University of Engineering & Technology, Taxila

UNDERGRADUATE
PROSPECTUS-2014

UNIVERSITY OF ENGINEERING AND TECHNOLOGY • TAXILA •

Undergraduate Prospectus

2014

UNIVERSITY OF ENGINE

ERING & TECHNOLOGY TAXILA

Welcome

Vice Chancellor's Message

I am immensely pleased that you are genuinely interested in seeking admission at the University of Engineering and Technology, Taxila, one of the premier, full services engineering university of this nation. This prospectus will guide you and answer critical questions that you may have regarding the Undergraduate engineering education at this university and its sub campus. As you know, the admission at UETs is very competitive and would require best of what you have before, during and after the admission to ensure an accomplished career in engineering profession. Once you join UET, you will become part of UET fraternity. We have adopted a slogan for the year -2013, "Student Centered University" as such we aspire to present the best of what we have in academic and social environment, a lively and thriving campus where students test and polish their. We will continue to uphold the same Slogan for 2013-14. The University will certainly look after you and make its best efforts to groom you as and abiltis thaughtful civilized citizens and leaders in profession. You will always be guided by best faculty in the best possible ways, but the ultimate success will certainly depend on your sincere efforts, will to work, capacity to outshine with the brilliance that you possess. UET, Taxila is ideally located in an exclusively peaceful and secure environment in the centre of heavy industrial zone. On the one hand it is free from the maddening crowd of the cities and on the other hand very close to big cities like Rawalpindi, Islamabad and Peshawar- best of the both worlds.

In today's knowledge based world, what distinguishes a quality education institution from an ordinary one is its capacity to create new knowledge and its ability to apply this knowledge to create innovative and marketable products and services. UET, gladly confronts these challenges and requirements. Today's world is growing more global, complex and interconnected. Advancement in science and technology is the single most reason in the economic and societal development, prosperity and success of nations. Education plays a pivotal role in the nation building and its development because economic prosperity, political stability and social development are inter-linked with scientific and technological advancement which is the outcome of good education. This University has consistently produced world class engineers for the last 39 years active around the globe and you are at the beginning of becoming part of that accomplished elite.

We as a University will equip you with the vision, technical knowledge, management and leadership skills necessary to succeed. Our faculty and our facilities, our process, procedures and systems are aligned for a smooth and enlightening academic experience. A fine blend of academic, research and administrative human resources, state of the art, purpose built and elaborate network of laboratories, sports facilities and environment for cultural enrichment is the hall mark of UET, Taxila. Our students advisory system, financial support office, placement and alumni relations office, health facilities are all geared to serve the student community. Broadband wireless across the campus, well stocked library, newly built cafeteria, fleet of transport all support a comfortable campus environment. The University has a wide range of disciplines and making efforts to add many more from the array of new disciplines to its canvass according to the market needs so that the applicants have wide choices and when they graduate and complete their engineering education they are quickly absorbed in the job market.This year we have added Metallargy and Metrial Engineering, City and Regional Planning Engineering, Computer Science, Petroleum and Gas Engineering, Computer Science and Management Sciences in Chakwal Campus. and also increased some seats expended.

We had a glorious past, a vibrant present and certainly promising future. Our Quaid said, "Education does not merely mean academic education; we have to build the character of our future generation which means highest sense of honor, integrity, selfless service to the nation and a sense of responsibility". We cherish this vision and ambitions of our founding father and are adequately equipped to realize this vision. Your work has started and so is ours, let us accomplish together-we shall make a winning combination.

MUHAMMAD ABBAS CHOUDHARY

About the University

Introduction

The antique name 'T akshasila' means the city of cut stones. Taxila has gained worldwide eminence for its archaeological sites. Once a province of the powerful Achaemenian empire, Taxila was conquered by Alexander in 327 BC. It later came under the Mauryan dynasty and attained a remarkably mature level of development under the great Ashoka. Then appeared the Indo- Greek descendants of Alexander's warriors and finally came the most creative period of Gandhara. The great Kushan dynasty was established some where near 50 AD. During the next 200 years Taxila became a renowned centre of learning, philosophy, art and religion, Jaulian being a centre of excellence or a university of that age. Pilgrims and travelers were attracted to it from as far away as China and Greece. History took a new turn around 1950 when Ordnance Factories were founded at Wah, adjacent to Taxila. The country's largest Mechanical Complex and Foundry were established at Taxila in mid sixties. In early seventies, the industrial progress attained a new dimension when Taxila was chosen to have Heavy Industries Taxila near its world famous museum. At the same time Pakistan's largest Aeronautical Complex was established at Kamra which is about 45 km from Taxila. In mid seventies, government of the Punjab found the city ideally suitable for establishing the constituent college of University of Engineering and T echnology, Lahore Industrial progress in and around Taxila is gaining a newer pace. The neighboring industrial organizations are in the process of rapid expansion. A new industrial zone has emerged in Hattar area, which is about 20 km away from Taxila. Taxila is emerging as a leading industrial region at the national level. The strategic location is paving way for the city to act as a gateway to historical "Silk Route".

The University

With phenomenal increase in students' enrollment in 1970's, a plan to establish additional campuses of theUniversity of Engineering and Technology Lahore was conceived. As a result of that, the University College of
Engineering Taxila was established in 1975. For three years it functioned at Sahiwal. In 1978 it was shifted to itspermanent location at Taxila. The College continued its working under the administrative control of the University of Engineering and Technology, Lahore till October 1993. During this month it received its charter as an independent university under the University of Engineering and Technology Taxila Ordinance 1993. At present total enrollment of undergraduate and postgraduate students is above 5500.

Administration

The Governor of Punjab is the Chancellor and the Education Minister of Punjab is the Pro-Chancellor of the University. The Syndicate is the governing/legislative body and the Academic Council is the highest academic body of the University. The Vice-Chancellor is the Chief Executive and Academic Officer of the University. He is assisted by Deans of Faculties, Chairmen of Departments, Directors and Principal Officers of the University – the Registrar, the Treasurer, the Controller of Examinations and the Project Director, to ensure that the provisions of the University Act, the Statutes and the Regulations are faithfully observed and implemented.

Location

The University campus is located on the outskirts of Taxila at a distance of 5 km from the city. It is situated near railway station Mohra Shah Wali Shah on Taxila-Havelian branch line. The city of Taxila is 35 km from the twincities of Islamabad and Rawalpindi on the main Rawalpindi-Peshawar highway. The University buses commute daily between the campus and the cities of Islamabad, Rawalpindi and Wah Cantt. The campus covers an area of 163 acres. All the teaching departments, residential colony for teachers/ employees, student hostels, guesthouse, post office and bank are housed on campus.

Pakistan

The land of antiquity and diversity

Pakistan is a land of antiquity and diversity. It has been a melting pot for races and cultural traditions from times immemorial. Therefore, it has a rich tapestry of cultural patterns and colorful customs and traditions. It is a treasure trove for archeologist and historians, as it has been home to some of the oldest and most vibrant civilizations—Soan Valley (ca 50000 to 125000 BCE), Mehrgarh (7000-5500 BCE), Kot Diji (3000 BCE), Indus Valley (3300 to 1700 BCE) and Gandhara (1st to 5th Century CE) which flourished over vast areas. Apart from the ancient heritage sites, it is a mountaineers' paradise as there are 108 peaks above 7000 meters, and out of 14 highest (eight-thousander)peaks in the world, five are located in the northern areas of Pakistan, not far from Islamabad. Apart from historical sites, there are fascinating variations in landscape, ranging from pristine shores and desolate deserts to fabulous valleys and mighty mountains.

Islamabad
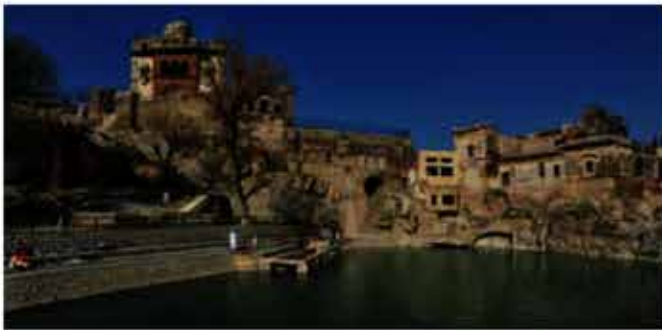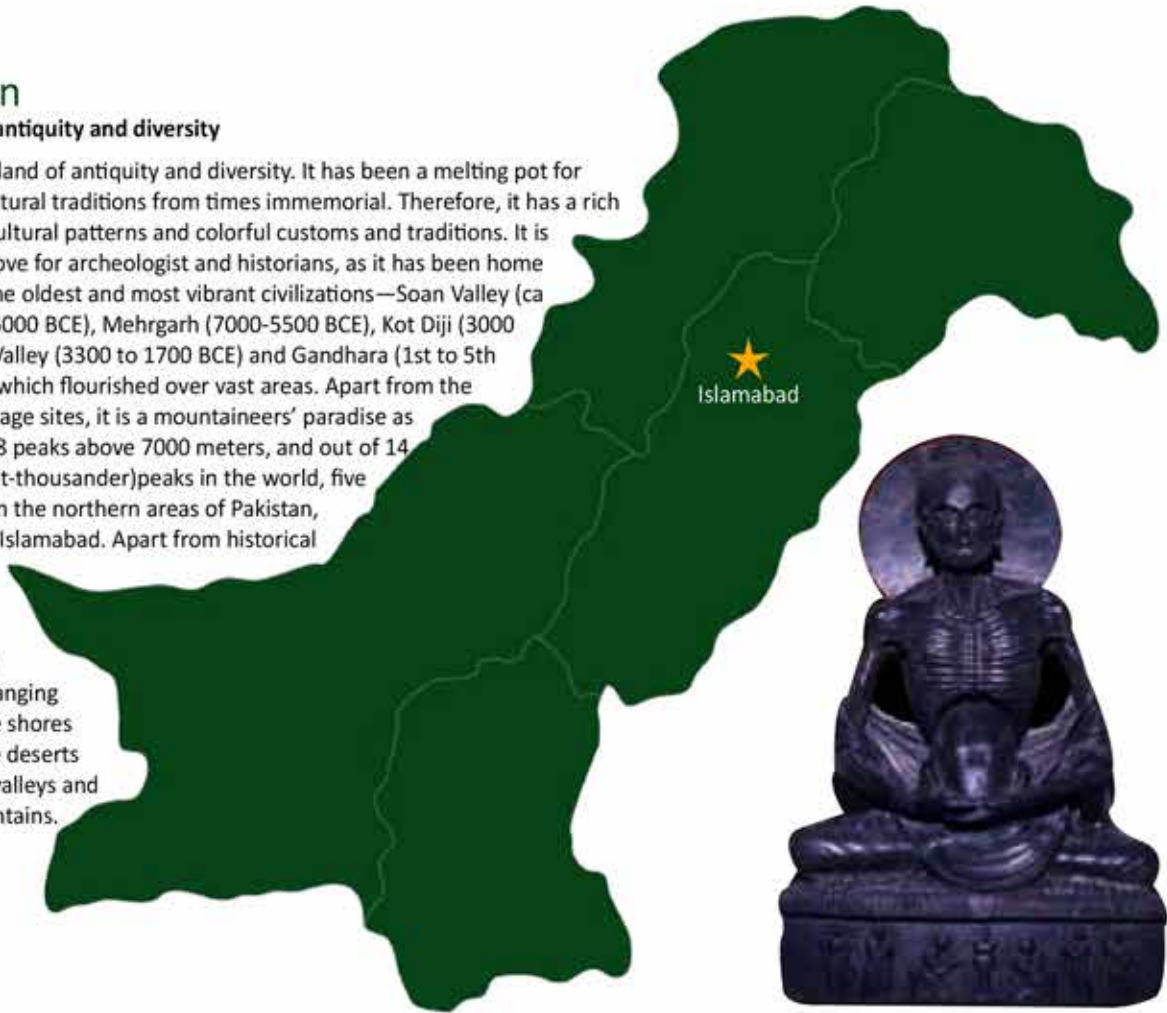
Katas Raj, Salt Range, Punjab
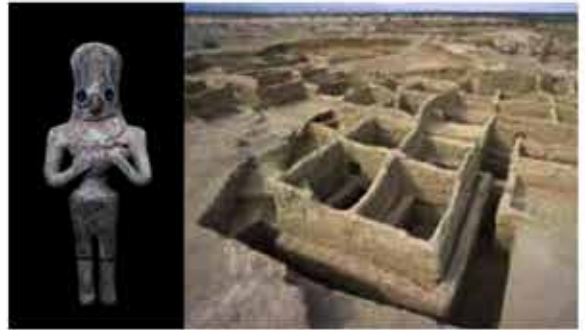
Mehrgarh, Balochistan

Taxila Railway Station

Taxila Musem Picture

Vale in Azad Kashmir

Shindur Plateau

K2, seen from Concordia

Nanga Parbat seen from Fairy Meadows

Mahabat Khan Mosque, Peshawar

Lake Mahudand, Swat

Drawar Fort, Cholistan

River Indus at Ghazi Ghat

Quaid-i-Azam Mausoleum, Karachi

Minar-e-Pakistan

Gawadar Port, Makran

Pakistan Railways, Balochistan

Mangrove Forest, Sindh Coast

Nomads in Balochistan

Historical necropolis at Makli

St Patrick's Church, Karachi

Gurdwara Darbar Sahib, Kartarpur (Narowal)

Buddhist Monastery, Takht Bai

CONTENTS

ORGANIZATIONAL SETUP

Chancellor
Chaudhary Muhammad Sarwar
Governor of the Punjab

Pro-Chancellor
Rana Mashood Ali
Minister for Education, Punjab

Vice Chancellor
Dr. Muhammad Abbas Choudhary

Registrar
Prof. Dr. Tahir Nadeem Malik

Controller of Examinations
Mr. Mahmood Akhtar

Treasurer
Mr. Muhammad Ashraf

Directror ASR & TD
Prof. Dr. Abdul Razzaq Ghumman

Director Admin & Security
Lt. Col (R) Syed Muhammad Ali

Director Academics /Quality Assurance
Engr. Mubashar Nawaz, TI

Additional Registrar
Engr. Mansoor A. Baluch

Librarian
Mrs. Nuzhat Yasmin

Director Procuremment
Mr. Muhammad Gul Aziz Awan

Deputy Directror ASR & TD
Dr. Muhammad Sultan

Deputy Director Placement
Mr. Ijaz Ahmad

Deputy Director Alumni
Ms Sadia Shahbaz

Deputy Registerar Establishment
Mr. Khalid Mehmood

Deputy Registerar P&D
Mr. Muhammad Ilyas Khan

Deputy Registerar Dues & Scholarship
Mr. Syed Ali Hussain Naqvi

Deputy Registerar Transport
Mr. Muhammad Nawaz

Deans of Faculties

Faculty of Civil and Environmental Engineering	Prof. Dr. Mohamamd Ahmad Choudhry
Faculty of Electronic and Electrical Engineering	Prof. Dr. Mohammad Ahmad Choudhry
Faculty of Mechanical and Aeronautical Engineering	Prof. Dr. Shahab Khushnood
Faculty of Telecommunication and Information Engineering	Prof. Dr. Adeel Akram
Faculty of Basic Sciences and Humanities	Prof. Dr. Mukhtar Hussain Sahir
Faculty of Industrial Engineering	Prof. Dr. Mukhtar Hussain Sahir

