyam

Teaching Assistant
Ms. Ghazala
Mr. Ali Raza
Mr. Nouman
Mr. Hassan
Ms. Sonia

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.

B.Sc. Computer Science

Year 1

Semester 1

Course No	Subject	Credit Hours	
		Th	Pr
CSC102	Programming Fundamentals	3	1
CSC100	Application of Information and Communication Technologies	2	1
CSC101	Discrete Mathematics	3	0
MA-123	Calculus	3	0
PHY-111	Applied Physics	2	1

Semester 1

Course No	Subject	Credit Hours	
		Th	Pr
CSC103	Object Oriented Programming	3	1
CSC104	Database Systems	3	1
CSC105	Digital Logic Design	2	1
MA-104	Calculus II	3	0
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

Course No	Subject	Credit Hours	
		Th	Pr
CSC200	Data Structures and Algorithms	3	1
MA-234	Linear Algebra	3	0
HU-102	Functional English	3	0
CSC203	Computer Networks	2	1
CSC204	Software Engineering	3	0
IS-XXX	Islamic Studies	3	0

Semester 4

Course No	Subject	Credit Hours	
		Th	Pr
CSC205	Computer Organization and Assembly Language	2	1
CSC201	Information Security	2	1
CSC202	Artificial Intelligence	2	1
CSC206	Theory of Automata	3	0
CSC208	Design and Analysis of Algorithms	3	0
CSC207	Advanced Database Management Systems	2	1
QT-201	Translation of the Holy Quran-II	1	0

Year 3

Semester 5

Course No	Subject	Credit Hours	
		Th	Pr
CSC300	Operating Systems	2	1
CSC301	Introduction to Human Computer Interaction	3	0
CSC302	Computer Architecture	3	0
CSCXXX	Domain Elective 1	3	0
CSCXXX	Domain Elective 2	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

Semester 6

Course No	Subject	Credit Hours	
		Th	Pr
CSC303	Compiler Construction	2	1
CSC304	Parallel and Distributed Computing	2	1
CSCXXX	Domain Elective 3	3	0
CSCXXX	Domain Elective 4	3	0
XX-XXX	Elective Supporting Course (e.g. Introduction to Marketing/ Financial Accounting)	3	0
HU-XXX	Expository Writing	3	0
QT-301	Translation of the Holy Quran-III	1	0

Year 4

Semester 7

Course No	Subject	Credit Hours	
		Th	Pr
CSC401	Final Year Project – I	0	2
CSCXXX	Domain Elective 5	3	0
CSCXXX	Domain Elective 6	3	0
HU-XXX	Civics and Community Engagement	2	0
HU-XXX	Technical Report Writing	3	0
MGT-XXX	Entrepreneurship	2	0

Semester 8

Course No	Subject	Credit Hours	
		Th	Pr
CSC402	Final Year Project – II	0	4
CSCXXX	Domain Elective 7	3	0
IS-XXX	Ideology and Constitution of Pakistan	3	0
CSC403	Professional Practices in Software Development	2	0
QT-401	Translation of the Holy Quran-IV	1	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			
Course No	Subject	Credit Hours	
		Th	Pr
CSC102	Programming Fundamentals	3	1
CSC100	Application of Information and Communication Technologies	2	1
CSC101	Discrete Mathematics	3	0
MA-123	Calculus	3	0
PHY-111	Applied Physics	2	1

Semester 1			
Course No	Subject	Credit Hours	
		Th	Pr
CSC103	Object Oriented Programming	3	1
CSC104	Database Systems	3	1
CSC105	Digital Logic Design	2	1
MA-104	Calculus II	3	0
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			
Course No	Subject	Credit Hours	
		Th	Pr
CSC200	Data Structures and Algorithms	3	1
MA-234	Linear Algebra	3	0
HU-102	Functional English	3	0
CSC203	Computer Networks	2	1
CSC204	Software Engineering	3	0
IS-XXX	Islamic Studies	3	0

Semester 4			
Course No	Subject	Credit Hours	
		Th	Pr
CSC205	Computer Organization and Assembly Language	2	1
CSC201	Information Security	2	1
CSC202	Artificial Intelligence	2	1
SE-211	Software Requirement Engineering	3	0
CSC208	Design and Analysis of Algorithms	3	0
SE-222	Software Design & Architecture	2	1
QT-201	Translation of the Holy Quran-II	1	0

Year 3

Semester 5			
Course No	Subject	Credit Hours	
		Th	Pr
CSC300	Operating Systems	2	1
SE-323	Software Construction and Development	2	1
SE-331	Software Quality Engineering	3	0
CSCXXX	Domain Elective 1	3	0
CSCXXX	Domain Elective 2	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

Semester 6			
Course No	Subject	Credit Hours	
		Th	Pr
SE-341	Software Project Management	3	0
CSC304	Parallel and Distributed Computing	2	1
CSCXXX	Domain Elective 3	3	0
CSCXXX	Domain Elective 4	3	0
XX-XXX	Elective Supporting Course (e.g. Introduction to Marketing/ Financial Accounting)	3	0
HU-XXX	Expository Writing	3	0
QT-301	Translation of the Holy Quran-III	1	0

Year 4

Semester 7			
Course No	Subject	Credit Hours	
		Th	Pr
CSC401	Final Year Project – I	0	2
CSCXXX	Domain Elective 5	3	0
CSCXXX	Domain Elective 6	3	0
HU-XXX	Civics and Community Engagement	2	0
HU-XXX	Technical Report Writing	3	0
MGT-XXX	Entrepreneurship	2	0

Semester 8			
Course No	Subject	Credit Hours	
		Th	Pr
CSC402	Final Year Project – II	0	4
CSCXXX	Domain Elective 7	3	0
IS-XXX	Ideology and Constitution of Pakistan	3	0
CSC403	Professional Practices in Software Development	2	0
QT-401	Translation of the Holy Quran-IV	1	0
HU-XXX	International Language	0	0

Institute of Machine Learning, Artificial Intelligence, and Cyber Security

Director
Prof. Dr. Muhammad Shoaib

Assistant Professor
Dr. Muhammad Irfan Yousuf

Lecturer
Ms. Namra Sheikh
Mr. Usman Ghani

Teaching Fellow
Ms. Sehrish Ghouri

Introduction
The Institute of Machine Learning, Artificial Intelligence, and Cyber Security KSK Campus at the University of Engineering and Technology (UET) is one of the newly established institutes. To meet the growing demand for Artificial Intelligence and Cyber Security education, UET established a this institute at its New Campus located in Kala Shah Kaku in 2025. The Institute offers B.Sc. degree programs in Artificial Intelligence and Cyber Security.

Programs Offered
The Institute offers the following degree programs.

- B.Sc. Artificial Intelligence
- B.Sc. Cyber Security

B.Sc. Artificial Intelligence
Mission
To provide foundational and advanced AI education that cultivates technical excellence, critical thinking, and ethical awareness, enabling graduates to create impactful and socially responsible intelligent technologies.

Program Educational Objectives (PEOs)
The Program Educational Objectives (PEOs) of the Artificial Intelligence program are to produce graduates who are ready to:

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.