Chairmen of Academic Departments

Department of Civil Engineering	Prof. Dr. Mumtaz Ahmad Kamal
Department of Computer Engineering	Prof. Dr. Muhammad Iram Baig
Department of Electrical Engineering	Prof. Dr. Ahmad Khalil Khan
Department of Mechanical Engineering	Prof. Dr. Sagheer Ahmad
Department of Metallurgy and Materials Engineering	Dr. Riffat Asim Pasha
Department of Software Engineering	Prof. Dr. Muhammad Irum Baig
Department of Telecommunication Engineering	Prof. Dr. Adeel Akram
Department of Electronic Engineering	Prof. Dr. Mohammad Ahmad Choudhry
Department of Industrial Engineering	Prof. Dr. Mirza Jahanzeb
Department of Environmental Engineering	Prof. Dr. Liaqat Ali Qureshi
Department of Basic Sciences	Mr. Mahmood Akhtar
Department of City & Regional Planning	Prof. Dr. Mumtaz Ahmad Kamal

Sub Campus Chakwal

Director Chakwal Campus	Prof. Dr. Aftab Ahmad
Chairman Department of Electronic Engineering	Prof. Dr. Aftab Ahmad
Chairman Department of Mechatronics Engineering	Engr. Amir Sultan

SERVICES AND COMMON FACILITIES

Chairmen of Committees

Health
Prof. Dr. Qaiser-uz-Zaman Khan

Library
Prof. Dr. Abdul Razzaq Ghumman

Transport
Prof. Dr. Mohammad Ahmad Choudhry

Sports
Prof. Dr. Muhammad Zafrullah

Masajid
Prof. Dr. Muhammad Iram Baig

Time Table
Prof. Sagheer Ahmad

Discipline
Prof. Dr. Mumtaz Ahmad Kamal

Affiliation Committee
Prof. Dr. Aftab Ahmad

House Allotment Committee
Prof. Dr. Ahmad Khalil Khan

Health Clinic

Chief Medical Officer	Dr. Shaheen Sughra
Medical Officer	Dr. Muhammad Arif Nadeem
Medical Officer	Dr. Sabahat Qudus

Library

Librarian	Mrs. Nuzhat Yasmin
Dy. Librarian (Morning)	Mr. Muhammad Irfan Aslam
Asstt. Librarian (Morning)	Mr. Muhammad Mushtaq Khan
Asst. Librarian (Evening)	Mr . M. Safdar

Sports

Director Physical Education (Male)	Mr . Muhammad Akmal Hussain
Assistant Director Physical Education (Female)	Miss Shamsa Ghafoor

Transport

Deputy Registrar	Mr . Muhammad Nawaz

Estate Office

Director Arboriculture & Land Management
Col. (R) Syed Muhammad Ali

Estate Officer
Col. (R) Syed Muhammad Ali

Hostels

Senior Warden
Prof . Dr. Mohammad Ahmad Choudhary

Foreign Faculty Hostel
Engr . Mansoor A. Baluch

Halls of Residence

Senior Warden
Prof. Dr. Mohammad Ahmad Choudhry

Warden (Male)
Lt. Col. (R) Syed Muhammad Ali Shah

Warden (Female)
Mrs. Nuzhat Yasmeen

Resident Tutor 1 – Iqbal (I) Hall
Mr. Nadeem Majeed Choudhary

Resident Tutor 2 – Iqbal (I) Hall
Mr. Muhammad Mudassir

Resident Tutor 1 – Quaid-e-Azam (Q) Hall
Engr. M. Asjad Saleem

Resident Tutor 3 – Quaid-e-Azam (Q) Hall
Engr. Bilal Asif

Resident Tutor 1 – Abu Bakar (AB) Hall
Mr. Syed Sabeyal Haider

Resident Tutor 1 – Omar & Usman Hall
Engr. Salman Amin

Resident Tutor 1 – Ali Hall
Engr. Mubashir Ayub

Resident Tutor 2 – Ali Hall
Engr. Shamas Tabraiz

Resident Tutor 1 - Aysha Hall
Engr. Zunaira Huma

Resident Tutor 2 – Ali Hall
Engr. Waqar Ahmad

Warden Foreign Faculty Hostel
Engr. Mansoor A. Baluch

Audit

Resident Auditor
Mr. Abdul Rauf

Accounts

Assistant Registrar
Mr. Shahid Saleem

Assistant Registrar
Mr. Abid Mehmood Qureshi

Dues/Scholarship Section

Deputy Registrar   Mr. Ali Hussain Naqvi

Establishment

Deputy Registrar   Mr. Khalid Mahmood

Academic & Regulation

Deputy Registrar   Mr. Khalid Mahmood

Public Information Officer   Engr. Mansoor A. Baluch

Network Administration and Research Center

Director Networks   Prof. Dr. Adeel Akram

Web Manager   Syed Muhammad Adnan Shah

Vice-Chancellor's Office

Secretary to Vice Chancellor   Syed Basharat Abbas Shah

Examinations Branch

Assistant Controller   Rana Nadeem Anjum

Assistant Controller   Engr. Zakaullah

Legal Cell

Legal Advisor   Mr. Farhat Abbas Ch.

Directors

Advanced Studies, Research & Technological Development   Prof. Dr. Abdul Razzaq Ghumman

Undergraduate Studies   Prof. Dr. Mumtaz Ahmad Kamal

Student Affairs   Prof. Dr. Tahir Nadeem Malik

Information Technology Centre   Prof. Dr. Adeel Akram

Project Director (B&W)   Engr. Nisar Ahmad

Telephone Exchange   Dr. Gulistan Raja

Digital Library   Mr. Nadeem Majeed Choudhary

Planning & Development (Deputy Registrar)   Mr. Muhammad Ilyas Khan

Deputy Director QEC   Mr. Iftikhar Ahmad

IMPORTANT TELEPHONE NUMBERS

Trunk Numbers: 9047 (RWP/IBD PRI port #) 400,500,600 (operator Extensions), 9314216-23 (Taxila, 8 Lines),
Fax No: 051-9047420
The Intercom extensions are configured as Rawalpindi/Islamabad local numbers. 051-9047ddd (300 lines), where ddd stands for the 3-digit intercom extensions listed below:

	Intercom Ext. (ddd)
Vice-Chancellor	401
Secretary to the Vice-Chancellor	403, 404
Deans of Faculties	
Electronics & Electrical Engineering	533
Telecom. & Information Engineering	566
Civil & Environmental Engineering	633
Mechanical & Aeronautical Engineering	666
Chairmen of Academic Departments	
Electrical Engineering	535
Electronic Engineering	720
Computer Engineering	568
Software Engineering	735
Civil Engineering	635
Environmental Engineering	795
Mechanical Engineering	668
Matellurgy and Materials Engeneering	684
Industrial Engineering	827
Telecommunication Engineering	765
Basic Sciences	872
Other Establishments	
Registrar	405
Additional Registrar	451
Deputy Registrar (Establishment)	407
Establishment Branch	409
Human ResourceCell	410
Academic & Regulation Branch	411
Admissions Office (Under Graduate)	412
Treasurer	413

Accounts Branch	417
Assistant Registrar (Dues & Scholarship)	421
Student Section	422
Resident Auditor	423
Controller of Examinations	428
Examination Branch	432, 433
Project Director (Building & Works)	434
Executive Engineer	436
Director Academics/QEC	492
Deputy Director QEC	493
Director Admin & Security	476
Director Sports	473
Director Legal Cell	442
Deputy Director Placement	444
Legal Advisor	445
University Library	455
University Health Clinic	460
Network Centre	468
Transport Office	470
Directorate Students Affairs	472
Post Office	474
Habib Bank Ltd.	475
Senior Warden	539
Quaid-e-Azam Hall	267
Iqbal Hall	270
Ali Hall	271
Ayesha Hall	283
Chakwal Campus	0543-602003, 0543-602004

CODE OF ETHICS

For the seekers and practitioners of the magnificent science of engineering

IN THE NAME OF ALLAH, THE BENEFICENT, THE MERCIFUL

» You shall be honest, faithful and just, and shall not act in any manner derogatory to the honor, integrity and dignity of the engineering profession.

» You shall not injure, malici-ously, directly or indirectly, the reputation or employment of another engineer, nor shall you fail to act equitably while performing professional duty.

» You shall use your knowledge and skill of engineering for human welfare, and render professional service and advance, which reflects your best professional service and advance, which reflects your best professional judgment.

» You shall not abuse your position or power, nor accept illegal gratification of any sort.

» You shall faithfully observe and fulfill all your obligations.

» You shall express your opinion on engineering or other matters in a frank, open and straight-forward manner.

» You shall not criticize another engineer's work without his knowledge nor malign, or injure his professional reputation.

» You shall not ridicule fellow engineers nor let one discipline of engineering derides other disciplines or professions.

» You shall not directly or indirectly discredit other engi-neers nor assign (derogatory) epithets to their persons or work.

» 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 or in any manner derogatory to the dignity of the profession.

» You shall ascertain facts before accepting them and shall not encourage or cause others to carry tales. Credulity is no credit.

» You shall help one another in upholding and doing that is right, and shall not associate with those who transgress and those who indulge in unethical practices.

» You shall be kind and considerate to others and shall not fail to be cooperative and accommodating.

» You shall decide matters of common professional interest by mutual consultation.

The University offers B.Sc. Degree courses in Civil, Computer, Electrical, Machenical, Software, Telecommunication, Enviromental, Electronic, Industrial, Metallurgy & Material Engineering, City & Regional Planning and Computer Science at Main Campus, Taxila. Sub Campus Chakwal offers B.Sc. degree courses in Mechatronics, Electronic, Petrolium & Gas Engineering, Management Sciences and Computer Science.

Exisiting Faculty & Departments

Faculty of Civil and Environmental Engineering
    Department of Civil Engineering
    Department of Environmental Engineering
    Department of City & Regional Planning
Faculty of Electronics and Electrical Engineering
    Department of Electrical Engineering
    Department of Electronic Engineering
Faculty of Mechanical and Aeronautical Engineering
    Department of Mechanical Engineering
    Department of Metallurgy & Material Engineering
Faculty of Industrial Engineering
    Department of Industrial Engineering
Faculty of Telecommunication and Information Engineering
    Department of Computer Engineering
    Department of Software Engineering
    Department of Telecommunication Engineering
    Department of Computer Sciences
Faculty of Basic Sciences and Humanities
    Department of Basic Sciences

Future Programs

The Following new departments will be established under the respective faculties near future:

1.   **Faculty of Mechanical and Aeronautical Engineering**
    Department of Aeronautical Engineering

2.   **Faculty of Industrial Engineering**
    Departmen t of Engineering Economic & Management

FACULTY OF CIVIL AND ENVIROMENTAL ENGINEERING

1

Dean
Prof. Dr. Mohammad Ahmad Chaudhry

DEPARTMENT OF CIVIL ENGINEERING

Chairman
Prof. Dr. Mumtaz Ahmed Kamal

Professors

Abdul Razzaq Ghumman
BSc Engg (Lahore), MPhil (CEWRE Lahore),
PhD (Univ. of London, UK)

Mumtaz Ahmad Kamal
BSc Engg (Lahore), PhD (Queen's Univ. UK)

Hashim Nisar Hashmi
BSc Engg (Hons) (Gold Medalist) (Lahore)
PhD (Queen's Univ. UK)

Qaiser uz Zaman Khan
BSc Engg (Hons) (Gold Medalist) (Lahore)
MSc Engg (University of Leeds, UK)
PhD (Saitama University, Japan)

Shaukat Ali Khan
BSc Engg (Hons) (Lahore)
MSc Engg (Newcastle Upon Tyne, UK)
AMASCE (USA), PhD (Taxila)

Liaqat Ali Qureshi
BSc Engg (Lahore)
MSc Engg (Taxila), PhD (Taxila)

Associate Professors

Ashfaq Ahmad Tahir
BSc Engg (Lahore)
MSc Engg (Taxila)

Kamran Muzaffar Khan
BSc Engg (Taxila)
MSc Engg (Taxila), PhD (Taxila)

Imran Hafeez
BSc Engg (Lahore)
MSc Enng (Taxila), PhD (Taxila) , Post Doc
(USA)

Ayub Elahi
BSc Engg (Taxila), MSc Engg (Taxila)
PhD (Taxila & Queen's Univ. UK)
Post Doc. (Queen's Univ. of Belfast, UK)

Assistant Professors

Usman Ghani
BSc Engg (Hons) (Gold Medalist, Taxila)
MSc Engg (Taxila), PhD (Taxila & Queen Mery
University, UK)
Post Doc (Univ. of Birmingham, UK)

Muhammad Yaqub
BSc Engg (Taxila)
MSc Engg (Taxila),
PhD (University of Manchester, UK)

Muhammad Salman
BSc Engg (Taxila)
MSc Engg (NUST)

Naeem Ejaz
BSc Engg (Taxila)
MSc Engg. (Lahore), PhD (Taxila)

Jawad Hussain
BSc Engg (Taxila)
MSc Engg (Taxila),
PhD (The Univ. of Auckland, NZ)

Faheem Butt
BSc Engg (Lahore), MSc Engg (Taxila),
PhD (The Univ. of Auckland, NZ)

Usman Ali Naeem
BSc Engg (Taxila), MSc Engg (Taxila),
PhD (Taxila)

M. Fiaz Tahir
BSc Engg (Taxila), MSc Engg (Lahore),
PhD (Taxila)

Qazi Umar Farooq
BSc Engg (Taxila)
M.E (Univ. of Tokyo, Japan),
PhD (Univ. of Tokyo, Japan)

Muhammad Ali Shamim
BSc Engg (Taxila)
MSc Engg (Taxila), PhD (Univ. of Bristol, UK)

Naveed Ahmad
BSc Engg (Taxila), MSc Engg (Taxila),
PhD (Univ. of Nottingham, UK)

Faisal Shabbir
BSc Engg (Hons, Taxila), MSc Engg (Taxila)
PhD (Univ.of Acukland, NZ)

Shahzad Saleem
BSc Engg (Hons, Taxila)
MSc Engg (Taxila) (On higher studies abroad)

Syed Bilal Ahmed Zaidi
BSc Engg (Hons, Taxila), M.Sc. Engg (Taxila)
(On higher studies abroad)

Muhammad Usman Arshid
BSc Engg (Taxila), M.Sc. Engg (Taxila)

Mehwish Asad
BSc Engg (Taxila), M.Sc. Engg (Taxila)

Afaq Ahmad
BSc Engg (Hons, Taxila) , MSc Engg (Taxila)

Faisal Yaqoob
BSc Engg (Taxila), M.Sc. Engg (Uk)

Lecturers

Zafar Naushad
BSc Engg (Taxila)
MSc Engg (Taxila) (On higher studies abroad)

Qadeer Hussain
BSc Engg (Taxila)
MSc Engg (Taxila) (On higher studies abroad)

Muhammad Irshad Qureshi
BSc Engg (Taxila), MSc Engg (Taxila)
(On higher studies abroad)

Naveed Ahmad,
BSc Engg (Hons, Taxila)
MSc Engg (Taxila) (On higher studies abroad)

Ghufran Ahmad Pasha,
BSc Engg (Hons, Taxila), MSc Engg (Taxila)

M.Saad
BSc Engg (Taxila) , MSc Engg (Taxila)

Saqib Mehboob,
BSc Engg (Taxila) , MSc Engg (Taxila)

The Department

Department of Civil Engineering is actively engaged in disseminating civil engineering education for the last thirty seven years. The Department has produced several eminent engineers who have made significant contributions in the planning and execution of Civil Engineering projects in Pakistan as well as abroad.

The Department of Civil Engineering has an approved staff strgenth of 37, nearly 70% of whom contribute to postgraduate teaching and are involved in PhD research work. Approximately 693 undergraduate and 175 postgraduate students are registered in the department. Civil engineers cater to the national needs for buildings, highways, dams, bridges, irrigation network and water supply systems, and are the world's largest users of building materials.

Courses of Study

The Department of Civil Engineering offers full-time course of four years duration leading to the Bachelors Degree in Civil Engineering. The department also offers graduate courses of study leading to the MSc and PhD degrees in Civil Engineering.

In the bachelor's course, emphasis is laid on the fundamental concepts and principles, which constitute the basis of civil engineering practice. To foster their creative abilities, the students are assigned projects on design, construction or laboratory investigation for self directed execution. The classroom and laboratory work is supplemented by the instructional tours to acquaint students with civil engineering projects of national importance. Survey camp is held to impart intensive field training where the students plan and execute survey of large areas independently.

Laboratories

The department has the following well-equipped ten laboratories to meet the academic requirements of students and teachers as well as the professional needs of the government and private organizations:

a.   Geo- Tech Engineering
b.   Concrete Technology
c.   Strength of Materials
d.   Transportation Engineering
e.   Hydraulics/Fluid Mechanics
f.   Theory of Structures/ Engineering

Mechanics

g.   Surveying
h.   Public Health Engineering
i.   CAD laboratory
j.   Postgraduate Research Laboratory

Department upgrades all the laboratories from time to time through the funds provided by Higher Education Commission (HEC) and its own resources. Recently, Department received grants from HEC and Transportation & Structural Engineering Laboratories were upgraded with the state of the art equipment, whereas Hydraulics/ Fluid Mechanics Laboratory has been shifted in its new building and new equipment was procured and installed which is functioning. Department has also established Postgraduate Research Laboratory which have latest civil engineering software and research tools.

23

Taxila Institute of Transportation Engineering (TITE)

Department of Civil Engineering has established a new institute by the name of "Taxila Institute of Transportation Engineering (TITE)". It is a unique institute of its own kind in Pakistan and will prove to be a focal point for providing education and research facilities in the field of Transportation Engineering.

The institute provides facilities like research laboratories, lecture rooms for postgraduate students, conference room, computer laboratory and a library. A wide range of state of the art equipment had been procured to facilitate high tech research work.

The mission of the institute is to develop and implement innovative methods, materials, and the technologies for improving transportation efficiency, safety and reliability as well as improving the learning and innovative environment for students, faculty and staff in transportation related areas.

Postgraduate Studies & Research

In order to satisfy the increasing demand for relevant advanced technological education, the department offers full time and part time MSc degree courses in Structural Engineering, Water Resources and Irrigation Engineering, Transportation Engineering and Geo - Tech Engineering covering the most recent developments. The courses contain a balance of analytical and professional aspects and are designed to suit the needs of fresh graduates and those with professional experience.

The faculty has completed a number of research projects funded by HEC through the Directorate of Advanced Studies, Research and Technological Development. Research papers based upon applied research have been published in journals and conferences of national and international repute.

Most of the postgraduate students belong to the construction industry and act as a bridge for university–industry linkage that makes research in the department to be practical and useful for the country. The introduction of PhD program has further enriched the research activities in the department. Twenty One students have been awarded PhD degrees in various fields. Presently about 27 PhD scholars are pursuing their PhD research work.

Research is being carried out in the following areas:

a. Structural Engineering
b. Soil Mechanics and Foundation Engineering
c. Transportation Engineering
d. Water Resources and Irrigation Engineering
e. Hydraulic Engineering
f. Concrete Technology
g. Environmental Engineering

Numerical modeling and computer-application in all the research activities are being given special attention. The courses of studies have been designed on the basis of present needs of the Industry. The students are also trained to work independently for solving complex real world problems.

Courses Under Semester System
BSc Civil Engineering

1st Semester

Course	Course Title	Credit Hours	
		Part I	Part II
CE-101	Civil Engineering Drawing	1	2
CE-102	Engineering Mechanics	2	1
CE-103	Engineering Geology	2	1
CE-104	Surveying-I	2	4
MA-105	Mathematics-I	3	0
	Total:	**10**	**8**
	Semester Total for Part-I & II	**18**	

2nd Semester

Course	Course Title	Credit Hours	
		Part I	Part II
CE-106	Surveying-II	2	4
CE-107	Civil Engineering Materials	2	1
CE-108	Communication Skills & Technical Report Writing	1	1
CE-111	Professional English	0	2
MA-109	Mathematics-II	3	0
HU-110	Pakistan Studies	2	0
	Total:	**10**	**8**
	Semester Total for Part-I & II	**18**	
	Total for 1st Year	**36**	

3rd Semester

Course	Course Title	Credit Hours	
		Part I	Part II
CE-201	Fluid Mechanics-I	2	1
CE-202	Properties of Concrete	2	1
CE-203	Civil Engineering Practice	2	1
MA-204	Mathematics and Computer Programming	2	2
HU-205	Islamic Studies	2	0
	Total:	**10**	**05**
	Semester Total for Part-I & II	**15**	

4th Semester

Course	Course Title	Credit Hours	
		Part I	Part II
CE-206	Theory of Structures-I	3	1
CE-207	Strength of Materials-I	2	1
CE-208	Soil Mechanics-I	2	1
CE-209	Drawing, Estimation & Construction	1	3
HU-210	Computer Applications	2	2
	Total:	**10**	**8**
	Semester Total for Part-I & II	**18**	
	Total for 2nd Year	**33**	

5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CE-301	Theory of Structures-II	3	1
CE-302	Strength of Materials-II	3	1
CE-303	Soil Mechanics-II	2	2
CE-304	Construction Planning & Management	2	1
CE-305	Hydrology and Water Resources	2	1
	Total:	**12**	**6**
	Semester Total for Part-I & II	**18**	

6th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CE-306	Environmental Engineering-I	2	1
CE-307	Reinforced Concrete-I	3	1
CE-308	Design of Steel Structures	2	1
CE-309	Fluid Mechanics-II	2	1
CE-310	Transportation Engineering-I	2	2
	Total:	**11**	**6**
	Semester Total for Part-I & II	**17**	
	Total for 3rd Year	**35**	

7th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CE-401	Environmental Engineering-II	2	1
CE-402	Reinforced Concrete-II	3	1
CE-403	Hydraulics Engineering	2	1
CE-404	Transportation Engineering-II	2	1
CE-405	Foundation Engineering	2	1
CE-406(A)	Project	0	2
	Total:	**11**	**7**
	Semester Total for Part-I & II	**18**	

8th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CE-407	Structural Engineering	2	1
CE-408	Irrigation Engineering	2	1
CE-409	Design of Structures	1	3
CE-410	Computer Aided Analysis & Design	1	2
CE-406(B)	Project	0	2
	Total:	**06**	**09**
	Semester Total for Part-I & II	**15**	
	Total for Final Year	**33**	
	Grand Total for Four Years	**137**	

DEPARTMENT OF ENVIRONMENTAL ENGINEERING

Chairman
Prof. Dr. Liaqat Ali Qureshi

Professor
Prof. Dr. Liaqat Ali Qureshi
BSc Engg (Lahore)
MSc ngg (Taxila) PhD (Taxila)

Assistant Professor
Engr. Sidra Iftikhar
BSc Environmental Engg (Lahore)
MSc Environmental Engg (Lahore)

Lecturers
Engr. Muhammad Bilal Asif
BSc Environmental Engg (Lahore)

Engr. Shamas Tabraiz
BSc Environmental Engg (Lahore)
MSc Environmental Engg (Lahore)

Engr. Rasikh Habib
BSc Environmental Engg (NUST)

Engr. Sadia Fida
BSc Environmental Engg (Lahore)

Lab Engineer
Engr. Muhammad Zeeshan
BSc Environmental Engg

Sharing Faculty
Prof. Dr. Mumtaz Ahmad Kamal(Prof,CED)
BSc Engg (Lahore), PhD (Queen's Univ. UK)

Dr. Qazi Umar Farooq (Asstt.Prof, CED)
BSc Engg (Taxila)
M.E (Univ. of Tokyo, Japan),
PhD (Univ. of Tokyo, Japan)

Dr. Usman Ali Naeem (Asstt.Prof,CED)
BSc Engg (Taxila), MSc Engg (Taxila)

Mehwish Asad (Asstt.Prof,CED)
BSc Engg (Taxila), M.Sc. Engg (Taxila)

Afaq Ahmad (Asstt. Prof, CED)
BSc Engg (Hons, Taxila) , MSc Engg (Taxila)

Ghufran Ahmad Pasha, (Lecturer CED)
BSc Engg (Hons, Taxila)

Engr. Usama Waleed, (Lecturer IED)
BSc Engg (Hons, Taxila)

Dr. Muzaffar Ali(Asstt.Prof, MED)
BSc Engg (Taxila)
MSc Engg (Taxila)
PhD (Taxila)

Mr. Asghar Ali (Lecturer BSD)

Sumera Nawaz (Asstt. Prof.)
M.Phil Islamic Studies (AIOU, Islamabad)

Mariam Batool (Lecturer, BSD)
M.A English (PU, Lahore)

Syed Sabyel Haider (Lecturer)
M.Phil Mathematics (QAU, Islamabad)

Ms. Andaleeb Abbassi (Lecturer, BSD)
M.Phil Mathematics (QAU, Islamabad)

Mr. Azeem (Lecturere, BSD)

Visiting Faculty
Ms. Nosheen
M.A Sociology (IIUI)

Mr. Adnan Mustafa
MSc Software Engg (IIUI)

The Department

The Department of Environmental Engineering is newly established at University of Engineering & Technology Taxila. This Department is working under the Faculty of Civil & Environmental Engineering. Considering the overall environmental crises and issues through out the country, it has been decided to produce well trained professionals in the field of Environmental Engineering. The graduates will be highly motivated and trained to undertake the environmental issues like water and wastewater treatment, air and noise pollution, river and land pollution etc.

Courses of Study

The Department of Environmental Engineering offers full-

time course of four years duration, leading to the bachelor degree in Environmental Engineering. The provided course contents are highly professional and well arranged. The designed course content will support the graduates to enhance their knowledge up to the international standards.

Future Plans

The Department will offer Master and Doctoral Programmes in the field of Environmental Engineering in near future.

Courses Under Semester System
BSc Environmental Engineering

1st Semester

Course	Course Title	Credit Hours	
		Part I	Part II
EnE-101	Introduction to Environmental Engineering & Issues	2	0
EnE-102	Environmental Chemistry	2	1
MA-105	Mathematics-1	3	0
CE-101	Civil Engineering Drawing	1	2
EnE-103	Computer Programming	1	2
	Total:	**09**	**5**
	Semester Total for Part-I & II	**14**	

2nd Semester

Course	Course Title	Credit Hours	
		Part I	Part II
CE-102	Engineering Mechanics	2	1
CE-106	Surveying	2	4
EnE-104	Environmental Microbiology	2	1
MA-109	Mathematics-II	3	0
EnE-105	Communication Skills & Technical Report Writing	1	1
	Total:	**10**	**07**
	Semester Total for Part-I & II	**17**	
	Total for 1st Year	**31**	

3rd Semester

Course	Course Title	Credit Hours	
		Part I	Part II
EnE-201	Environmental Ecology	2	1
IS/HU-110	I&P Studies/E&P Studies	2	0
CE-207	Strength of Materials	2	1
CE-208	Soil Mechanics	2	1
CE-201	Fluid Mechanics	2	1
MA-205	Mathematics-III	3	0
	Total:	**13**	**04**
	Semester Total for Part-I & II	**17**	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EnE-202	Environmental Engineering Lab. Techniques-I	1	2
EnE-203	Environmental Engineering Processes	3	1
CE-309	Transportation Engineering	2	2
MA-325	Numerical Methods and Computer Programming	2	1
BS-201	Environment and Human Interaction	2	0
	Tutorial	1	0
	Total:	**11**	**06**
	Semester Total for Part-I & II	**17**	
	Total for 2nd Year	**34**	

5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EnE-301	Water & Wastewater Engineering	3	1
ME-238	Thermodynamics-I	2	1
CE-409	Design of Structures	1	3
CE- 104	Hydrology and Water Resources	2	1
EnE-303	Cleaner Production Techniques	3	1
	Total:	**11**	**07**
	Semester Total for Part-I & II	**18**	

6th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EnE-304	Vehicular & Industrial Combustion Emission	3	1
EnE-305	Engineering Economics	3	0
EnE-405	Environmental Impact Assessment	3	1
EnE-307	Environmental Engineering.Lab.Techniques-II	1	2
EnE-308	Industrial Wastewater Management	3	1
	Total	**13**	**05**
	Semester Total for Part-I & II	**18**	
	Total for 3rd Year	**36**	

7th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EnE-401	Environmental Modeling and Optimization	3	1
EnE-402	Noise and Air Pollution Control Engineering	3	1
EnE-403	Toxicology, Occupational Health and Safety	3	1
CE-408	Irrigation Engineering	2	1
EnE-499	Project	0	2
	Total	**11**	**06**
	Semester Total for Part-I & II	**17**	

8th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EnE-404	Water & Wastewater Treatment Plant Design	3	1
ME-440	Energy Resources and Utilization	3	1
EnE-406	Solid and Hazardous Waste Management	3	1
EnE-407	Wastewater Disposal and Reuse	3	1
EnE-499	Project	0	2
	Total	**12**	**06**
	Grand Total Part I & II	**18**	
	Grand Total for Final Year	**35**	
	Grand Total for Four Years	**136**	

DEPARTMENT OF CITY AND REGIONAL PLANNING

Introduction

University of Engineering and Technology UET, Taxila feels immense pleasure to establish the Department of City and Regional Planning at its main campus. The newly established department aims to deliver state of the art in City and Regional Planning. It is the planners who are managing the continuing migration to cities; working to upgrade slum housing, and propose practical solutions to problems of climate change and environmental degradation. Closer to home, it is the planners who are renewing and redesigning the nation's characterless suburbs; protecting vulnerable communities from the effects of the financial meltdown; and turning sustainability and resiliency from buzzwords into best practices. At UET Taxila, the approach is to provide students a broad based understanding and awareness regarding planning, planning issues, land use and land use change etc. Students will learn the quantitative and digital skills they need to analyze urban communities and to visualize alternative futures. Moreover they will learn how historical and institutional contexts are shaped while planning as well as how to work with community members to break bureaucratic logjams and think outside the box.It is expected that the quality of education imparted at CRP, UET Taxila be comparable with any university of the technologically advanced countries.

Courses of Study

As in its initial phase the CRP department is offering only the following;

• **B.Sc. City & Regional Planning**
Undergraduate Course
B.Sc. Program in City & Regional Planning: The curriculum for the four years B.Sc. course in City & Regional Planning has been designed to produce the Professionals who can serve as development managers of urban and rural areas. The Course of study has an intensive coverage of theoretical understanding of planning concepts and practical experience of planning projects.

The Major areas covered under this undergraduate program includes; Engineering Sciences, Geography, Sociology, Statistics, Economics, Mapping, Community and Social Work, Management and Administrative Sciences, Applied Computer Science, Mathematical Sciences, Remote Sensing and Geographic Information System (GIS).

Library and Equipment

At the initial phase, the existing departmental library of Civil Engineering Department will be shared with City and Regional Planning Department. The library has wide range of latest books, International Journals, Reports and other relevant research papers. An extensive variety of books covering subjects like Surveying, Engineering Fundamentals, Highways, Engineering Drawing, School Building Design, Movement of Vehicular Operations and Maintenance etc., which are also related to City and Regional Planning are available. All the lecture rooms/design studios are equipped with multimedia and overhead projectors.