B.Sc. Artificial Intelligence

Year 1

Semester 1

Course No	Subject	Credit Hours	
		Th	Pr
HU-102	Functional English	3	0
AI-121	Discrete Mathematics	2	0
MA-113/MA-101	Calculus and Analytical Geometry/Calculus-I	3	0
CSC100	Applications of ICT	2	1
AI-133	Programming Fundamentals	3	1
IS-104	Istamic Studies	2	0

Semester 1

Course No	Subject	Credit Hours	
		Th	Pr
PHY-118	Applied Physics	2	1
HU-221	Technical Writing & Presentation Skills	3	0
AI-131	Software Engineering	3	0
MA-234	Linear Algebra	3	0
AI-134	Object Oriented Programming	3	1
MA-224/ MA-104	Multivariate Calculus/ Calculus-II	3	0

Year 2

Semester 3

Course No	Subject	Credit Hours	
		Th	Pr
AI-272 / CMPE-223	Digital Systems / Digital Logic Design	3	1
AI-234	Data Structures and Algorithms	3	1
AI-xxx	Domain Core-I	2	1
AI-202 / MA-205	Probability and Statistics / Applied Statistics and Probability	3	0
AI-232	Computer Networks	2	1

Semester 4

Course No	Subject	Credit Hours	
		Th	Pr
AI-273	Comp. 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
IS-109	Fehm-e-Quran-1	0	1
AI-xxx	Domain Core-II	2	1

Year 3

Semester 5

Course No	Subject	Credit Hours	
		Th	Pr
AI-336	Database Systems	3	1
AI-339	Design and Analysis of Algorithms	3	0
AI-xxx	Domain Core-III	3	0
AI-xxx	Domain Core-IV	2	1
AI-431	Operating Systems	3	1

Semester 6

Course No	Subject	Credit Hours	
		Th	Pr
AI-xxx	Domain Core-V	3	0
AI-xxx	Domain Elective-I	3	0
AI-xxx	Domain Elective-II	3	0
AI-xxx	Domain Elective-III	2	1
MGT-349	Entrepreneurship	2	0
HU-222	Expository Writing	2	0

Year 4

Semester 7

Course No	Subject	Credit Hours	
		Th	Pr
MGT-xxx	Introduction to Marketing/Financial Accounting	2	0
AI-xxx	Domain Core-VI	3	0
AI-xxx	Domain Elective-IV	3	0
HU-xxx	Social Science	2	0
AI-499a	Project (Phase-I)	0	3

Semester 8

Course No	Subject	Credit Hours	
		Th	Pr
IS-203	Ideology and Constitution of Pakistan	2	0
HU-212	Civics and Community Engagement	2	0
AI-xxx	Domain Elective-V	3	0
IS-209	Fehm-e-Quran-II	0	1
AI-499b	Project (Phase-II)	0	3
IS-111	Pakistan Studies	2	0

B.Sc. Cyber Security

Mission

To equip graduates with the knowledge, skills, and ethical awareness needed to create secure technologies that address national industrial and socio-economic needs.

Program Educational Objectives (PEOs)

The Program Educational Objectives (PEOs) of the Cyber Security program are to produce graduates who are ready to:

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

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

PEO-03: 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)	Credit Hours	
		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
PHY-111	Applied Physics	2	1

Semester 1

Course No	Subject (Pre-requisites)	Credit Hours	
		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	3	0
CMPE-252	Probability and Random Variables	3	0

Year 2

Semester 3

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CYS-222	Computer Organization & Assembly Language	2	1
MA-234	Linear Algebra	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)	Credit Hours	
		Th	Pr
CMPE-214	Data Structure and Algorithm	3	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	3	0
IS-104	Islamic Studies	2	0

Year 3

Semester 5

Course No	Subject (Pre-requisites)	Credit Hours	
		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 / H U 215 Social Work/ International Relation / political Science	2	0
IS-109L/IS-212L	Fehm -e - Quran - I / Social Ethics-I	0	1

Semester 6

Course No	Subject (Pre-requisites)	Credit Hours	
		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	Electice Supporting Course (e.g. Introduction to Marketing / Financial Accounting)	3	0
HU 222	Expository Writing	3	0
	Internship (Summer Semester)		

Year 4

Semester 7

Course No	Subject (Pre-requisites)	Credit Hours	
		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	3	0
IS-111	Pakistan Studies	2	0
MGT-414	Entrepreneurship and Business Management	2	0
IS-209L/IS-213L	Fehm -e - Quran - II / Social Ethics-II	0	1

Semester 8

Course No	Subject (Pre-requisites)	Credit Hours	
		Th	Pr
CYS-492	Final Year Project - II	0	4
CYS-xxx	Domain Elective 7	3	0
IS 202	Ideology and Constitution of Pakistan	2	0
CYS-413	Professional Practice in Software Development	2	0
HU-111	Communication Skills	3	0
HU xxx	International Language	0	0

FAISALABAD CAMPUS

- Department of Electrical, Electronics & 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 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. Mechatronics and Control Engineering
- B.Sc. Textile Engineering
- B.Sc. Electrical Engineering
- B.Sc. Chemical Engineering
- B.Sc. Computer Science
- B.Sc. Cyber Security
- B.Sc. Data Science
- B.Sc. Computer Engineering
- B.Sc. Industrial Chemistry

Department of Electrical, Electronics & Telecommunication Engineering

Chairman
Prof. Dr. Muhammad Akram

Professor
Dr. Muhammad Akram

Associate Professor
Dr. Faizan Dastgeer
Dr. Aashir Waleed
Dr. Haseeb Hussain

Assistant Professors
Dr. Muhammad Nasir
Dr. Yasir Jamal
Dr. Bilal Ahmad
Dr. Zia ur Rahman
Dr. Ali Raza

Lecturers
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 (NCEAC)
- 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. Shoaib Aslam
Dr. Ammara Kanwal

Lecturers
Dr. Aamir Mehmood
Engr. Dilruba Siddiqi
Engr. Umar Siddique Virk
Engr. Syed Muhammad Umer
Engr. Muhammad Imran

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. All Undergraduate batches (2004-2021) are accredited with PEC, whereas batches 2017, 2019-2021 are PEC accredited under Level-II, Washington Accord.

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.

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

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
Dr. 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

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Textile Engineering

Chairman
Prof. Dr. Muhammad Mohsin

Professor
Dr. Muhammad Mohsin

Associate Professor
Dr. Shaheen Sardar
Dr. Aamir Abbas

Lecturers
Dr. Wardah Anam
Dr. Haris Ameer
Dr. Faiza Safdar
Engr. Sidra Ghaffar
Engr. Muhammad Ahsan
Engr. Khurram Shehzad Akhtar

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 revised 11 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	Credit Hours	
		Th	Pr
TEX-101	Textile Engineering Fundamentals	2	1
CY-105	Applied Chemistry-I	2	1
ME-102	Mechanical Engineering Fundamentals	3	0
CS-106	Application of Information and Communication Technologies (ICT)	2	1
MA-105	Applied Mathematics-I	3	0
IS-102	Islamic Studies	2	0

Semester 2

Course No	Subject	Credit Hours	
		Th	Pr
TEX-102	Textile Raw Materials and Science	2	1
EE-199	Basic Electrical and Electronics Engineering	3	1
MA-106	Applied Mathematics	3	0
HU-215	Social Work	2	0
ME-100L	Workshop Practice	0	1
IS-109L/ IS-212L	Fehm-e -Quran-I/Social Ethics-I	0	1
MGT-105	Introduction to Economics	2	0
CS-103	Introduction to Computer Programming for Data Science	2	1

Year 2

Semester 3

Course No	Subject	Credit Hours	
		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-203	Ideology and Constitution of Pakistan	2	0
HU-205	Technical Report Writing	3	0

Semester 4

Course No	Subject	Credit Hours	
		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
ME-100L	Workshop Practice	0	1
HU-222	Expository writing	2	0

Year 3

Semester 5

Course No	Subject	Credit Hours	
		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	Credit Hours	
		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
IS-111	Pakistan Studies	2	0

Year 4

Semester 7

Course No	Subject	Credit Hours	
		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
TEX-409	Textile Calculations	2	0

Semester 8

Course No	Subject	Credit Hours	
		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
IS-209L/ IS-213L	Fehm-e -Quran-II/ Social Ethics-II	0	1
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 in the department and department faculty have published over 220 papers, 11 patents and 6 international book chapters in the last five years. Seven Ph.D. students have successfully

been supervised and co-supervised by the department faculty as well as completing 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, corn and okra fabric, textile recycling, bio finishes, smart textile 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, PEC project funding and prizes at the ICST 2024 and ICST 2025.