Computer Laboratory

The computer laboratory of the Department has been recently upgraded with the latest desktop computers with a server having core i5 processor, several workstations having core 2 duo processors with 19" and 15" LCDs respectively. The laboratory is also equipped with the modern scanning and printing facilities with accommodation of 88 students at a time. The Department has already pursued to launch state of art Remote Sensing (RS) and Geographical Information System (GIS) Laboratory. GIS and RS Laboratory will be helpful while working on the satellite imageries for spatial data analysis and planning.

Courses Under Semester System
BSc City and Regional Planning

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
	Introduction to City and Regional Planning	2	1
	Technical Drawing and Computer Aided Design	1	2
	Mapping and Remote Sensing	2	1
	Sociology	3	0
	Mathematics	2	0
	English-I (Functional English)	3	0
	Total:	13	4
	Semester Total for Part-I & II	17	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
	History of Urban Planning	2	0
	Transportation Engineering	2	1
	Surveying	1	2
	Applied Statistics	2	0
	Economics	3	0
	Islamic Studies/ Pakistan Studies/ Ethics	2	0
	English-II (Communication Skills)	3	0
	Total:	15	03
	Semester Total for Part-I & II	18	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
	Transportation Planning	2	1
	Planning Legislation	3	0
	Porfessional Practice for Planners	2	0
	Architectural Design	1	2
	Applied Geography	2	1
	English-III (Commnication Skill and Report Writing)	1	2
	Total:	11	6
		17	
	Semester Total for Part-I & II	14	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
	Housing and Urban development	2	1
	Planning Surveys	1	2
	Environmental Planning and Management	2	1
	Informaton Technology and Database Management	1	2
	Introduction to GIS	2	1
	Islamic Studies/Pakistan Studies/ Ethics	2	0
	Total:	10	7
		17	

5th Semester		Credit Hours	
Course No.	Course Title	Part I	Part II
	Site Planning and Landscape Design	2	1
	Urban Renewal and Conservation	2	1
	Infrastructure Planning and Mangement	1	1
	GIS Analysis and Applications in Planning	1	2
	Environmental Engineering	2	1
	Hazards and Disaster Management	**2**	**1**
	Total	**10**	**7**
		17	

6th Semester		Credit Hours	
Course No.	Course Title	Part I	Part II
	Urban Design	2	1
	Planning of New Towns	2	2
	Rural Planning	2	1
	Sustainable Development and Community Empowerment	1	1
	Construction Technology	2	1
	GIS Development	**1**	**1**
	Total	**10**	**7**
		17	

7th Semester		Credit Hours	
Course No.	Course Title	Part I	Part II
	Master Planning -I	2	2
	Land Use and Building Control	2	1
	Project Planning and Management	2	1
	Financial Planning and Budgeting	2	1
	Research Methods	2	1
	Project (Part-I)	**0**	**0**
	Total:	**10**	**6**
		16	

8th Semester		Credit Hours	
Course No.	Course Title	Part I	Part II
	Master Planning -II	2	2
	District and Regional Planning	2	1
	Estate Management	1	1
	Project (Part-**II**)	0	6
	Total:	**05**	**10**
		15	
	Total Credit Hours	**84**	**50**
		134	

33

FACULTY OF ELETRONIC AND ELECTRICAL ENGINEERING **2**

Dean

Prof. Dr. Mohammad Ahmad Choudhry

DEPARTMENT OF ELECTRICAL ENGINEERING

Chairman

Prof. Dr. Ahmad Khalil Khan
BSc Engg (Lahore)
MSc Engg(USA), PhD (Taxila)
MIEP, MIEEP, MIEEE (USA)

Professors

Muhammad Zafrullah
BSc Engg (Hons) (Gold Medalist) (Lahore)
MSc Engg (Lahore), PhD (Taxila)
MIEP, MIEEEP, MIEEE(USA)

Tahir Nadeem Malik
BSc Engg (Lahore)
MSc Engg(Lahore) , PhD (Taxila)
MIEEE (USA)

Aftab Ahmad
BSc Engg (Lahore)
MSc Engg (Lahore), PhD (Taxila)

Gulistan Raja
BSc Engg (Taxila)
M.S. Engg (Japan), PhD (Taxila)
MIEEEP, MIEEE (USA)

Associate Professors

Tahir Mahmood
BSc Engg (Hons) (Lahore)
MSc Engg(Lahore) , PhD (Taxila)
MIEE (UK)

Assistant Professors

Ilyas Ahmad
BSc Engg (Peshawar)
MSc Engg(Taxila)

Inamul Hasan Shaikh
BSc Engg. (Hons) (Lahore)
MSc Engg.(Taxila) ,PhD (UK)

Shabbir Majeed Chaudhry
BSc Engg (Taxila)
MSc Engg (Taxila)
PhD (Taxila)

Salman Amin
BSc Engg (Hons) (Taxila)
MSc Engg (Taxila)
PhD (Taxila)

Hafiz Irfan Arshad
BSc Engg (Taxila)
MSc Engg (Taxila)

Sarmad Sohaib
BSc Engg (GIKI)
PhD (UK)

Sh. Saaqib Haroon
BSc Engg (Lahore)
MSc Engg (Taxila)

Tahir Muhammad
BSc Engg (Canada)
MSc Engg (Taxila)

Junaid Mir
BSc Engg (Taxila)
MSc Engg (Taxila) (on Higher Studies Abroad)

Lecturers

Salman Saeed
BSc Engg (Taxila)
MSc Engg (Taxila)

Hammad Shaukat
BSc Engg (Taxila)
MSc Engg (Taxila)

Mrs. Fatima Nazir
BSc Engg (Taxila)
MS.c (Taxila)

Mrs. Mamoona Irfan
BSc Engg (Taxila)
MSc Engg (Taxila)

Mrs. Munira Batool
BSc Engg (Multan)
MSc Engg (Taxila)

Mr. Mehroz Iqbal
BSc Engg (Taxila)
MSc Engg (Taxila)

Mr. Mansoor Ashraf
BSc Engg (Taxila)
MSc Engg (Taxila)

Mr. Faisal Siddiq
BSc Engg (Taxila)
MSc Engg (Taxila)

Mr. Abubakar Waqas
BSc Engg (Taxila)
MSc Engg (Taxila)

Raja Abdullah
BSc Engg (Taxila) (on Higher Studies Abroad)

Moazzam Azeem
BSc Engg (Taxila) (on Higher Studies Abroad)

Saif Siddique Butt
BSc Engg (Taxila) (on Higher Studies Abroad)

Ms. Ayesha Ijaz
BSc Engg (Taxila) (on Higher Studies Abroad)

Intisar Ali Sajjad
BSc Engg (Lahore)
MSc Engg (Taxila) (on Higher Studies Abroad)

Syed M. Bilal
BSc Engg (Taxila)
MSc Engg (Taxila) (on Higher Studies Abroad)

Syed Azhar Ali Zaidi
BSc Engg (Taxila)
MSc Engg (Taxila) (on Higher Studies Abroad)

Lab Engineers

Ms. Zunaira Huma
BSc Engg (Taxila)

Mr. Umais Tayyab
BSc Engg (NUST, IBD)

Ms. Farzana Kousar
BSc Engg (Taxila)

Mr. Nouman Qamar
BSc Engg (Taxila)

Mr. Usama Ashfaq
BSc Engg (Taxila)

Mr. Komal Munir
BSc Engg (Taxila)

Mr. Muhammad Waseem
BSc Engg (Taxila)

Mr. Habib ur Rehman Habib
BSc Engg (Taxila)

Mr. Wasif Tabbassum
BSc Engg (Taxila)

The Department

Vision

Aspiring for a Better World for Next Generation

Objectives

- To Strive for Excellence with Values.
- To address the challenges of market / industry
- To prepare the students for advanced learning & research in the field of Electrical Engineering

Core Values

- Integrity
- Self Discipline
- Cognition
- Team Spirit

The Department of Electrical Engineering was established in 1975 with creation of University College of Engineering & Technology, Taxila at Sahiwal. In 1978, the college was shifted to its permanent location at Taxila. The Electrical Engineering program provides basic preparation for a career in the discipline of Electrical Engineering. The department aims to develop abilities in the students for the application of the knowledge of Electrical Engineering. The students are provided with an educational foundation that prepares them for leadership roles along diverse career paths in the fields concerned with Electronics, Communications, Energy & Power Systems, and Industrial IT: Control & Automation. Presently 180 undergraduate students are enrolled annually. The department has produced more than 2350 graduate students so far.

The undergraduate program offers degree in "Bachelor of Science in Electrical Engineering" with following streams:

- Power
- Communication

An independent and spacious building with a covered area of 66,100 sq.ft is available for the department. The department has three blocks namely: Main Block, Extension Block and Laboratory Block.

Laboratories and other Facilities

The Electrical Engineering Department has following fourteen well equipped laboratories::

a. Basic Electrical Engineering Lab
b. Computer Lab
c. Computer Simulation Lab
d. Digital Systems Lab
e. Electrical Machines Lab
f. Electronics Lab
g. Power Systems Lab
h. Microwave & Communication Lab
i. Multimedia & Vision Lab
j. Power Electronic Lab
k. Workshop & Projects Lab
l. Instrumentation and Measurements Lab
m. Optoelectronics Lab
n. ASIC Design and DSP Lab

These laboratories are upgraded as and when required.

Courses of Study

The Electrical Engineering curriculum develops a thorough understanding of the physical and mathematical principles underlying basic electrical processes and devices and provides students with a foundation in basic science, mathematics and the humanities. Written and oral communication skills are emphasized and developed. The computer as a tool for mathematical analysis, design, data analysis and instrumentation is extensively used.

Most of the courses have an integrated laboratory component which is supported by modern laboratories and state-of-the-art equipment and computers. Strong emphasis is placed on "hands-on" experience. Laboratory projects are encouraged in second and third years whereas final year projects are assigned keeping in view the industrial problems and

in most of the cases in consultation with industrial experts. The campus is located in an industrial environment and the students have a fair chance of industrial visits.

The courses in Electrical Engineering include core and elective courses. The Elective Courses are included in the program to provide more breadth to the knowledge. In 3rd and 4th years, the students have to register for the Elective Courses according to their interests. Our degree is highly regarded by industry and independent assessors. The program is accredited by the Pakistan Engineering Council as satisfying the academic requirements for Registred Engineer (RE) status.

Postgraduate Studies & Research

The department started its postgraduate program in 1984 and doctoral study program in 2001. Until now 356 MSc and 33 PhDs have been produced. The postgraduate program offers a degree in "Master of Science in Electrical Engineering" with specializations in

- Electrical Power Systems
- Communication Systems
- Energy Systems

- Control Systems
- Electro Magnetics
- Power Electronics

The master degree courses are aimed at bringing the students abreast with the most recent developments in their fields of specialization. These courses are offered both for the part time as well as the full-time students. At present 40% students are enrolled in full-time and 60% students are enrolled in the part time program. Most of the part time students are working with major engineering organizations of the country. The faculty members and postgraduate students have published 360 Research papers in different fields of Electrical Engineering.

The Department also arranges conferences , seminars and workshop in various areas of electrical engineering. The faculty members, postgraduate students and prominent researchers from Pakistan and abroad participate in these seminars. The department has a well-stocked and up to date library for use of the teachers and postgraduate students.
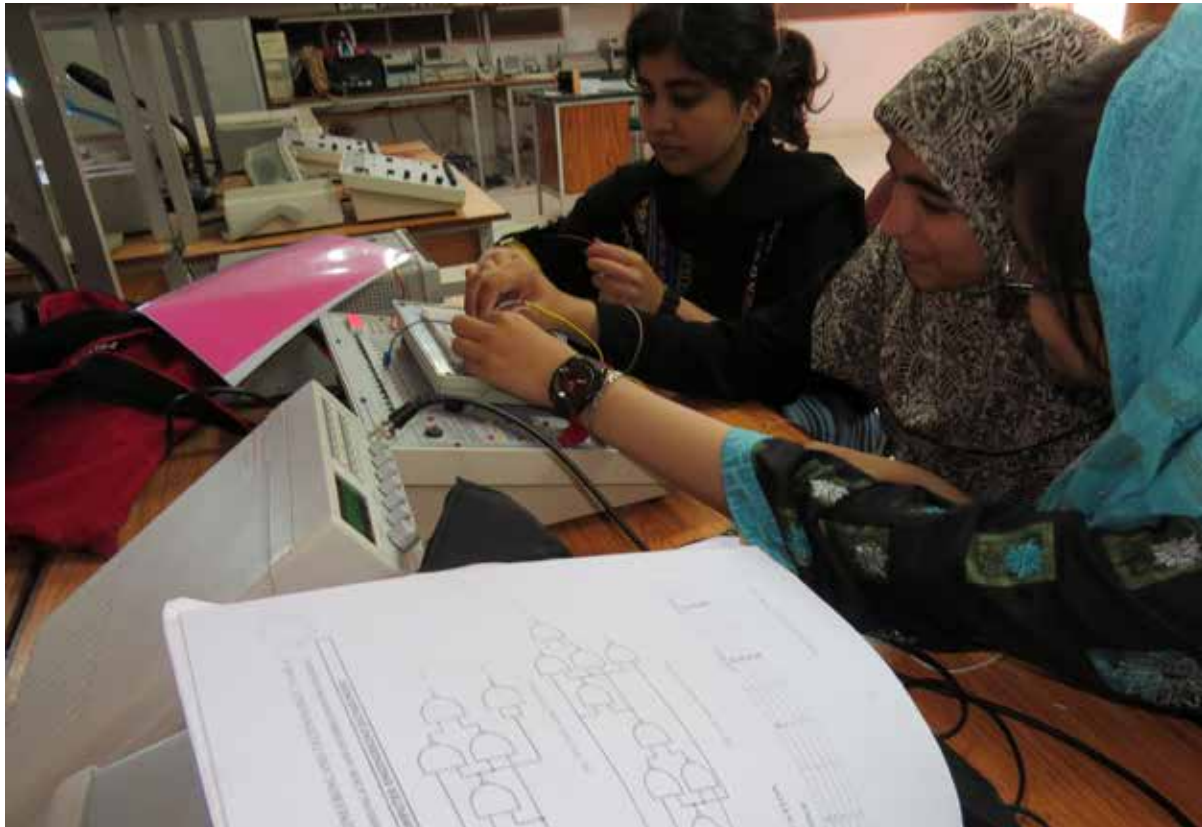
Courses of Study for Undergraduate Program
BSc Electrical Engineering

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-111	Basic Electrical Engineering	3	1
EE-112	Workshop Practice	0	1
IDE-113	Basic Mechanical Engineering	3	0
CS-114	Introduction to Programming	2	1
NS-115	Applied Physis	3	0
HU-116	Islamic Studies	2	0
	Total:	**13**	**3**
	Semester Total for Part-I & II	**16**	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-121	Digital Logic Design	3	1
EE-122	Electronic Devices & Circuits	3	1
EE-123	Engineering Drawing & CAD	0	1
CS-124	Advanced Programming Languages	2	1
NS-125	Linear Algebra	3	0
HU-126	Functional English	1	0
	Total:	**12**	**4**
	Semester Total for Part-I & II	**16**	
	Total for First Year	**32**	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-211	Network Analysis	3	1
EE-212	Electrical Machines	3	1
IDE-213	Basic Civil Engineering	3	0
NS-214	Differential Equations	3	0
HU-215	Pak Studies	2	0
	Total:	**14**	**2**
	Semester Total for Part-I & II	**16**	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-221	Instrumentation & Measurements	3	1
EE-222	Introduction to Power Engineering	3	0
NS-223	Calculus and Analytic Geometry	3	0
NS-224	Numerical Analysis and Transforms	3	0
HU-225	Communaction Skills	3	0
	Total:	**15**	**1**
	Semester Total for Part-I & II	**16**	
	Total for Second Year	**32**	