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). 8th International Conference on Sustainable Textile 2025 was held on 10th December 2025. More than 550 student projects were displayed in the student competition 2025. 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
Dr Muhammad Yasir

Associate professors
Dr. Muhammad Yasir

Lecturers
Dr. Faiza Mehmood
Dr. Asim Naveed
Mr. Mohsin Sheraz
Mr. Talha Mubashar
Ms. Rida Zaheer
Mr. Muhammad Tahir

Teaching Fellows
Ms. Kalsoom Fatima
Ms. Kanwal Khurshid
Ms. Nosheen

Introduction

This century is witnessing an unprecedented demand for skilled computing professionals. The Department of Computer Science is a dynamic and rapidly growing academic unit committed to excellence in teaching, research, and innovation. It offers cutting-edge undergraduate programs including B.Sc. Computer Science, B.Sc. Data Science, and B.Sc. Cyber Security, designed to equip students with strong theoretical foundations and practical skills aligned with industry needs. With a focus on emerging technologies, hands-on learning, and strong industry linkages, the department aims to produce competent graduates capable of addressing complex computing challenges and contributing effectively to the digital economy. 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
- B.Sc. Cyber Security
- B.Sc. Data 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 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.

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Basic Sciences and Humanities

Chairman
Prof. Dr. Sajjad Ahmad

Associate Professor
Dr. Ghufrana Samin
Dr. Ilyas Ali
Dr. Arshi Khalid
Dr. Abdur Rehman
Dr. Shazia Karim

Assistant Professors
Dr. Muhammad Aslam
Mr. Kamran Shaheen
Dr. Nosheen Shehzadi

Lecturers
Dr. 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. Industrial Chemistry
- 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.

B.Sc. Industrial 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.

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.

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 based. The hostel facility is provided subject to availability of rooms and on first come first serve basis. 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, state of the art 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.

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

RACHNA CAMPUS

- Department of Electrical Engineering
- Department of Mechanical Engineering
- Department of Computer Science and Engineering
- Department of Natural Sciences, Humanities & Islamic Studies

Campus-Incharge/ Principal
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 kilometres 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.

Programs Offered
Currently, courses at undergraduate and postgraduate levels are being offered. All B.Sc. Engineering courses (except Computer Engineering-NCEAC) 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 enrolment of around 115. So far by year 2025-26, around 870 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.

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 10 faculty members, including two Ph.Ds and eight M.Sc. degree holders. The faculty members are actively involved in teaching and research activities.

Associate Professors
Dr. Haroon Farooq **(Chairman EED)**
Dr. Muhammad Naveed Akhtar

Assistant Professors
Engr. Muhammad Rehan Arif
Engr. Moazzam Shehzad

Lecturers
Engr. Waqas Ali
Engr. Irzam Shahid
Engr. Hira Ali Jamal
Engr. Saira Arif
Engr. Saman Cheema
Engr. Faiqa Tariq

Teaching Assistant
Engr. Moman Farooq

Lab Staff
Engr. Hussnain Khurshid

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 Circuits Lab
7. Computer Lab
8. Integrated Electronics Lab
9. Control and Instrumentation Lab
10. Workshop
11. Physics Lab

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Mechanical Engineering

The department of Mechanical Engineering was established in 2003. Currently the department has a student enrolment 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 has doubled 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.
4.

Chairman, Department of Mechanical Engineering

Dr. M. Salman Abbasi, **Associate Professor**

Associate Professors

Dr. Qasim Ali Ranjha

Assistant Professors

Dr. Ali Akbar
Dr. Anas Rao
Engr. Mushtaq Ahmad
Engr. Humble Bin Khalid

Lecturers

Engr. Muhammad Kashif Jamil
Engr. Aaqib Imdad
Engr. Hafiz Muhammad Suleman

Teaching Fellows

Engr. Mariam Hameed

Teaching Assistants

Engr. Ahsan Ali

Workshop/Lab Staff

Engr. Muhammad Irfan
Engr. Usman Jamil

Laboratories

The following laboratories have been established 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

Computer / CAD / FEA
Mechanical Workshops
Machines Shop
Fitting Shop
Foundry Shop
Carpentry Shop
Electrical Shop
Welding Shop

- Mechanical Vibration

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Computer Science and Engineering

The department of Computer Science and Engineering was established in 2008 and is currently offers degree programs in Computer Science at undergraduate and postgraduate levels. The degree program is accredited by National Computing Education Accreditation Council (NCEAC). Department has successfully doubled its intake since Fall 2023 and 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)

PEO-1 **Computing Education and Application:** Graduates demonstrate theoretical and practical knowledge and skills of computer science to solve real world complex problems.

PEO-2 **Professionalism, Leadership, Continuous Learning:** Graduates demonstrate professionalism, leadership qualities and engage in continuous learning of new developments in diverse fields of computing.

PEO-3 **Teamwork Communication, Ethics:** Graduates communicate effectively, work in multi-disciplinary team environment and exhibit an awareness of professional and social responsibility by making an impact on the 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
Dr. Noman Sohaib Qureshi
Ms. Amna Wajid
Mr. Muhammad Shehzad Aslam
Ms. Uroosa Bilal Chaudhry
Mr. Syed Muhammad Mehdi
Ms. Namra Ashraf

Teaching Fellow/Graduate Assistant
Mr. Muhammad Faizan Iqbal
Mr. Adil Yousaf

Laboratories

The department currently has following dedicated laboratories to support its degree programs.

- Programming Lab
- Systems Lab
- Final Year Projects/Research Lab
- Video Conference Room

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Natural Sciences, Humanities and Islamic Studies

Chairman,
Dr. Adnan Aslam, Associate Professor

Assistant Professors
Dr. Mateen Ahmed (Mathematics/ Program Lead CE-NCEAC)
Dr. Majid Hussain (Mathematics)
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.

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

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 road Narowal. 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 1300 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)
Dr. Rana Tariq Mehmood Ahmad

Assistant Professors
Mr. Adnan Bashir
Dr. Osama Bin Naeem
Mr. Muhammad Haseeb

Lecturers
Ms. Amna Javeed
Mr. Shahbaz Bashir

Teaching Assistant
Mr. Muhammad Bilal

Program Offered
B.Sc. Electrical Engineering
B.Sc. Computer 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. The department started new program B.Sc. Computer engineering in 2025.

B.Sc. 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.

Alumni

10 batches of Electrical Engineering Department 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.

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

B.Sc. Computer Engineering:

Program (POs)

PO-01: Computing education and Application
PO-02: Professionalism, Leadership, Continuous Learning
PO-03: Teamwork, Communication, Ethics

Regulatory Status

The undergraduate program of Computer Engineering at Narowal Campus is under NCEAC.

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.

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Computer Science and Engineering

Associate Professor
Dr. Muhammad Idrees (Chairman)

Assistant Professor
Dr. Iqra Muneer

Lecturers
Dr. Yaseen ul Haq
Dr. Saadia Tariq
Ms. Fatima Shahzadi
Ms. Rabia Sana
Ms. Madiha Maqbool Ch.

Teaching Fellow
Ms. Hafiza Habiba Shabir
Ms. Farva

Teaching Assistant
Ms. Ariba

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

Eight Batches of Computer Science and Engineering Department with a total of more than 280 students have graduated and the alumni are working in various national and international organizations.

Programs

a) B.S. Computer Science
b) M.Sc. Computer Science (Evening Program)

Regulatory Status

The undergraduate program of Computer Science and Engineering Department at Narowal Campus is accredited by **NCEAC (HEC)** and achieved **W-Category**.

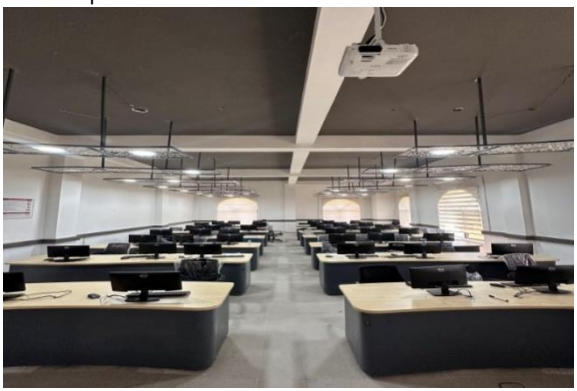
Laboratories

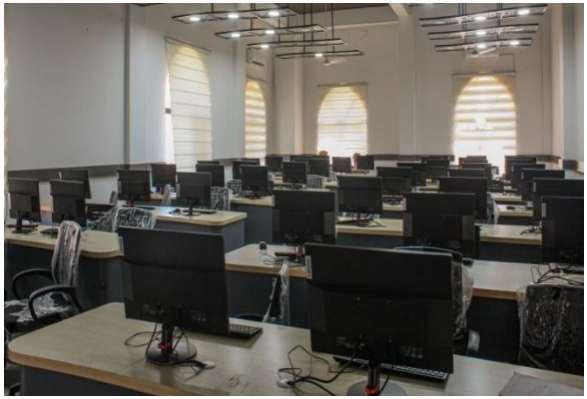
The department has the following well equipped laboratories which fulfill the academic needs of students and faculty:

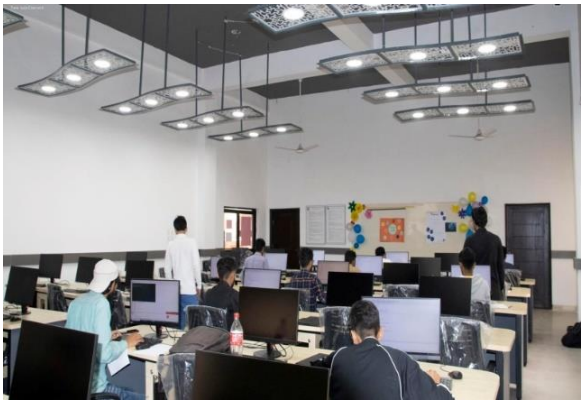
1. Programming
2. Software Engineering/Database
3. General Purposes
4. Network/Operating System
5. FYP
6. Digital Logic Design
7. Hardware

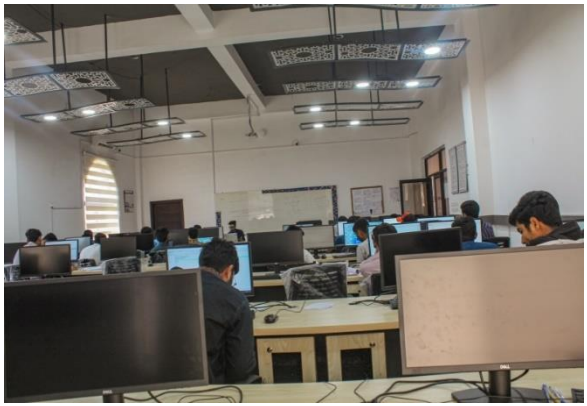
Extra-Curricular Activities

Gaming Competitions, Software Exhibitions, Free-lancing, Sports Activities, Annual Dinners, Debating Activities, etc. also managed by CODATOR Society, under the supervision of Department.









Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Mechanical Engineering

Assistant Professors
Dr. Zahid Hussain (HOD)

Lecturers
Mr. Tanveer Mukhtar
Mr. Muhammad Lolak
Mr. Shahid Farooq
Mr. Umar Ishaq
Mr. Asif Jalal
Mr. Sufyan Matloob
Mr. Basit Ali Wajid

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.

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Civil Engineering

Professors
Dr. Khawaja Adeel Tariq
(Chairman)

Lecturers
Dr. AdeelFaisal
Dr. Muhammad Usman
Mr. Intezar Hussain
Mr. Usman Anwar
Ms. Sehrish Khan
Mr. Ahad Ali

Teaching Assistant
Mr. Junaid Iqbal
Mr. Abdul Rehman Butt

Introduction
The Department of Civil Engineering at UET Narowal Campus was established in 2013, and its first batch graduated in 2017. Currently, around 210 students are enrolled across various sessions. The department boasts a team of highly qualified faculty members, with academic and professional backgrounds from Japanand 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

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Architecture

Assistant Professors
Dr. Amna Iqbal (HOD)

Lecturer
Ar. Haroon Malik

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.

Vision
Generate knowledge for global competitive advantage and become a leading world class Institute. We envision a world where architecture plays a key role for the wellbeing of people and safeguarding the environment.

Mission
Strive for excellence as one of the leading institutions in Architecture in Pakistan. Aim to create a vibrant and collaborative environment for teaching and research by fostering a strong studio culture. Focus to train and equip our students with design thinking, technical knowledge and advanced tools

Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

Department of Bio-Medical Engineering

Assistant Professor
Dr. Muhammad Rehan Chaudry (HOD)
Dr. Hafiz Muhammad Salman Ajmal
Dr. Sameen Ahmed Malik
Dr. Bisma Rauff

Lecturer
Mr. Abdul Hanan Taqi

Teaching Fellow
Ms. Kinza Naseer
Ms. Asma Latif
Ms. Atiqa Saeed
Mr. Shazaib

Teaching Assistant
Ms. Rimsha Sarwar

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. Basic Biology
5. Bioinstrumentation
6. Clinical instrumentation
7. Robotics
8. Computer and Project Laboratory

Curriculum of relevant program is available in the prospectus of Bio-Medical Engineering KSK

Department of Basic Sciences & Humanities

Assistant Professor

Dr. Habib Hussain (HOD)
Dr. Muhammad Yousuf
Dr. Absar Ul Haq
Dr. Mudassar Hussain

Lecturers

Dr. Hafiz Abdullah Saleem
Dr. Usman Abbas
Dr. Tahir Shahzad
Mr. Muhammad Zeeshan Ashraf
Ms. Farheen Samra
Ms. Rabia Shoukat
Ms. Anjum Naseem Rao
Mr. Muhammad Ishaq Malik
Ms. Iqra Javed
Mr. Moazzam

Introduction

The Basic Sciences and Humanities (BS&H) department was established in 2012 at UET Lahore, Narowal campus. The department is committed to delivering quality education and is staffed by 14 highly qualified faculty members who have numerous research publications in national and international impact factor journals. It emphasizes both theoretical understanding and practical application to prepare students for academic and professional excellence.

The department plays a vital role in supporting all engineering disciplines by offering courses in Chemistry, Physics, Mathematics, Communication Skills, Business Administration, Psychology, and Pakistan & Islamic Studies. Furthermore, the department strives to develop a broad intellectual perspective among students, highlighting the integrated relationship between engineering, social sciences, and professional life. It also provides specialized training programs to enhance students' linguistic and communication skills.

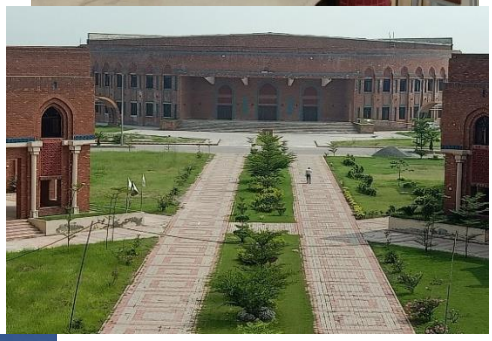
Mission

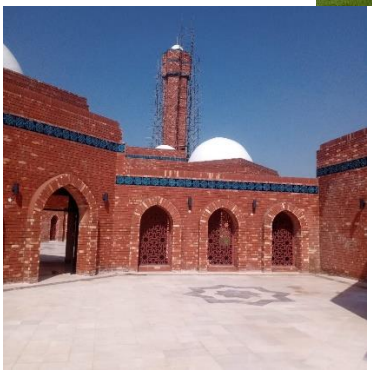
To awaken young minds and unleash their talents in both theory and practice, through innovative teaching methods.