5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-311	Signals and Systems	3	1
EE-312	Electromagnetic Field Theory	3	0
CS-313	Micro Processor and Computer Architecture	3	1
NS-314	Probability & Statistics for Engineers	3	0
EE-31##	Elective-I	3	1
	Total:	**15**	**3**
	Semester Total for Part-I & II	**18**	

6th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-321	Power Electronics	3	1
EE-322	Linear Control Systems	3	1
EE-323	Communication Systems	3	1
MS-324	Engineering Management and Economics	3	0
EE-32##	Elective-II	3	1
	Total:	**15**	**4**
	Semester Total for Part-I & II	**19**	
	Total for Third Year	**37**	

7th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-411	Digital Signal Processing	3	1
EE-412	Design Project	0	2
HU-413	Techinical Report Writing	3	0

8th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-421	Senior Design Project	0	4
HU-422	Social Sciences	3	0
HU-423	Engineering Ethics	3	0
EE-42##	Elective IV	3	1
EE-42##	Elective V	3	1
	Total:	**12**	**6**
	Semester Total for Part-I & II	**18**	
	Total for Final Year	**34**	
	Grand Total for Four Years	**135**	

1st # represents the specialization   A) Power   B) Communication

2nd # represents the elective course no. from the list of electives

List of Electives

(A) Power

1. Power Generation
2. Powr Transmission
3. Power Distribution and Utilization
4. Power System Protection
5. Power System Planning
6. Power System Analysis
7. Power system Economics and Management
8. Power System Operation and Control
9. Artificial Intelligence Tools
10. Fundamentals of High Voltage Engineering
11. Electrical Estaimation Installation and Planning
12. Distributed Generation
13. Alternate Energy Systems
14. Automotive Electrical Systems
15. Hybrid Energy Systems
16. Illumination Engineering
17. Electrical Traction Systems
18. Electrical Machine Design

(B) Communication

1. Optical Fiber Communication
2. Computer Communication Networks
3. Satellite Communication
4. Information Theory & Coding
5. Wrieless Communication
6. Digital Commuication
7. Cellular Mobile Communication Systems
8. Multi Media Communication
9. RF Communication System Design
10. Microwave Communication System Design
11. Microwave Devices and Systems
12. Microwave Transmission Lines & Wave guides
13. Microwave Integrated Circuit Design
14. RF Circuit Design
15. Radar Systems
16. Broad Band Digital Networks
17. Radiating systems and Antennas
18. Communication Electronics
19. Communication System Design & Performance Analysis
20. Introduction to Wavelets

Note:

I. Choice of Electives in 6th, 7th & 8th semester will be dependent on Elective chosen in 5th semester. No student
can change the specialization area after choosing any of two areas above in his 5th Semester.

II. The Elective courses offered by the Department in a semester can be changed depending on the availability of teachers and related facilities and will be notified one week before the start of
the semester.
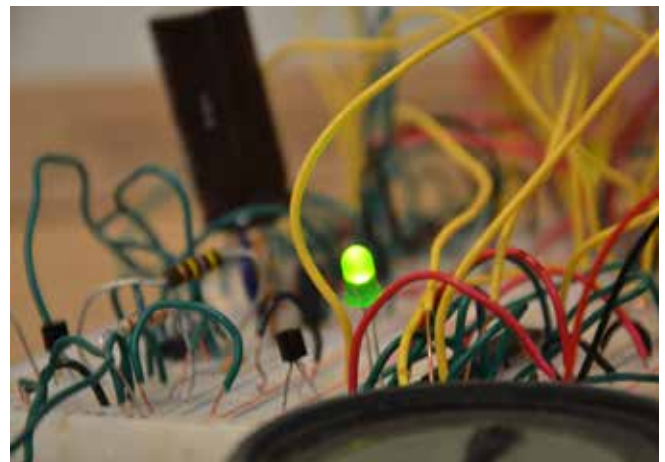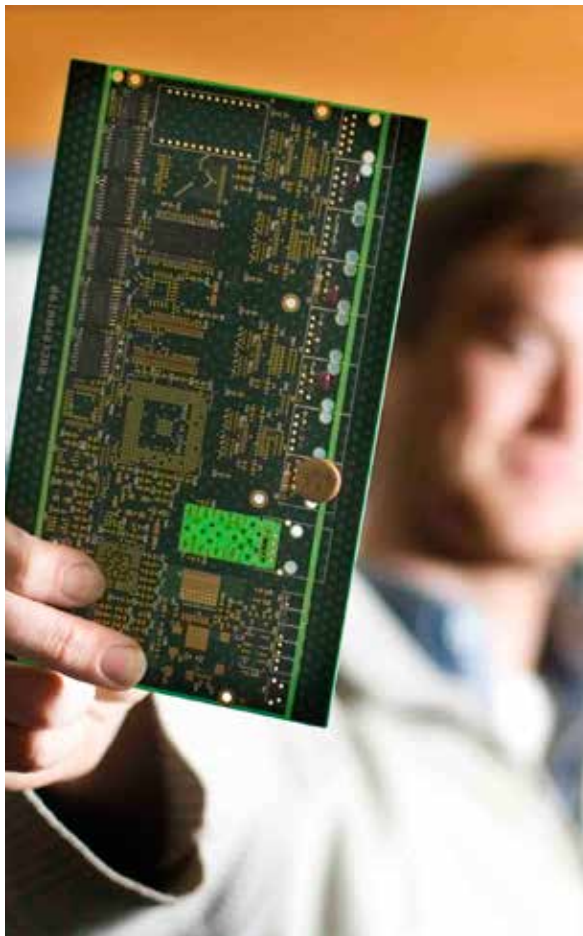
DEPARTMENT OF ELECTRONIC ENGINEERING

DEPARTMENT OF ELECTRONIC ENGINEERING

Chairman

Prof. Dr. Mohammd Ahmad Choudhry

Professors

M. A. Choudhry
BSc Engg (Lahore)
MSc Engineering (GWU, USA), PhD (Virginia Tech, USA)

Muhammad Javed Mirza
BSc Engg (PAF CAE, Karachi)
MSc Engineering (KFUMPM, KSA), PhD (OSU, USA)

Assistant Professors

Nadeem Anjum
MCS (IIU, Islamabad)
MSc Engg (QMU, London), PhD (QMU, London)

Ahsan Ali
BSc Engg (Taxila)
MSc Engg (Taxila), PhD (TUH, Germany)

Yaseer Arafat Durrani
BSc Engg (EMU, Turkey)
MSc Engg (KTH, Sweden), PhD (UPM, Spain)

Muhammad Obaid Ullah
BSc Engg (Taxila)
MSc Engg (Taxila), PhD (UM, UK)

Lecturer

Engr. Adil Usman
BSc Engg (Air Univ, islamabad)
MSc Engg (Air Univ, Islamabad)

Engr. Syed Zohaib Hassan Naqvi
BSc Engg (IIUI)
MSc Engg (IIUI), MBA (VU)

Engr. Qummar Zaman
BSc Engg (IIUI)
MSc Engg (UET, Taxila)

Engr. Muhammad Faraz
BSc Engg (IIUI)
MSc Engg (UET, Taxila)

Engr. Mohsan Niaz
BSc Engg (Taxila)
MSc Engg (Sweden), (On Higher Studies Abroad)

The Department

The Department of Electronic Engineering started in 2010 with an enrollment of 60 undergraduate students per year. The department is housed in the historic building of laboratory block. Laboratory block is the first building of this campus constructed in 1977. The building is recently renovated to accomodate Electronic Engineering Department. The department is equipped with laboratories including Electronics Lab, Digital Systems Lab, Computer Lab, Control Lab, Automation Lab and ASIC & DSP Lab which cater for the experimental and project works. The department employs highly qualified faculty with diverse background and research interests.

Courses of Study

In all matters regarding courses of study and others, the department strictly follows the policies and guidelines of 'Higher Education Commission' and 'Pakistan Engineering Council' .

Courses of Study for Undergraduate Program
BSc Electronic Engineering

1st Semester

Code	Course Title	Credit Hours	
		part-I	Part-II
BH-111	Functional Engilish	3	0
BH-112	Calculus and Analytical Geometry	3	0
BH-113	Applied Physics	3	0
CS-114	Introduction to Computers	2	1
EN-115	Basic Electronic Engineering	3	1
	Total	**14**	**2**
	Semester Total for Part -I & II	**16**	

2nd Semester

Code	Course Title	Credit Hours	
		part-I	Part-II
BH-121	Communication Skills	3	0
BH-122	Pakistan Studies	2	0
BH-123	linear Algebra	3	0
BH-124	Chemistry	3	0
CS-125	Computer Programming	2	1
EN-126	Circuit Analysis-I	3	1
	Total	**16**	**2**
	Semester Total for Part -I & II		**18**
	Total for 1st Year	**35**	

3rd Semester

Code	Course Title	Credit Hours	
		part-I	Part-II
BH-211	Differential Equations	3	0
EN-212	Computer - Aided Engineering Design	0	1
EN-213	Electronic Circuit Design	3	1
EN-214	Circuit Analysis-II	3	1
EN-215	Digital Logic Design	3	1
	Total:	**12**	**4**
	Semester Total for Part -I & II	**16**	

4th Semester

Code	Course Title	Credit Hours	
		part-I	Part-II
BH-221	Complex Variables and Transforms	3	0
EN-222	Proability and Random Variables	3	0
EN-223	Electric Machines	3	1
EN-224	Electromgnetic Field Theory	3	0
EN-225	Microprocessors & Microcontrollers	3	1
	Total:	**15**	**2**
	Semester Total for Part -I & II	**17**	
	Total for 2nd Year	**33**	

5th Semester

Code	Course Title	Credit Hours	
		Part-I	**Part-II**
BH-311	Technical Report Writting & Presentation Skills	3	0
BH-312	Sociology	3	0
EN-313	Integrated Electronic	3	1
EN-314	Signal Processing	3	1
EN-315	Instrumentation and Measurements	3	1
	Total:	**15**	**3**
	Semester Total for Part-I & II	**18**	

6th Semester

Code	Course Title	Credit Hours	
		Part-I	**Part-II**
BH-321	Islamic Studies	2	0
BH-322	Psychology	3	0
BH-323	Engineering Economics	3	0
EN-324	Analog & Digital Commincations	3	1
EN-325	Control Systems	3	1
	Total:	**14**	**2**
	Semester Total for Part-I & II	**16**	
	Total for 3rd Year	**34**	

7th Semester

Code	Course Title	Credit Hours	
		Part-I	**Part-II**
MS-411	Engineering Management	3	0
EN/CS-4xx	Elective-I	3	1
EN/CS-4xx	Elective-II	3	1
EN/CS-4xx	Elective III	3	0/1
EN-499A	Electronic Engineering Project	0	3
	Total:	**12**	**5/6**
	Semester Total for Part-I & II	**17/18**	

8th Semester

Code	Course Title	Credit Hours	
		Part-I	**Part-II**
MS-421	Professional and Social Ethics	3	0
EN/CS-4xx	Elective-IV	3	1
EN/CS-4xx	Elective-V	3	0/1
EN-499-B	Electronic Engineering Project	0	3
	Total	**9**	**4/5**
	Semester Total for Part-I & II	**13/14**	
	Total For Final Year	**30~ 32**	
	Grand Total for Four Year	**132~134**	

Abbreviations Used:
BH: Basics Sciences & Humanities
CS: Computer Sciences

EN: Electronic Engineering
MS: Management Sciences

List of Elective Courses

BH-4XX Numerical Methods	(3+0)	EN-4XX Hardware Software Codesign Techniques	(3+0)
EN-4XX Power Electronics	(3+1)	EN-4XX Linear Controls System	(3+1)
EN-4XX Laser and Fiber Optics	(3+0)	EN-4XX Digital Control Systems	(3+1)
EN-4XX Filter Design	(3+1)	EN-4XX Industrial Conrol Systems	(3+1)
EN/CS-4XX Introduction to Neural Networks	(3+0)	EN-4XX Process Measurement Engineering	(3+1)
EN/CS-4XX Artificial Intelligence	(3+1)	EN-4XX Industrial Automation	(3+1)
EN-4XX Biomedical Instrumentation	(3+1)	EN-4XX Introduction to Robotics	(3+1)
EN-4XX Biomedical Signal Analysis	(3+1)	EN-4XX Wireless Sensor Newtworks	(3+0)
EN-4XX Medical Imaging	(3+1)	EN-4XX Digital Instrumentation Systems	(3+1)
EN-4XX VLSI Design	(3+1)	EN-4XX Industrial Electronics	(3+1)
EN4XX FPGA-Based System Design	(3+1)	EN-4XX Mechatronics Applications	(3+0)
EN-4XX Digital System Design	(3+1)	EN/CS-4XX Fuzzy Logic and Simulation	(3+0)
EN-4XX Microelectronic Techonology	(3+0)	EN-4XX Digital Signal Processing	(3+1)
EN-4XX Embedded System Design	(3+1)	EN/CS-4XX Digital Image Processing	(3+0)
EN-4XX Computer Architecture	(3+1)	EN-4XX Digital Speech Processing	(3+1)
EN-4XX Microcomputer Systems	(3+1)	EN/CS-4XX Pattern Recognition and Matching	(3+0)

FACULTY OF MECHANICAL AND AERONAUTICAL ENGINEERING

3

Dean
Prof. Dr. Shahab Khushnood

DEPARTMENT OF MECHANICAL ENGINEERING

Chairman
Prof. Sagheer Ahmad

Professors

Shahab Khushnood
BSc Engg (Hons) (Gold Medalist) (UET Lahore)
MSc Engg (UET Lahore), MBA (Marketing) (AIOU),
PhD (NUST)

M. Shahid Khalil
BSc Engg (UET Lahore), PhD (Sheffield, UK),
PGD(Quality), PGD(HRM)

Sagheer Ahmad
BSc Engg (UET Lahore)
MSc Engg (UET Lahore)

Khawaja Sajid Bashir
BSc Engg (UET Lahore)
MSc Engg (UET Lahore), MBA (Marketing) (AIOU)

Associate Professor
Riffat Asim Pasha
BSc Engg (UET Lahore)
MSc Engg (UET Taxila), PhD (UET, Taxila)

Assistant Professors
Khalid Masood Khan
BSc Engg (UET Lahore)
MSc Engg (Birmingham, UK)

Zahid Suleman Butt
BSc Engg (Hons) (UET Lahore)
MSc Engg (UET Taxila)

Muhammad Kashif Iqbal
BSc Engg (Hons) (UET Taxila)

Muhammad Ali Nasir
BSc Engg (UET Taxila)
MSc Engg (UET Taxila)

Tanzeel-ur- Rashid
BSc Engg (UET Taxila)
MSc Engg (UET Lahore)

Dr. Muzaffar Ali
BSc Engg (UET Taxila)
MSc Engg (UET Taxila) ,PhD (UET Taxila)

Muddasar Khan
BSc Engg (UET Taxila)
MSc Engg (NUST) (on higher studies abroad)

Abdul Mobeen
BSc Engg (UET Lahore)
MSc Engg (Germany)

Muhammad Shehryar
BSc Engg (NUST)
MSc Engg (France), PhD (France)

Masood ur Rahman
BSc Engg (UET Taxila)
MSc Engg (France), PhD (France)

Nazeer Ahmad Anjum
BSc Engg (Hons) (UET Taxila)
MSc Engg (UET Taxila)

Hafiz Muhammad Ali
BSc Engg (UET Taxila), PhD (Queen Merry, UK)

Waqar Ahmad Qureshi
BSc Engg (NUST), MSc Engg (UET Taxila) (on higher studies abroad)

Abid Hussain
BSc Engg (Hons) (UET Taxila), MSc Engg (UET, Taxila)
(on higher studies abroad)

Rana Atta-ur-Rahman
BSc Engg (UET, Taxila), MSc Engg (UET Taxila)
(on higher studies abroad)

Lecturers

Ahtesham-ul-Haq
BSc Engg (UET Taxila) (on higher studies abroad)

Tayyaba Bano
BSc Engg (Hons) (UET Taxila)
MSc Engg (UET Taxila)

Sana Zulfiqar
BSc Engg (NED)

Aneela Anum
BSc Engg (UET Taxila)
MSc Engg (UET Taxila)

M. Sajjad Sabir
BSc Engg. (NUST)
MSc Engg. (NUST)

Lab Engineers

Muhammad Ahmed
BSc Engg (UET Taxila)

Waqas Asghar
BSc Engg (UET Taxila)

Muhammad Imran
BSc Engg (UET Taxila)

Zahid Waqas
BSc Engg (UET Lahore)

Muhammad Rafid
BSc Engg (UET Taxila)

Muhammad Usman
BSc Engg (UET Taxila)

The Department

Mechanical Engineering is a highly versatile and diversified engineering discipline. On one hand it is concerned with the design of machines and equipment that use energy and convert it into useful work. On the other hand it deals with the design and development of those machines that are used for manufacturing, production and process equipment.