Laboratories

The department has following well-equipped laboratories to fulfill academic needs of students and faculty as well:

- Chemistry Lab
- Physics Lab
- Math Lab





Curriculum of relevant program is available in the prospectus at their parent department Main Campus Lahore (except Bio-Medical Engineering KSK)

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:

$$GPA = \sum_{i=1}^{n} (GP_i \times CH_i) \Big/ \sum_{i=1}^{n} CH_i$$

where *n* is the number of subjects in the semester for which GPA is being computed.

$$CGPA = \sum_{i=1}^{m} (GP_i \times CH_i) \Big/ \sum_{i=1}^{m} CH_i$$

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 The subject teachers, being the Superintendent(s), shall:

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 constituent 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.
   (a) The candidate must have appeared in the Combined Entry Test conducted by UET Lahore of the same session in which he/she was admitted in Parent University. In case; he/she has not appeared in the UET entry test then he/she 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/she was admitted in parent university.
   (b) In case of the candidate of university / institution abroad, he/she must have appeared in the SAT (Scholastic Aptitude Test) of same year in which he/she obtained admission in the parent university.
   (c) The candidate will provide certified copies of transcript and approved course outline from his/her parent university.
   (d) The SAT result card must be sent to UET, Lahore directly from 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/her papers of previous years/semesters or having subject with “I”, ”W”,“F”, “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 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.
   (a) Students from other HEC approved universities and programs accredited by PEC / PCATP / IPP, 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 Honours.

(d) Migrating student may be deficient in subjects as compared to the class which he /she has joined. Such a student shall repeat these subjects. In case, he /she is studying a particular subject for the first time, it will not be classified as repeated subject for him/her.

18. 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. 5,00,000/- (Rupees five lacs only) in case of candidates of Universities/ Institutions abroad.

ii. Rs. 4,00,000/- (Rupees four lacs only) from applicants admitted elsewhere in Pakistan in private universities or on 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 candidate shall pay prescribed semester dues of the category in which he got admission, in addition to migration fee.

1. A student desiring to leave this University in order to join another University or Institution shall apply to the Dean of the Faculty concerned on the prescribed form after payment of prescribed fee of Rs. 2000/-.
2. No migration certificate shall be issued unless the student has cleared all University dues.
3. In case of student who has been debarred from taking University examination or has been expelled or rusticated, no migration certificate shall be issued so far as the punishment is in force.
4. The Dean of Faculty concerned shall be competent to issue a migration certificate on the prescribed form.
5. A student who has obtained Migration Certificate from the University but has not secured admission in another institution may be re-admitted to the University in the class to which he can be admitted under the regulation provided that his absence from the current teaching session of that class does not exceed four weeks and further that he surrenders the Migration Certificate.

Any change / addition/ modification, if made, in the above regulations, will also be applicable

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.

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) / Financial Management System (FMS) 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 / UBL.
   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 30 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**
   At present the University's fee refund policy under the guidelines of HEC will present before the Academic Council for approval, after the approval of the competent authority fee refund policy will be published and will be available on admission portal.

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", "NM", "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

Sr. No.	Description	Subsidized	Partially Subsidized
		A1,A1-M I, L, M, P, R, B, D, E, H, J1, K, Q1, Q2, U1, U2, H1, H4, NM	A2, A2-M, H2, H3, H5, J2, N, O, S, SF,SI
1	**(Non-Recurring Fee (Payable at the Time of Admission)**		
i	Admission Fee Payable in First Semester/Readmission Fee	54050	74040
	(Recurring Fee From 2nd to 8th or 10th Semester)		
ii	Tuition Fee (Payable in every semester)	56290	85250
iii	Examination Fee	1474	1572
iv	Facilities Charges (Day scholars / Hostiled)	7220/3610	7220/3610
v	Summer Semester Subject Registration Fee	2650	9850
vi	Degree & Final DMC & Verification Fee (Payable in 8th Semester)	10000	10000
2	**Semester Hostel Charges**		
i	Room Rent (Cubicle/ Dormitory)	7000/5500	15000/7500
ii	Utility Charges (Cubicle/ Dormitory)	10750/7540	9170/8760
iii	Hostel Admission Fee (One Time Payment)	2810	2810
iv	Consolidated Summer Semester Hostel Charges (Cubicle/ Dormitory)	17750/13040	24170/16260

UNDERGRADUATE FEE SCHEDULE FOR SESSION FALL 2026

Semesters	Session FALL 2026	
	Subsidize	Partially Subsidize
	A, A1, A1-M, A3, I, L, M, P, R, B, D, E, H, J, J1, K, Q, U, C, T, H1, H4, NM, AP1, AP1-M	A2, A2-M, H2, H3, H5, J2, N, O, S, SF, SI, AP2, AP2-M
First Semester (Fall) 1st Installment Admission Fee (Non- Refundable)	54,050	74,040
First Semester (Fall) 2nd Installment Tuition Fee due on 1st day of classes	56,290 *	85,250
Second Semester (Spring)	72,260	113,040
Third Semester (Fall)	79,020	122,080
Fourth Semester (Spring)	79,020	122,080
Fifth Semester (Fall)	86,580	133,400
Sixth Semester (Spring)	86,580	133,400
Seventh Semester (Fall)	95,060	146,070
Eighth Semester (Spring)	105,060	156,070
Total 8 Semesters	**713,920**	**1,085,430**
Ninth Semester (Fall)	104,550	160,260
Tenth Semester (Spring)	104,550	160,260
Total 10 Semesters	**923,020**	**1,405,950**

Per Semester Hostel Fee & Summer Hostel Fee		
Rs.2810/- charged as non-refundable Hostel Admission Fee at the time of allotment		
Dormitory (Fall / Spring)	13040	17750
Cubicle (Fall / Spring)	16260	24170

* - 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.104050 in first semester (which includes admission charges) and Rs.50000 per semester until seventh semester (with final semester containing degree/DMC fee).

Note:

Those who admitted in the program of Industrial Chemistry, Faisalabad Campus a fix fee of Rs. 30,000 per semester inclusive of all charges in addition to Admission Charges (Rs. 15,000) will be charge per candidate.

UNDERGRADUATE ALLOCATION SEATS FOR Fall 2026

Note: The University reserves the right to revise the number of seats at any stage of the admission process in accordance with its policies.

Campus	Program	Fall 2026 Admissions Seats program wise Table-1			
		A1 / *A1-M (where applicable)	A2 / *A2-M (where applicable)	All Others Including NM, N, P, S, O, R, T, L and others reserved seats where applicable	Total seats for 2026 (Excluding "NM)
FSD	Chemical Engineering	71	-	10	80
FSD	Industrial Chemistry*	50	-	1	50
FSD	Computer Engineering (NCEAC)*	50	50	2	100
FSD	Computer Science*	100	50	2	150
FSD	Electrical Engineering	83	-	19	100
FSD	Mechatronics & Control Engineering	86	-	16	100
FSD	Textile Engineering	47	-	4	50
FSD	Data Science*	50	-	1	50
FSD	Cyber Security*	50	-	1	50
KSK	Artificial Intelligence*	100	-	**2**	100
KSK	Bachelor of Business Administration*	50	-	1	50
KSK	Bachelor of Business Information Technology*	50	-	1	50
KSK	Biomedical Engineering*	27 A1: 14 A1-M:13	22 A2:11 A2-M:11	2	50
KSK	Chemical Engineering	75	18	8	100
KSK	Computer Engineering (NCEAC)*	50	-	1	50
KSK	Computer Science*	100	100	2	200
KSK	Electrical Engineering	70	9	24	100
KSK	Energy Systems and Management*	50	-	1	50
KSK	Food Science & Technology*	50	-	1	50
KSK	Mechanical Engineering	67	17	19	100
KSK	Software Engineering*	50	100	3	150
KSK	Data Science *	50	-	1	50
KSK	Cyber Security*	50	-	1	50
KSK	Mathematics	50	-	1	50
NWL	Architecture	28	-	3	30
NWL	Biomedical Engineering*	98 A1: 51 A1-M:47	**-**	4	100
NWL	Civil Engineering	68	-	14	80
NWL	Computer Engineering (NCEAC)*	50	-	1	50
NWL	Computer Science*	50	50	2	100
NWL	Computer Science (with Specialization in Quantum Computing) *	50	-	-	50
NWL	Electrical Engineering	93	-	10	100
NWL	Mechanical Engineering	92	-	10	100
NWL	Business Information Technology	50	-	1	50
RCET	Computer Engineering (NCEAC)*	50	-	1	50
RCET	Computer Science*	50	50	3	100
RCET	Electrical Engineering	45	-	6	50
RCET	Mechanical Engineering	91	-	11	100
LHR	Architectural Engineering	27	7	12	45
LHR	Architecture	21	14	11	45
LHR	Artificial Intelligence (Morning)*	-	100	2	100
LHR	Automotive Engineering	26	24	1	50
LHR	Bachelor of Business Administration (Morning)*	100	50	3	150

LHR	Bachelor of Business Administration (afternoon)*	-	50	-	50
LHR	Bachelor of Business Information Technology (Morning)*	50	200	5	250
LHR	Bachelor of Business Information Technology (afternoon)*		100	-	100
LHR	Business Analytics*	40	10	1	50
LHR	Business Data Analytics*	50	50	2	100
LHR	Chemical Engineering	56	17	28	100
LHR	Chemistry*	45	-	6	50
LHR	City & Regional Planning	24	5	16	45
LHR	Civil Engineering	86	91	80	250
LHR	Computer Engineering	58	37	7	100
LHR	Computer Science (Morning)*	86	100	18	200
LHR	Cybersecurity (Morning)*	33	67	2	100
LHR	Data Science (Morning)*	50	50	2	100
LHR	Electrical Engineering	84	49	73	200
LHR	English Language and Literature*	50	-	1	50
LHR	Environmental Engineering	48	-	3	50
LHR	Environmental Science*	48	2	3	50
LHR	Geological Engineering	42	-	10	50
LHR	Remote Sensing and GIS*	50	-	1	50
LHR	Industrial & Manufacturing Engineering	39	5	7	50
LHR	Industrial Chemistry*	50	-	1	50
LHR	Interior Design*	39	11	1	50
LHR	Islamic Studies (Specialization in Computer Technology) *	50	-	1	50
LHR	Logistics and Supply Chain Management*	50	-	1	50
LHR	Materials Science*	50	-	1	50
LHR	Mathematics	95		7	100
LHR	Mechanical Engineering	84	49	68	200
LHR	Mechatronics & Control Engineering	**57**	40	4	100
LHR	Metallurgical & Materials Engineering	42	-	9	50
LHR	Mining Engineering	41	-	10	50
LHR	Petroleum & Gas Engineering	30	5	16	50
LHR	Physics*	45	-	6	50
LHR	Polymer Engineering	47	-	4	50
LHR	Product & Industrial Design	48	-	**3**	50
LHR	Robotics and Intelligent Systems*	-	100	2	100
LHR	Software Engineering (Morning)*	-	100	2	100
LHR	Transportation Engineering	37	-	4	40

- M- Category, Seats reserved for Children of Univ. Employees under category-M with Upper Limit of 10 seats in any major discipline- A total of 41 seats in all disciplines in addition to 05 seats other sciences disciplines.
- For Fall admissions, some seats are available in designated disciplines on an **"Open Merit" basis for candidates from all over Pakistan (except Punjab)** under AP1/AP1-M and AP2/AP2-M, where applicable.

UNDERGRADUATE ALLOCATION SEATS FOR Fall 2026

Details and Distribution of Designated Seats for following categories Included in Table -1:

Campus	Program Name	L	N	NM	O	P	R	S	T
FSD	Chemical Engineering - Morning	-	-	1	-	1	-	4	-
FSD	Computer Engineering (NCEAC) - Morning	-	-	2	-	-	-	-	-
FSD	Computer Science - Morning	-	-	2	-	-	-	-	-
FSD	Cybersecurity - Morning	-	-	1	-	-	-	-	-
FSD	Data Science - Morning	-	-	1	-	-	-	-	-
FSD	Electrical Engineering - Morning	-	-	1	-	2	-	14	-
FSD	Industrial Chemistry - Morning	-	-	1	-	-	-	-	-
FSD	Mechatronics & Control Engineering - Morning	-	-	2	-	-	-	11	-
FSD	Textile Engineering - Morning	-	-	1	-	1	-	-	-
KSK	Artificial Intelligence - Morning	-	-	2	-	-	-	-	-
KSK	Bachelor of Business Administration - Morning	-	-	1	-	-	-	-	-
KSK	Bachelor of Business Information Technology - Morning	-	-	1	-	-	-	-	-
KSK	Biomedical Engineering - Morning	-	-	1	-	1	-	-	-
KSK	Chemical Engineering - Morning	-	-	1	-	1	-	4	-
KSK	Computer Engineering (NCEAC) - Morning	-	-	1	-	-	-	-	-
KSK	Computer Science - Morning	-	-	2	-	-	-	-	-
KSK	Cybersecurity - Morning	-	-	1	-	-	-	-	-
KSK	Data Science - Morning	-	-	1	-	-	-	-	-
KSK	Electrical Engineering - Morning	-	-	1	-	2	-	18	-
KSK	Energy Systems and Management - Morning	-	-	1	-	-	-	-	-
KSK	Food Science & Technology - Morning	-	-	1	-	-	-	-	-
KSK	Mechanical Engineering - Morning	-	-	1	-	2	-	14	-
KSK	Software Engineering - Morning	-	-	1	-	-	-	2	-
LHR	Architectural Engineering - Morning	-	-	1	-	-	-	5	-
LHR	Architecture - Morning	-	1	1	-	-	-	5	1
LHR	Artificial Intelligence - Morning	-	-	2	-	-	-	-	-
LHR	Automotive Engineering - Morning	-	-	1	-	-	-	-	-
LHR	Bachelor of Business Administration - Afternoon	-	-	-	-	-	-	-	-
LHR	Bachelor of Business Administration - Morning	-	-	3	-	-	-	-	-
LHR	Bachelor of Business Information Technology - Afternoon	-	-	-	-	-	-	-	-
LHR	Bachelor of Business Information Technology - Morning	-	-	5	-	-	-	-	-
LHR	Business Analytics - Morning	-	-	1	-	-	-	-	-
LHR	Business Data Analytics - Morning	-	-	2	-	-	-	-	-
LHR	Chemical Engineering - Morning	-	1	1	-	2	-	10	-
LHR	Chemistry - Morning	-	-	1	-	-	-	5	-
LHR	City & Regional Planning - Morning	-	1	1	-	-	-	-	1
LHR	Civil Engineering - Morning	-	2	2	-	4	-	15	-
LHR	Computer Engineering - Morning	-	-	2	-	-	-	-	-
LHR	Computer Science - Morning	-	-	4	-	-	-	-	-
LHR	Cybersecurity - Morning	-	-	2	-	-	-	-	-
LHR	Data Science - Morning	-	-	2	-	-	-	-	-
LHR	Electrical Engineering - Morning	1	2	2	1	4	1	10	-
LHR	English Language and Literature - Morning	-	-	1	-	-	-	-	-
LHR	Environmental Engineering - Morning	-	-	1	-	-	-	2	-
LHR	Environmental Science - Morning	-	-	1	-	-	-	2	-
LHR	Geological Engineering - Morning	-	-	1	-	-	-	1	-
LHR	Industrial & Manufacturing Engineering - Morning	-	-	1	-	1	-	3	-
LHR	Industrial Chemistry - Morning	-	-	1	-	-	-	-	-
LHR	Interior Design - Morning	-	-	1	-	-	-	-	-