The department offers four years degree program leading to BSc in Mechanical Engineering. At present, around 720 students in BSc, 150 students in MSc and 60 students in PhD are enrolled in the program.

Courses of Study

The Mechanical Engineering courses are built on a strong foundation of mathematical, physical and computing sciences. Emphasis is laid on the fundamental concepts and principles, which constitute the basis of mechanical engineering practice. The curriculum is designed to cover a broad range of areas. The department offers a series of courses in the following areas:

- Thermo-Fluid Engineering
- Applied Mechanics and Design
- Manufacturing Processes Engineering
- Computer based Mechanical Engineering
- Applied Mathematics & Statistics
- Engineering Management

The courses in Thermo-Fluid Engineering include applied Thermodynamics, Refrigeration and Air Conditioning, Heat and Mass Transfer, Power Plant, Fluid Mechanics and Gas Dynamics. The department offers a wide range of courses in Applied Mechanics and Design. Starting from a basic course in Engineering Statics, a series of courses is offered in Mechanics of Materials and Mechanics of Machines. These theoretical concepts are fostered in a series of Machine Design courses enabling the students to try their

skills and design small mechanical equipment. Product design is of no use without product development studies. Manufacturing Processes Engineering deals with the smart and economical product development methodologies. Students start with Workshop Technology in this area. Successive courses in Engineering Materials, Manufacturing Processes and Production Automation provide the students further insight to this area. Additional courses like Engineering Management and Economics in senior year introduce students to the efficient management of the productive resources. Computer based mechanical engineering concepts have been embedded in various courses like Computer Programming, Machine Design, CAD and Thermo-Fluids Engineering etc.

The University has a rich industrial neighborhood. The students have the opportunity to make maximum use of this industrial environment by engaging themselves in short term as well as long term training. These industries include HIT, HMC, POF, PAF complex at Kamra, HEC, KSB, TIP, CTI, ARL, OGTI, Railway Carriage Factory, Research Establishments of PAEC, NESCOM and a large number of units in the Hattar area. The students pick real world problems either for their semester papers or as final year project from these organizations and brush their skills.

The department is offering Masters Degree program since 1983. A large number of engineering graduates have made use of this program in a variety of areas. The program involves two years of part-time as well as full time study and consists of lectures, design, office work, laboratory investigation, software usage & application of computational methods and research. The emphasis is on introducing students to modern trends and techniques and advanced knowledge in their fields of specialization. The department has adequate research facilities including licensed software, state of the art laboratories and access to published literature to meet the needs of postgraduate students to do their Masters program. The department is also offering PhD Program since 2001. By the end of year.

2014 it is expected that the tally of completed PhDs from the MED would be twenty and quite a few are nearing the mature stage of their research.

Laboratories & other Facilities

The department has the following well-equipped laboratories to meet the academic requirements of students and teachers as well as the professional needs of the government and private organizations:

a. Applied Thermodynamics
b. Mechanics of Materials
c. Refrigeration & Air Conditioning
d. Fluid Mechanics and Hydraulics
e. Heat and Mass Transfer
f. Mechanics of Machines
g. Power Plants
h. Internal combustion Engines
i. Engineering Materials
j. Modelling and Simulation
k. Engineering Mechanics (Static & Dynamics)
l. Drawing Hall
m. Stress Analysis
n. Mechanical Vibrations
o. Fracture Mechanics & Fatigue
p. Renewable Energy Research & Development Center (RERDC)
q. Composite Materials and Smart Structures

The sco ys a challenging job. The testing of materials; their analysis is always helpful for the new researcher to explore the various properties and characteristics of materials. The Fracture Mechanics & Fatigue laboratory is established in the extension block of Mechanical Engineering Department at ground floor comprising a covered area of 3500 ft2. The idea to establish this advance laboratory was to enhance the research and development activities in the field of fatigue and fracture. The laboratory is equipped with many state of art highly precise testing equipment along with related specimen preparation facility.

The laboratory is equipped with experimental facilities capable to satisfy the needs of postgraduate and undergraduate studies as well as industry R&D. Further more this laboratory is potentially able to produce internationally scaled research work in the field of fracture mechanics, fatigue of engineering materials and structures and failure analysis of engineering components and related equipments, particularly defense organizations. The present equipment can perform the following well known standard tests at different levels:

• Strain-controlled fatigue tests under axial loading
• Stress-controlled fatigue tests under axial loading
• Stroke-controlled fatigue tests under axial loading
• Fatigue tests under rotating bending moments
• Fatigue tests under combined bending & twisting moments
• Fatigue crack growth tests
• Fracture Mechanics tests (KIC, JIC, CTOD)
• Tensile tests on specimens of different geometries
• Static bending tests
• Static torsion tests
• Notch Impact tests
• Wear fatigue tests

The fluid Mechanics lab in the department was renovated and brought up to the state of the art under the "strengthening of labs project" of HEC. A considerable sum of 36.34 million rupees was spent under the project to procure new experimental equipment in the period stretching between 2006 and 2009. The Fluid Mechanics Lab today boosts twelve state of the art experimental equipments, including sub-sonic wind tunnel, forced and free vortex generator and parallel and series pump test bed.

A Modelling and Simulation Laboratory has been established to provide facilities for 2D/3D automated drafting, C++ programming and Digital Simulation. Computer based design and optimization techniques are being employed for teaching various courses in the networking environment and considerable number of modern computers is available in the Department. The Department shares AMS Lab with Department of Industrial Engineering, which include the state of the art manufacturing facilities with CNC (M100), computer Integrated manufacturing with AGVs/ASRS and virtual prototyping models. The students can enhance their technical knowledge by using STL files directly from Pro-E and build a model in 3D using rapid prototyping System.

The department has also established a new Renewable Energy Research & Development Center (RERDC). The purpose of the RERDC is to reduce the existing deficiency in research facilities in the Pakistani universities especially in energy sector to support the Pakistani energy policy and departmental priorities for increasing the viability and deployment of renewable energy through system design and prototype development and optimization that enhance domestic benefit from renewable energy development.

Courses Under Semester System
BSc Mechanical Engineering

1st Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
GS-101	Calculus and Analyticla Geometry	3	0
HS-101	Functional English	2	0
CS-101	Computer System & Programing	2	1
GS-102	Applied Physics	2	1
ME-111	Engineering Drawing & Graphics	2	2
GS-103	Applied Chemistry	2	0
	Total:	**13**	**4**
	Semester Total for Part-I & II	**17**	

2nd Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
IS-101	Islamic Studies / Ethics	2	0
EE-101	Electrical Engineering	2	1
HS-102	Communication Skills	2	0
GS-104	Lienear Algebra and Ordrinary Differential Equations	3	0
ME-112	Workshop Practice	1	1
ME-113	Engineering Statics	2	1
ME-121	Thermodynamics-I	3	0
	Total:	**15**	**3**
	Semester Total for Part-I & II	**18**	
	Total for 1st Year	**35**	

3rd Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
IS-201	Pakistan Studies	2	0
ME-211	Engineering Dynamics	2	1
ME-212	Mechanics of Materials-I	3	1
ME-213	Engineering Materials	2	1
ME-221	Thermodynamics-II	2	1
ME-222	Fluid Mechanics-I	3	1
	Total:	**14**	**5**
	Semester Total for Part-I & II	**19**	

4th Semester			
Course No.	Course Title	Credit Hours	
		Part I	Part II
EE-201	Electronics Engineering	2	1
GS-201	Complex Varibles and Transforms	2	0
ME-214	Machine Design & CAD-I	2	1
ME-215	Machanics of Materials-II	3	1
ME-223	Fluid Mechanics-II	3	1
GS-202	Socical Sciences	2	0
	Total:	**14**	**4**
	Semester Total for Part-I & II	**18**	
	Total for Second Year	**37**	

5th Semester			
Course No.	Course Title	Credit Hours	
		Part I	Part II
HS-301	Technical Report Writing and Presentation Skills	2	0
GS-301	Numerical Analysis	3	0
ME-311	Machine Design & CAD-II	3	1
ME-312	Precision Engineering & Metrology	2	1
ME-313	Manufacturing Processes	3	1
	Total	**13**	**3**
	Semester Total for Part-I & II	**16**	

6th Semester			
Course No.	Course Title	Credit Hours	
GS-302	Applied Statistics	2	0
ME-314	Control Engineering	2	1
ME-315	Mechanics of Machines	3	1
ME-321	Power Plants	2	1
ME-322	Heat and Mass Transfer	3	1
	Total:	**12**	**4**
	Semester Total for Part-I & I	**16**	
	Total for Third Year	**32**	

7th Semester		Credit Hours	
Course No.	Course Title	Part I	Part II
MS-401	Engineering Economics	2	0
ME-411	Mechanical Vibrations	3	1
ME-421	Internal Combustion Engines	2	1
ME-422	Refrigeration and Air Conditioning	3	1
ME-499	Design Project	0	3
	Total:	**10**	**6**
	Semester Total for Part-I & II	**16**	

8th Semester		Credit Hours	
Course No.	Course Title	Part I	Part II
ME-412	Advanced Manufaturing Systems	2	1
ME-413	Finite Element Methods	2	1
ME-4XY	Technical Elective Course	2	1
ME-4XY	Management Electives	2	0
ME-499	Design Project	0	3
	Total:	**8**	**6**
	Semester Total for Part-I & II	**14**	
	Total for Final Year	**30**	
	Grand Total for Four Years	**134**	

List of Elective Courses
Technical Electives: (ME-4XY)

a. ME-414 Maintenance Engineering
b. ME-415 Introduction to Mechatronics
c. ME-416 Tribology
d. ME-417 Mechanical Engineering Design Analysis
e. ME-423 Renewable Energy Technology
f. ME-424 Gas Dynamics
g. ME-425 Aerodynamics
h. ME-426 Computational Fluid Dynamics (CFD)
i. ME-427 Nuclear Engineering
j. ME-428 Stress Analysis

Management Electives: (ME-4XY)

1. MS-402 Operations Management
2. MS-403 Total Qualit Management
3. MS-404 Project Management
4. MS-405 Operations Research
5. MS-406 Engineering Law
6. MS-407 Business and Entrepreneurship
7. MS-408 Safety Health and Environment
8. MS-409 Environment and Health

DEPARTMENT OF METALLURGY AND MATERIALS ENGINEERING

Dean
Prof. Dr. Shahab Khushnood

DEPARTMENT OF METALLURGY AND MATERIALS ENGINEERING

Chairman
Dr. Riffat Asim Pasha

Professors

Shahab Khushnood
BSc Engg (Hons) (Gold Medalist)(Lahore)
MSc Engg (Taxila), MBA (Marketing (AIOU)
PhD (NUST)

Zaffar M. Khan (Industrial Professor/ Industrial Ace)
BSc Engg (NUST)
MSc Engg (Kansas, USA),
PhD (Manchester UK) Post Doc. (Iowa USA)

Dr. Muhammad Ashraf Butt
BE Engg (MEU&T, Jamshoro)
MSc Engg (University of Manchester)
PhD (Univerisyt of Mancheste)

Associate Professor
Riffat Asim Pasha
BSc Engg (Lahore)
MSc Engg (Taxila), PhD (Taxila)

Assistant Professors
Hiring under process

Lecturer
Hiring under process

Lab Engineer
Hiring under process

The Department

The field of Metallurgy and Materials Engineering comprises all classes of materials (matels, ceramics, electronic materials, composite materials and biomaterials) from a unified view point with an emphasis on the connections between the structure, processing, properties, and performance of the material.

A materials study describes how materials react in different condioons (such as temperature and pressure) and understands that all materials can be approached from a common set of principles. Aerospace, Automobiles, Architect, civil engineers, toy companies, bio-medical research companies, the data storage industry etc are all recent users of technologies that developed from research in Materials.

Most fields in science and engineering are concerned in some way with materials, but only the field of materials engineering focuses directly on them. The Department of Metallurgy and Materials Engineering mission continues the farsighted and broad mission.

- To provide a well-rounded education in metallurgy and materials engineering to meet the needs of industry, academia, and social secotr.
- To conduct research of internatioal standard in the field.
- To provide technical personal in the cross-disciplinary materials community.

Metallurgy and materials engineering is a key aspect of most companies the world over. It needs to make things stronger, cheaper, lighter, more functional and more sustainable. The graduates in this area can work, or do research in most countries of the world.

The Metallurgy and Materials Engineering Department at University of Engineering and Technology would be great contribution to fulfil the local and global requirments of the filed.

The current program is a unique coordination of Industry and Academia to understand and to solve the complex problems in more professional manner by doing experimentation in the Industry environment.

Laboratories & Other Facilities

The Departmetn of Metallurgy ad Materials Engineering at UET Taxila and collaboration with Heavy Mechanical Complex Taxila has the following well equipped laboratories/shops to meet the academic requirments of studens and teacher as well as the professional needs of the government and private organizations:

1. Computer Lab
2. Drawing Hall
3. Composite Materials & Smart Structures
4. Technical Training Workshop
5. Mechanical Materials Testing Lab
6. Heat Treatment Lab
7. Metallic Analysis Lab
8. Metallographic Lab
9. Non Destructive Testing Lab
10. Molding and Casting Lab/Shop
11. Fabrication Lab/Shop
12. Foundry Lab/Shop
13. Quick analysis Lab
14. Welding Lab
15. Specimen Preparation Lab

Courses of Study

Four year BSc "Matallurgy and Materials Engineering" Program is being started under the Faculty of Mechanical & Aeronautical Engineering at University of Engineering & Technology, Taxila.