LHR	Islamic Studies (Specialization in Computer Technology) - Morning	-	-	1	-	-	-	-	-
LHR	Logistics and Supply Chain Management - Morning	-	-	1	-	-	-	-	-
LHR	Materials Science - Morning	-	-	1	-	-	-	-	-
LHR	Mathematics - Morning	-	-	2	-	-	-	5	-
LHR	Mechanical Engineering - Morning	1	2	2	1	4	-	15	-
LHR	Mechatronics & Control Engineering - Morning	-	-	1	-	-	-	2	-
LHR	Metallurgical & Materials Engineering - Morning	-	1	1	-	-	-	1	-
LHR	Mining Engineering - Morning	-	1	1	-	-	-	-	-
LHR	Petroleum & Gas Engineering - Morning	-	1	1	-	-	-	3	-
LHR	Physics - Morning	-	-	1	-	-	-	5	-
LHR	Polymer Engineering - Morning	-	-	1	-	-	-	2	-
LHR	Product & Industrial Design - Morning	-	-	1	-	-	-	2	-
LHR	Remote Sensing and GIS - Afternoon	-	-	1	-	-	-	-	-
LHR	Robotics and Intelligent Systems - Morning	-	-	2	-	-	-	-	-
LHR	Software Engineering - Morning	-	-	2	-	-	-	-	-
LHR	Transportation Engineering - Morning	-	-	1	-	-	-	2	-
NWL	Architecture - Morning	-	-	1	-	-	-	2	-
NWL	Biomedical Engineering - Morning	-	-	2	-	2	-	-	-
NWL	Civil Engineering - Morning	-	-	1	-	1	-	10	-
NWL	Computer Engineering (NCEAC) - Morning	-	-	1	-	-	-	-	-
NWL	Computer Science - Morning	-	-	2	-	-	-	-	-
NWL	Electrical Engineering - Morning	-	-	2	-	2	-	5	-
NWL	Mechanical Engineering - Morning	-	-	2	-	2	-	6	-
NWL	Business Information Technology			1	-	-	-	-	-
RCET	Computer Engineering (NCEAC) - Morning	-	-	1	-	-	-	-	-
RCET	Computer Science - Morning	-	-	2	-	-	-	-	-
RCET	Electrical Engineering - Morning	-	-	1	-	1	-	2	-
RCET	Mechanical Engineering - Morning	-	-	2	-	1	-	2	-

- For Fall Admissions, some seats are available in designated disciplines on an “Open Merit” basis under AP1/AP1-M and AP2/AP2-M for candidates from all over Pakistan (except Punjab), wherever applicable as mentioned in the table below.

Campus	Program Name
LHR	Geological Engineering
LHR	Metallurgical and Materials Engineering
FSD	Textile Engineering
LHR	Mining Engineering
KSK, NWL	Biomedical Engineering
LHR	City & Regional Planning
LHR	Product & Industrial Design

UNDERGRADUATE ALLOCATION SEATS FOR Fall 2026

Details and Distribution of Reserved / Designated Seats for following categories Included in Table -1:

Discipline Name	Sindh	Balochistan	KPK	AJ&K		Gilgit Baltistan	ARMY	Air Force	Navy	FATA	D. G. Khan	Rajanpur	HEC Bal/FATA	Self-Finance	PTAP	Afghan Nationals	OIC	IOK	CEP	Sri Lankan
	B	C	D	E1		E2	J	J	J	K	Q1	Q2	U	SF	H1	H2	H2	H3	H4	H5
Electrical Engineering LHR	1	1	1	5	Open discipline (Only for residents of AJK Leepa Valley)	1	3	1	-	4	1	1	Open discipline (Upper limit of 4 seats in major disciplines)	10	20	Open discipline (Upper limit of 5 seats in major disciplines in Lahore campus)	-	Open discipline (maximum 3 nominees shall be accommodated in major disciplines)	2	1
Electrical Engineering FSD	-	1	-	1		-	-	-	-	-	-	-		10 seats (maximum 5 nominees shall be accommodated in other disciplines)	-		-		-	-
Electrical Engineering KSK	-	1	-	1		1	-	-	-	-	-	-			-		-		-	-
Electrical Engineering RCET	-	1	-	1		-	-	-	-	-	-	-			-		-		-	-
Electrical Engineering NWL	-	-	1	-		-	-	-	-	-	-	-			-		-		-	-
Computer Engineering LHR	-	-	-	-		-	2	1	1	-	-	-			-		-		-	1
Computer Science LHR	-	-	-	-		-	-	-	-	-	-	-		10	-		-		4	-
Computer Science RCET	-	1	-	-		-	-	-	-	-	-	-			-		-		-	-
Mechanical Engineering LHR	1	1	1	5		1	3	-	1	4	-	-		10	12		1		2	1
Mechanical Engineering KSK	-	-	-	1		-	-	-	-	-	1	-			-		-		-	-
Mechanical Engineering RCET	-	1	-	1		1	-	-	-	2	-	1			-		-		-	-
Mechatronics LHR	-	-	-	-		1	-	-	-	-	-	-			-		-		-	-
Mechatronics FSD	-	-	-	-		1	-	-	-	2	-	-			-		-		-	-
IME LHR	-	-	-	-		-	-	-	-	2	-	-			-		-		-	-
IME RCET	-	1	-	-		-	-	-	-	-	-	-			-		-		-	-
Textile Engineering FSD	-	-	-	-		-	-	-	-	2	-	-			-		-		-	-
Civil Engineering LHR	1	3	1	5		-	2	-	-	8	1	-		10	21		1		1	1
Civil Engineering NWL	-	-	1	-		1	-	-	-	-	-	-			-		-		-	-
Architectural Engineering LHR	-	1	1	1		-	-	-	-	-	-	-			3		-		-	-
Transportation Engineering LHR	-	1	-	-		-	-	-	-	-	-	-			-		-		-	-
Chemical Engineering LHR	2	1	2	2		-	-	-	-	2	-	-			4		-		-	1
Chemical Engineering FSD	-	1	-	2		-	-	-	-	-	-	1			-		-		-	-
Chemical Engineering KSK	-		-	-		-	-	-	-	2	-	-			-		-		-	-
Polymer Engineering LHR	-		-	-		1	-	-	-	-	-	-			-		-		-	-
Metallurgical & Materials Engg LHR	-	1	2	-		-	-	-	-	-	-	-			3		-		-	-
Petroleum Engineering LHR	2	3	1	-		-	-	-	-	-	1	-			3		-		1	-
Mining Engineering LHR	1	2	1	2		1	-	-	-	-	-	-			-		1		-	-
Geological Engineering LHR	1	1	2	2		-	-	-	-	2	-	-			-		-		-	-
Architecture LHR	-	1	-	-		-	-	-	-	-	-	-			2		-		-	-
City & Regional Planning LHR	1	1	5	2		1	-	-	-	-	-	-			3		-		-	-

"Total fifty (50) SF category eats are allocated, with ten (10) seats per designated discipline. Remaining seats may be distributed across other disciplines, subject to a maximum of five (5) per discipline."

"Twenty (20) U category 20 seats are allocated for open disciplines, with an upper limit of four (4) seats per major discipline."

Note: The University reserves the right to revise the number of seats at any stage of the admission process in accordance with its policies.

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.

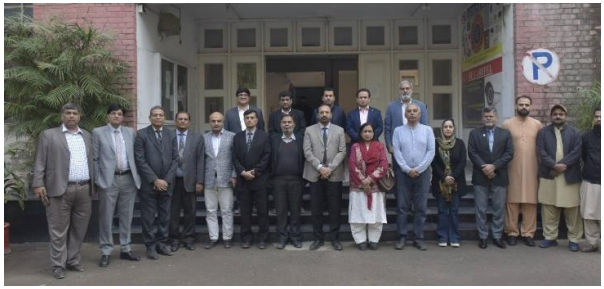
UET wants to maintain an association with pass-out students who want to stay involved with or support their institution. Our mission is to establish a forum where all our scientists & engineers could share valuable experiences & ideas. We are keenly interested in building a strong relationship with our 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

SENIOR WARDEN OFFICE

MAIN ENTRANCE GATE OF MUMTAZ HALL



The University has ample provisions for hostel accommodation. The halls reflect the history of the institution through variations in architectural styles over the last half a century. Some of them are from the pre-independence period inherited from the former Maclagan College of Engineering and the Sikh National College whereas others were built over a period of a quarter of a century since the inception of the University. Each campus of university contains varied number of hostels.

Sr. No.	Campus	Number of Hostels	Names of Hostels
1.	Main	17	Sir Syed, Iqbal, Quaid-e-Azam, Liaquat, Mumtaz, Zubair, Abdul Sattar Edhi, Muhammad Bin Qasim, Sultan Mahmood Ghazanavi, Khalid, Tariq, Ali Mardan, Al-Zohra, Khadeeja, News Girls, Usman and Umer
2.	Kala Shah Kaku	04	A, B, C, D
3.	Faisalabad	04	Al-Beroni, Ali, Umer, Ayesha
4.	Rachna	04	A, B, C, Girls Hostel
5.	Narowal	04	Fatima, Qasim, Girls Hostel

The hostels are of varying capacity and comprises of cubical rooms as well as Dormitories. There are also non-subsidized executive rooms and allotment in these is entirely prerogative of hostel authorities. The capacity of Dormitories ranges from 2-10 students depending upon the sizes of rooms.

Senior Warden Office (SWO) is mainly responsible for managing all matters like allotment, cancellation of allotment along with repair and maintenance of hostels. Senior Warden with a team of Wardens and Resident Tutors run the hostel matters. At each hostel, a Resident Tutor (RT) is appointed who is mainly responsible for tackling students' problems on day-to-day basis. S/he works under guidance of Warden and Senior Warden. RT takes the guidelines from SWO and exercises same with its letter and spirit to maintain discipline in hostel.

The Senior Warden and Wardens Offices are housed in the main Administration block whereas RT offices are present in respective hostels. A Hostel Management Committee (HMC) of students is present at hostel level and many aspects of life in halls are managed by the students themselves. The halls are provided with a mess, badminton courts, common and prayer rooms, etc. where students can nourish their abilities through physical exercise. Wi-Fi and other common services are also provided in each hostel. The students are expected to maintain discipline during their stay in hostels. They are encouraged to develop community life conducive to the healthy growth of the social aspects necessary for grooming their personalities. At present, hostels at the main campus are accommodating around 5000 boys' and girls' students.

ALLOTMENT IN HOSTELS

Hostel Accommodation is PRIVILAGE AND NOT A RIGHT. All rights of allotment are reserved with the university. Merit cum fitness is considered as a main criterion for allotment of students to these hostels. Local students are NOT ELIGIBLE for allotment in any hostel. Since accommodation in hostels is limited, the University Authorities may therefore not be able to provide accommodation to all the applicants. Therefore, seats in hostels shall be allotted subject to availability of accommodation. Senior Warden is responsible for allocating a seat to a student in a hostel according to the following order:

i. Hostel for Undergraduate Boys and Girls Students for a period not exceeding Eight (08) Consecutive Semesters (04 Years)

The newly admitted students should apply on prescribed form available for allotment using admission portal whereas old session students use University LMS system. Upon confirmation of admission, the students are directed to deposit prescribed hostel semester fee on the challan Form downloadable from the admission portal and provide a copy of the same of the dues section.

The female candidate selected for admission at New Campus (Kala Shah Kaku) should apply to the Senior Warden, Main Campus, University of Engineering and Technology, Lahore for hostel accommodation. For hostel at New (KSK), Faisalabad, Narowal Campuses and Rachna College of Engineering and Technology, Gujranwala, the selectees should apply to the Warden Office of concerning campus.

MESS SYSTEM

Each hostel comprises of one mess which is operated on No Profit and No Loss Basis. Hostel management committee of hostel students run the matters under the kind mentorship of Hostel Resident Tutor. Average monthly mess expenses ranges Rs. 6000-8000 depending upon the mess menu as well as current inflation.

REPAIR AND MAINTENANCE SERVICES

A separate Hostel Maintenance Cell works under the guidance of Senior Warden. The main purpose of this cell is to provide repair and maintenance services to the hostels. All the problems from students are taken up with its letter and spirit and maximum efforts are made to resolve the same within shortest possible time.
Use of all types of electric appliances and water coolers are strictly prohibited to be used in hostel rooms.

NOTE : Admission does not guarantee hostel accommodation. Hostel allocation is subject to availability and approval by the Senior Warden Office

IMPORTANT CONTACT INFORMATION

DESIGNATION	OFFICE	E-MAIL
VICE CHANCELLOR	042-99250201	vc@uet.edu.pk
	042-99029205	
	042-99250202 Fax	
DEANS OF FACULTIES		
Faculty of Electrical Engineering	042-99029234	deanee@uet.edu.pk
Faculty of Mechanical Engineering	042-99029221	deanmech@uet.edu.pk
Faculty of Civil Engineering	042-99029222	deancivil@uet.edu.pk
Faculty of Chemical, Mineral and Metallurgical Engineering	042-99029230	deancmme@uet.edu.pk
Faculty of Architecture & Planning	042-99029250	deanarch@uet.edu.pk
Faculty of NaturalSciences, Humanities and Islamic Studies	042-99029215	deannshis@uet.edu.pk
CHAIRPERSONS OF TEACHING DEPARTMENTS		
Architecture	042-99029223	chairmanarch@uet.edu.pk
Architecture Engineering & Design	042-99029419	chairmanaed@uet.edu.pk
Chemical Engineering	042-99029488	chairmanchemical@uet.edu.pk
Chemistry	042-99029239	chairmanchemistry@uet.edu.pk
City & Regional Planning	042-99029203	chairmancrp@uet.edu.pk
Civil Engineering	042-99029202	chairmancivil@uet.edu.pk
Computer Science & Engineering	042-99029260	chairmancse@uet.edu.pk
Electrical Engineering	042-99029229	chairmanee@uet.edu.pk
Institute of Environmental Engg.	042-99029248	sajjad@uet.edu.pk
Geoligical Engineering	042-99029297	chairmangeological@uet.edu.pk
Humanities and SocialScience	042-99029493	chairmanhmss@uet.edu.pk
Industrial & Manufacturing Engineering	042-99029226	chairmanime@uet.edu.pk
Islamic Studies	042-99029246	chairmanislamic@uet.edu.pk
Mathematics	042-99029210	chairmanmath@uet.edu.pk
Mechanical Engineering	042-99029466	chairmanmech@uet.edu.pk
Mechatronics & Control Engineering	042-99029294	chairmanmce@uet.edu.pk

DESIGNATION	OFFICE	E-MAIL
Metallurgical Engg & Material Science	042-99029207	chairmanmet@uet.edu.pk
Mining Engineering	042-99029212	chairmanmining@uet.edu.pk
Petroleum Engineering	042-99029471	chairmanpetroleum@uet.edu.pk
Physics	042-99029204	chairmanphy@uet.edu.pk
Polymer & Processing Engineering	042-99029505	chairmanpolymer@uet.edu.pk
Transportion Engineering & Management	042-99029428	Chair-tem@uet.edu.pk
Product & Industrial Design	042-99029203	chairmanpid@uet.edu.pk
HEADS OF NON TEACHING DEPARTMENTS		
Chairman Health Committee	042-99029240	chairmanee@uet.edu.pk
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