The Scheme of study is being followed as per guide line of HEC approved curriculum Revised-2012 as below.

Courses Under Semester System
BSc Metallurgy and Materials Engineering

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
HS-100	Communication Skills	3	0
GS-101	Applied Physics	3	0
MATH-101	Calculus	3	0
CS-101	Introduction to computing	2	1
GS-105	Applied Chemistry	3	0
HS-101	Islamic Studies/Ethics	2	0
	Total:	16	1
		17	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
MME101	Engineering Drawing and CAD	2	1
MME102	Workshop Practice	1	1
MME103	Introduction to Engineering Materials	3	0
MME104	Engineering Mechanics	3	0
HS103	Pakistan Studies	2	0
MATH102	Differential Equations and Applied Techniques	3	0
	Total:	14	2
		16	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
HS200	Technical Report Writing and Presentation	3	0
MME200	Engineering Economy	3	0
MATH201	Numerical Analysis and Computer Programming	3	1
MME201	Materials Thermodynamics	3	0
MME202	Physical Metallurgy-I	3	1
	Total:	15	2
		17	

4th Semester

Course No.	Course Title		Credit Hours
		Part I	Part II
MME203	Mechanical Behaviour of Materials	3	0
MME204	Engineering Ceramics and Glasses	3	1
MME205	Ferrous Metallurgy	3	0
MME206	Physical Metallurgy-II	3	1
HS201	Social Psychology and Human Rights	3	0
	Total:	15	2
		17	

5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
MME301	Polymeric Materials	3	1
MME302	Heat Treatment	3	1
MS33x	Management Sciences Elective-I	3	0
MME303	Corrosion Engineering	3	1
MME304	Non-ferrous Metallurgy	3	0
	Total:	**15**	**3**
		18	

6th Semester

Course No.	Course Title	Credit Hours	
MME305	Manufacturing Technology	**3**	**1**
MME306	Inspection and Testing of Materials	3	1
MME34x	Inter Disciplinary Elective-I	3	0
MME307	Composite Materials	3	1
CS301	Computer Applications in Materials Engineering	2	1
	Total:	**14**	**4**
		18	

7th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
MME401	Welding and Joining Processes	3	1
MS333	Entrepreneurship and Marketing	3	0
MATH401	Statistical Methods and Estimation	3	0
MME5xy	MBCD-Elective -I	3	0
MME400	Senior Design Project Part -I	0	3
	Total:	**12**	**4**
		16	

8th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
MME34x	Inter Disciplinary Elective-II	3	0
MS33x	Management Science Elective-II	3	0
MME402	Advanced Materials	3	1
MME5xy	MBCD Elective-II	3	1
MME400	Senior Design Project part-II	0	3
	Total:	**12**	**5**
		17	

Major Based Core Depth Courses (MBCD)

Course No.	Course Title
MME 501	Foundry Engineering
MME 502	Materials Characterization
MME 503	Powder Metallurgy
MME 504	Surface Engineering
MME 505	Advanced Steels
MME 506	Design and Selection of Materials
MME 507	Biomaterials
MME 508	Fracture Mechanics and Failure Analysis

Inter-Disciplinary Engineering Breadth (IDEB) Electives Courses

Course No.	Course Title
MME 340	Furnaces and energy conservation
MME 341	Mineral Processing
MME 342	Nuclear Materials
MME 343	Vacuum Technology

Management Sciences (MS) Elective Courses

Course No.	Course Title
MS 330	Industrial Safety and Environmental Engineering
MS 331	Production Operations Management
MS 332	Environmental Management and Control
MS 333	Entrepreneurship & Marketing
MS 334	Solid Waste Management
MS 335	Metallurgical Plants and
MS 336	Quality Control
MS 337	Total Quality Management (TQM)
MS 338	Engineering Management
MS 339	Energy Management

FACULTY OF
INDUSTRIAL ENGINEERING
4

Dean
Prof. Dr. Mukhtar Hussain Sahir

DEPARTMENT OF
INDUSTRIAL ENGINEERING

Chairman
Mirza Jahanzaib

Professors

Mukhtar Hussain Sahir
BSc Engg (Lahore)
MSc Engg (Lahore), PhD (Taxila)

Associate Professor

Mirza Jahanzaib
BSc Engg (Lahore)
MSc Engg (Taxila), PhD (Taxila, IRSIP,UK)

Assistant Professors

Ali Rizwan
BSc Engg (Taxila)
MSc Engg (Taxila), PhD (Taxila)

Wasim Ahmad
BSc Engg (Taxila)
MSc Engg (Taxila), PhD. Engg (UK)

Salman Hussain
BSc Engg (Taxila)
MSc Engg (UK), PhD. Engg (UK)

Haris Aziz
BSc Engg (Lahore)
MSc Engg (AIT Thailand), PhD (AIT Thailand)

Syed Turab Haider
BSc Engg (Taxila)
MSc Engg (UK) (On Higher Studies Abroad)

Abdul Aleem
BSc Engg (Lahore),
MSc Engg (Taxila)

Lecturer

Saifullah
BSc Engg (Taxila)
MSC Engg (HUST, China),
(On Higher Studies Abroad)

Abid Ali
BSc Engg (PU , Lahore)
MSC Engg (Taxila)

Zahid Rasheed
BSc Engg (Lahore)
MSC Engg (Taxila)

Zaheer Ahmad
BSc Engg (Lahore)
MSC Engg (Taxila)

Haji Bahader Khan
BSc Engg (PU , Lahore)
MSC Engg (Taxila)

Lab Engineers

Muhammad Jawad
BSc Engg (Lahore)

Introduction

Industrial Engineering is the branch of engineering that is concerned with the Design, Analysis, and Operation of Systems. These can range from a consumer product or single piece of equipment to large business, social, and environmental systems. Industrial Engineers determine the most effective ways to utilize the basic factors of ProductionPeople, Machines, Materials, Information, and Energyto make a product or provide a service. The Industrial Engineer's interest lies in modeling system functions and determining how best to achieve the objectives of the system. The methods employed in Industrial Engineering provide an excellent vehicle for considering both private and public costs and benefits.

Industrial Engineers by virtue of education and training have the opportunity to work in a variety of departments and businesses. The most distinctive aspect of industrial engineering is the flexibility that it offers. Whether it's shortening a rollercoaster line, streamlining an operating room, distributing products worldwide, or manufacturing superior automobiles, all share the common goal of saving money and increasing efficiencies. The need for Industrial Engineers is growing. Why? Industrial Engineers are the only engineering professionals trained as productivity and quality improvement specialists. Industrial Engineers figure out how to do things better. They engineer processes and systems that improve quality and productivity.

The Department

Industrial Engineering with Production and Manufacturing majors was the first MSc degree program offered at the university way back in 1983. Industrial Engineering had assumed a distinctive place as sub-discipline in Mechanical Engineering Department since then. With the creation of Industrial Engineering Department, this program has been shifted to the department. MSc degree program in Industrial Engineering spans over two years and specializes in Manufacturing Systems Engineering. The department is also offering a broad-based Master's program in Engineering Management. An independent four-year program leading to BSc degree in Industrial Engineering is being introduced with 2010-entry at the university.

Courses of Study

The Industrial Engineering courses are built on fundamentals of Mathematical, Physical and Computing Sciences. The curriculum is designed to educate students in diverse areas of theory and practices in engineering and management domains. The following areas are specifically enriched for disseminating state-of-the-art knowledge to future builders of the nation;

- Computational Industrial Engineering
- Human Resource's Skill development
- Managerial Capabilities Inculcation
- High-tech Manufacturing Technology and Management
- Quality, Productivity and Cost Effectiveness

On the core technology side, BSc in Industrial Engineering offers students a unique opportunity to learn classical production technologies in courses like Workshop Technology, Manufacturing Processes, Metrology and Tool Engineering. The high-tech courses embed in students the capabilities to learn and acquire modern production systems in courses like CAD/CAM, Robotics, Automation and CIM.
Soft technologies encompassing Statistical Analysis, Economics Optimization and Simulation Modeling courses prepare students to design and build large and complex systems for efficiency and effectiveness. Also, strong emphasis has been ensured to inculcate managerial capabilities in industrial engineering students by including a host of courses in management electives.

Rich industrial neighourhood around the University offers prospective industrial engineering students an ideal environment to groom their professional skills. These industries include HMC, HIT, POF, KSB, TIP, PAF complex at Kamra, BESTWAY and a host of SME's in nearby Hattar Industrial Estate. The department has Seven Laboratories and a fully functional workshop. A large Machine Tools Laboratory and a state-of-the-art Advanced Manufacturing System (AMS) with CIM (Intellitek) equipment is available in the department. CAD/CAM lab consists of Denford machining suit, Boxford, Intellitek milling centers ZCorp Rapid Prototyping and automation modules. Metrology and QC lab equipped with the basic to intermediate level equipment taught to students. Human Factors and Safety lab consisting of treadmill, weighing scale, pin boards, sound meters, light meter spectra light meter and various analysis tools with RULA software. Management System, Modeling and Simulation lab is equipped with modern software like TORA, LINGO, SIMU, ARENA (student version), and Expert Choice, Primavera, Pro Engineer, Minitab, CATIA and related software.

Courses Under Semester System
BSc Industrial Engineering

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
HU-111	English I (Communication skills/Business Skills)	3	0
IE-101	Problem Solving for Industrial Engineers	2	0
IE- 102	Workshop Practice	1	1
ME-191	Engineering Drawing & Graphics	2	1
ME-292	Mechanical Technology	2	1
MA-191	Calculus	3	0
	Total:	**13**	**3**
	Semester Total for Part-I & II	**16**	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
HU-291	Logic & Critical Thinking	2	0
MA-192	Differential Equations	3	0
CS-192	Introduction to Computing	2	1
HU-112	Islamic Studies / Ethics	2	0
IE-121	Probability and Statistics	3	0
IE-122	Computer Aided Design & Modeling	2	1
	Total:	**14**	**2**
	Semester Total for Part-I & II	**16**	
	Total for 1st Year	**32**	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
IE-231	Engineering Management	2	1
HU-292	Technical Writing Skills	2	0
ME-221	Engineering Mechanics	2	1
HU-101	Applied Physics	3	0
ME-293	Materials Engineering	2	1
MA-193	Applied Linear Algebra	**3**	**0**
	Total:	**14**	**3**
	Semester Total for Part-I & II	**17**	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
IE-241	Engineering Economics	3	0
IE-243	Operations Research	3	1
IE-242	Manufacturing Process	3	1
HU-113	Pakistan Studies	2	0
ME-294	Mechanics of Materials	2	1
EE-301	Industrial Electronics	**2**	**1**
	Total:	**15**	**4**
	Semester Total for Part-I & II	**19**	
	Total for 2nd Year	**36**	

5th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
IE-311	Operations of Manufacturing Systems	2	1
ME-311	Applied Machine Design & FEM	2	1
IE-312	Metrology & Statistical Quality Control	3	1
IE-313	Optimization Techniques	2	0
IE-314	Work Study & Methods Engineering	3	1
	Total:	**12**	**4**
	Semester Total for Part-I & II	**16**	

6th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
IE-321	Industrial Simulation	2	1
IE-322	Human Factors Engineering	2	1
IE-323	Management of Engineering Projects	3	0
MA-391	Numerical Analysis	3	0
IE-324	Planning & Scheduling in Manufacturing	2	0
IE-325	Industrial Automation and Robotics	2	1
	Total:	**14**	**3**
	Semester Total for Part-I & II	**17**	
	Total for 3rd Year	**33**	

7th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
IE-411	Design of Experiments	3	1
IE-412	Industrial Facilities Design	2	1
IE-XXX	Elective I	3	1
IE-XXX	Elective II	3	0
IE-491	Project Phase I	0	3
	Total:	**11**	**6**
	Semester Total for Part-I & II	**17**	

8th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
IE-XXX	Elective I	2	1
IE-XXX	Elective I	2	1
IE-XXX	Elective II	3	0
IE-XXX	Elective II	3	0
IE-492	**Project Phase II**	**10**	**5**
	Semester Total for Part-I & II	**15**	
	Total for Final Year	**32**	
	Total Credit Hours	**133**	

List of Elective Courses

(Elective I) Manufacturing Track

Course No.	Course Title	Credit Hours	
		Part I	Part II
IE-413	CAD/CAM	2	1
IE-414	Process Planning and Lean Systems	3	0
IE-415	Computer Integrated Manufacturing	2	1
IE-416	Metal Forming & Cutting Analysis	3	1
IE-417	Tool & Die Design	2	1
IE-418	Feed Back & Control	2	1
IE-419	Total Quality Management	2	1
IE-420	Optimization via Simulation	2	1
IE-421	Maintenance and Reliability Analysis	3	0
IE-422	Special Topics	3	0
IE-423	Productivity Improvement Tools and Techniques	3	0
IE-424	Product Development and Concurrent Engineering	3	0
IE-425	Modeling & Analysis of Manufacturing Systems	3	0

(Elective II) Management Track

Course No.	Course Title	Credit Hours	
		Part I	Part II
IE-426	Marketing Management	3	0
IE-427	Human Resource Management	3	0
IE-428	Financial Management	2	1
IE-429	Quantitative and Qualitative Decision Making	3	0
IE-430	Knowledge Management	3	0
IE-431	Management Information System	2	1
IE-432	Organizational Behavior	3	0
IE-433	Soft Computing & Data Mining	2	1
IE-434	Production & Operation Management	3	0
IE-435	Special Topics	3	0
IE-436	Supply Chain & Logistics Management	3	0
IE-437	Expert System Applications	3	0
IE-438	Occupational Health & Safety	2	1

FACULTY OF TELECOMMUNICATION & INFORMATION ENGINEERING 5

Dean

Prof. Dr. Adeel Akram

This faculty consists of four degree awarding departments.

- Department of Computer Engineering
- Department of Software Engineering
- Department of Telecommunication Engineering
- Department of Computer Science

DEPARTMENT OF COMPUTER ENGINEERING

Chairman

Prof. Dr. Muhammad Iram Baig

Professors

Muhammad Iram Baig
BSc (Taxila), MSc (Lahore), PhD (Taxila)

Associate Professors

Hafiz Adnan Habib

BSc (Taxila), MSc (Taxila), PhD (Taxila)

Assistant Professors

Muhammad Haroon Yousaf
BSc (Taxila) , M.Sc. Engg. (Taxila), PhD (Taxila)

Syed Sohail Ahmed
BSc (Taxila), M.Sc. Engg. (Taxila), PhD (Taxila)

Muhammad Rizwan
BSc (Taxila), M.Sc. Engg. (Taxila)

Malik Muhammad Asim
BSc (Taxila), M.Sc. Engg. (Taxila)

Fawad Hussain
BSc (Taxila), M.Sc. Engg (Taxila)

Khalid Bashir Bajwa
BSc (NUST), M.Sc. (UK), PhD (UK)

Muhammad Majid
BSc (Taxila) , MSc (UK), PhD (UK)

Syed Muhammad Anwar
BSc (Taxila) , MSc (UK), PhD (UK)

Muhammad Awais Azam
BSc (Taxila), M.Sc (UK) PhD (UK)

Sana Ziafat
BSc (Taxila), M.Sc. Engg. (Taxila)

Naveed Khan Baloach
BSc (Taxila), MSc Engg. (Taxila)

Afshan Jamil
BSc (Gold Medallist) (Taxila) , M.Sc. Engg. (Taxila)

Abdul Rehman Chaudhry
BSc (Taxila) , MSc Engg. (LUMS)

Waqar Ahmed
BSc (Taxila), MSc. (Taxila) (On Higher Studies Abroad)

Lecturers

Mona Zafar
B.Sc. Engg. (Taxila), MSc Engg (Taxila)

Romana Shahzadi
BSc (Taxila) , MSc. Engg (Taxila)

Noshina Ishaque
B.Sc. Engg (Taxila) MSc Engg. (Taxila)

Zahid Mehmood
BSc (Hons) (CIIT ,Wah), M.Sc (IIU Islamabad)

Awais Tanveer Rana
BSc (Taxila) (On Higher Studies Abroad)

Shahzad Ahmed Bhatti
BSc (Taxila) (On Higher Studies Abroad)

Lab Engineers

Malik Amir Arslan Awan
B.Sc. Engg (Taxila)

Asim Raheel
B.Sc. Engg (Taxila)

Sanay Muhammad Umar Saeed
B.Sc. Engg (Taxila) MSc (Taxila)

Mehak Arshad
B.Sc. Engg (Taxila)

Asim Raza
B.Sc. Engg (CIIT,Wah) MSc Engg. (Taxila)

Message from Chairman

Computer Engineering has emerged tremendously in the last two decades and found position among the four most degrees awarded globally. Computer Engineers have tremendous job potential due to computing equipment utilization in almost every industry ranging from medical to aerospace. Students are advised to gain hands-on experience in their professional degree of Computer Engineering at UET Taxila. Department is equipped with state of the art laboratories to facilitate experimentation and gain hand-on experience. Technical societies are also formed to provide a suitable platform for additional learning.

The Department

Computer engineering degree program was started in 2001 with intake of fifty students. Initially, it was setup in the building of Electrical Engineering Department and classes were conducted in evening session only. In the mean time, construction of a separate building for department worth Rs. 40 million with funding from HEC (Higher Education Commission) was started and completed in year 2006. Building comprised of eight class rooms, twelve labs, one girl's common room, two examination halls, nearly twenty five offices and some other rooms and halls. Department has laboratories with sufficient hardware and computing facilities. Each computing lab is equipped with at least forty PCs and each hardware lab is equipped with twenty workstations. All computing labs are also networked and department has wireless networked coverage as well.

Computer Engineering department also arrange different sort of events in order to encourage students to take part in those events and groom their technical as well as non technical skills. The events that we have been arranging so far are; programming exhibition (Term projects exhibition in JAVA, C# etc), Databases exhibition and annual students day.

Program Objectives

• To produce Graduates who are able to practice computer engineering to serve state and regional industries, government agencies, or national and international industries.

• To produce Graduates with the necessary background and technical skills to work professionally in one or more of the following areas: computer hardware and software design, embedded systems, computer network design, system integration, electronic design automation.

• To produce Graduates for personal and professional success with awareness and commitment to their ethical and social responsibilities, both as individuals and in team environments.

• To produce Graduates who are capable of maintaining and improving their technical competence through lifelong learning, including entering and succeeding in an advanced degree program in a field such as engineering, science, or business.

Laboratories

1. Video & Image Processing Laboratory

Video and image processing lab was established 2006 as a project funded by Higer Education Commission Pakistan . Lab is equipped with state of the art equipment for video and image processing. This lab offers services in the areas of signals and image processing and computer vision. Lab also contains a separate portion for Postgraduate students for fullfilling their research and development needs.

2. Electronic System Laboratory

Electronic system lab contains specialized hardware in the area of electrical and electronics engineering. Lab offers services in the areas of electrical and electronic circuit analysis .

3. Computing Lab

Computer lab is equipped with latest Dell 760 Computing machines. Lab offiers services for core computing areas for e.g fundamentals, programing data base algorithms etc.

4. Digital Systems Lab.

Digital systems lab contains specialized hardware in the domain of digital system design. Lab equppied with micro controller kits (80C51), micro processor kits, logic desgin trainers and FPGA KITS. Lab offers in areas of logic desgin , micro processor, computer architecure and digital desgin.

5. Data Communication & Networking Lab.

Data Communication and networking lab is equppied with CISCO sponsored network relataied hardware alongwith computing machines. Lab is also providing vibrant services as CISCO local acadmy. Lab offers services in the areas of computer communication and networks.

Technical Societies in the Department

URL: http://web.uettaxila.edu.pk/uet/computer/techSociety.htm

Technical societies are established in the department that serves guideline for the students to choose their profession after their degree. Students entering in first semester are given orientation about these societies so that they can later on join these societies to have technical grooming.

The major objective of these technical societies is to develop strong interaction among the scholars and faculty in their corresponding field of interests. Computer Engineering students have been divided into three categories for this reason. Scholars from undergraduate, postgraduate programs and members from the faculty will share their work with each others.

Each society is headed by specialist of respective field from the faculty. Other faculty members also coordinate. One student is also selected as student chair for each society.
URL: http://web.uettaxila.edu.pk/uett/CPED/techSociety.htm

a. Taxalian Robotics and Automation Club (TRAC)

This Society is a group of people who are committed to the advancement of robotics in the university through innovation and sharing of expertise, information and experience. Socieity arranges seminars, workshops and confferences on Microcontrollers, FPGAs and processors. It hopes toserve as catalyst for preparing students for the competencies required by industries today and in the near future. This society also aims to organize a national level competition in the university. Society Counselor: Engr. Naveed Khan BalochSociety Coordinator: Engr. Abdul Rehman Choudhry

b. Signals and Image Processing

Signal and image processing is an enabling field with diverse application areas. The society aims to play a vital role in preparing solutions locally and globally. Society Counselor: Dr. Hafiz Adnan Habib (Asso. Prof) Society Coordinators: Dr. Muhammad Haroon Yousaf, Dr. Muammad Majid

Online Course Management System

All the courses which are currently being taught in all the semesters are managed online. The purpose of this online management of courses is to provide access to the students to all the informative material regarding the subject anywhere all the time so that they can be updated.

URL: http://web.uettaxila.edu.pk/uet/computer/courses.htm

Academic Cell in the Department

An Academic Cell is also working in Computer and Software Engineering Departments. All student related activities: registration, attendance records, placement of students in different industries for internship, examination, student study trips etc. are managed by this cell. This cell also coordinates with onsite interview arrangements to facilitate different employers, Like AWC, PMO, PAEC and many other. Industrial liaison and industry-academia collaboration at university level is also on the way.

Girls Common Room

The facility of the common room is provided within the department for all the girls of the department with a seating capacity of 40. Wireless internet is also available in the girl's common room.

Courses Under Semester System
BSc Computer Engineering

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CP-101	Computing Fundamentals	2	1
EE-102	Basic Electrical Engineering	3	1
NS-103	Applied Physics	3	1
MA-104	Calculus & Analytical Geometry	3	0
HU-105	English Language Proficiency	3	0
	Total:	**14**	**3**
	Semester Total for Part-I & II	**17**	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CP-106	Digital Logic Design	3	1
CP-107	Computer Programming	3	1
EE-108	Circuit Analysis	3	1
MA-109	Linear Algebra & Differential Equations	3	0
HU-110	Islamic Studies	2	0
	Total	**14**	**3**
	Semester Total for part I & part II	**17**	
	Total for First Year	**34**	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CP-201	Computer Organization	3	0
CP-202	Data Structures & Algorithms	3	1
CP-203	Computer Applications in Engineering Design	2	1
EE-204	Electronic Circuits	3	1
MA-205	Complex Analysis and Transform Methods	3	0
	Total	**14**	**3**
	Semester Total for part I & part II	**17**	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CP-206	Object Oriented Programming	2	1
CP-207	Operating Systems	3	1
EE-208	Microprocessor: Architecture & Interfacing	3	1
EE-209	Signals & Systems	3	0
MA-210	Discrete Structures	3	0
	Total	**14**	**3**
	Semester Total for part I & part II	**17**	
	Total for Second Year	**34**	

5th Semester			
Course No.	**Course Title**	**Credit Hours**
		Part I	**Part II**
CP-301	Digitlal Signal Processing	3	1
CP-302	Computer Commuincation and Networks	3	1
CP-303	Microcomputer Systems	3	1
MA-304	Numerical Methods & Probiablity	3	0
HU-305	Buiness Commuincation & Report Writing	2	0
	Total	**14**	**3**
	Semester Total for part I & part II	**17**

6th Semester			
Course No.	**Course Title**	**Credit Hours**
		Part I	**Part II**
CP-306	Digital System Design	3	1
SE-307	Data Base Management Systems	3	1
HU-308	Pakistan Studies	2	0
CP-309	CEDE-I	3	1
CP-310	IDEE-I	3	0
	Total	**14**	**3**
	Semester Total for part I & part II	**17**
	Total for Third Year	**34**

7th Semester			
Course No.	**Course Title**	**Credit Hours**
		Part I	**Part II**
CP-401	Preliminary Project Studies	0	2
MS-402	Project Management	3	0
CP-403	CEDE-II	3	1
CP-404	CEDE-III	3	1
CP-405	IDEE-II	3	1
	Total	**12**	**5**
	Semester Total for part I & part II	**17**

8th Semester			
Course No.	**Course Title**	**Credit Hours**
		Part I	**Part II**
CP-406	Design Project	0	4
MS-407	Management Information System	3	0
HU-408	Entrepreneurship & Leadership	2	0
HU-409	Engineering Economics	2	0
HU-410	Professional Ethics	2	0
CP-411	IDEE-III	3	1
	Total	**12**	**5**
	Semester Total for part I & part II	**17**
	Total for Final Year	**34**
	Total Credit Hours for Four Years	**136**

Elective Courses for Computer Engineering

Computer Egineering Depth Elecives (CEDE)

Course Title	Credit Hours	
	Part I	Part II
Computer Graphics	3	1
Software Engineering	3	1
VLSI System Design	3	1
Control Engineering	3	1
Advance Topics in Computer Engineering	3	1

Inter-Disciplinary Engineering Electives (IDEE)

Course Title	Credit Hours	
	Part I	Part II
Artificial Intelligence	3	0
Neural Networks and Fuzzy Logic	3	0
Parallel & Distributed Computing	3	0
Network Security	3	0
Wireless Communication	3	0
Digital Image Processing	3	1
Digital Communication	3	1
Communication Systems	3	1
Applied Electronics	3	1
Systemsz Programming	3	1
Robotics	3	1
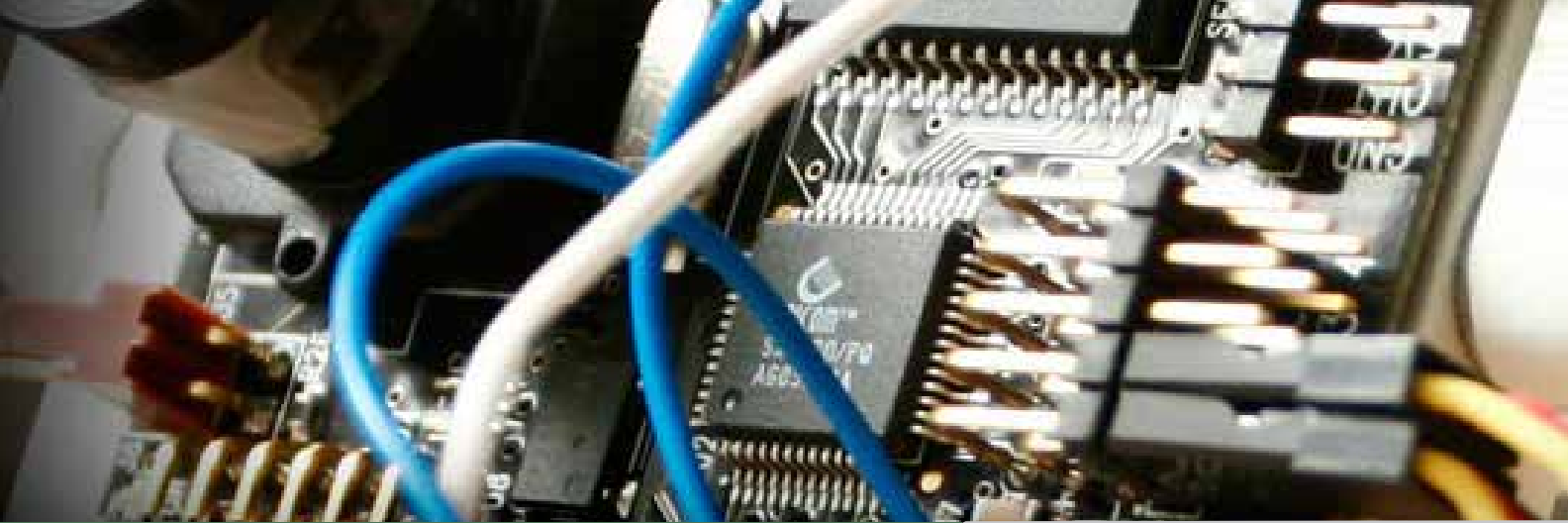
DEPARTMENT OF SOFTWARE ENGINEERING

Chairman
Dr. Muhammad Iram Baig

Associate Professor

Dr. Tabassam Nawaz
BSc Engg (Taxila)
MCS (BIIT), MSc Engg (Taxila), PhD (Taxila)

Assistant Professor

Engr. Raja Muhammad Asjad Saleem
BSc Engg (Hons) (Taxila)
MSc Engg(Taxila)

Mrs. Huma Ayub Vine
MCS (QAU) , MS (NUST)

Mr. Muhammad Nadeem Majeed
MCS (Hamdard University), MS (CASE)

Engr. Ali Javed
BSc Engg (Hons) (Taxila) 3rd postion overall
MSc Engg (Taxila) Gold Medalist

Engr. M. Fahad Khan
BSc Engg (Hons) (Taxila)
MSc Engg (Taxila) Gold Medalist

Dr. Mustansar Ali Ghazanfar
BSc Engg (Hons) Gold Medalist (Taxila)
MSc Engg (UK), PhD (UK)

Engr. Mubashir Ayub
BSc Engg (Hons) (Taxila)
MSc Engg (UK)

Engr. Saima Zareen
BSc Engg (Hons) (Taxila)
MSc Engg (NUST)

Engr. Wajahat Abbas
BSc Engg (Hons) (Taxila)
MSc Engg (Taxila) (On Higher Studies Abroad)

Mr. Muhammad Siraj Rathore
MCS (UAAR), MSc Engg (CASE) (On Higher Studies Abroad)

Engr. Fawad Riasat Raja
BSc Engg (Taxila)
MSc Engg(Taxila) (On Higher Studies Abroad)

Lecturer

Engr. Madiha Liaqat
BSc Engg (Hons) (Taxila)
MSc Engg (Taxila)

Engr. Wajeeha Batool
BSc Engg (Hons) (Taxila)
MSc Engg (Taxila)

Engr. Tasawer Khan
BSc Engg (Hons) (Taxila)
MSc Engg (UK)

Engr. Sehar Javed
BSc Engg (Hons) (Taxila)
MSc Engg (NUST)

Engr. Kanwal Yousaf
BSc Engg (Hons) (Taxila)
MSc Engg (Taxila)

Engr. Arta Iftikhar
BSc Engg (Hons) (Taxila)
MSc Engg (Taxila)

Engr. Asma Malik
BSc Engg (Hons) (Taxila)
MSc Engg (UK) (On Higher Studies abroad)

Lab Engineer

Engr. Nazia Bibi
BSc Engg (Hons) (Taxila)

Engr. Sidra Shafi
BSc Engg (Hons) (Taxila)

The Department

Software Engineering degree Program was started in 2002. Initially, it was setup in Electrical Engineering Department and classes were conducted for evening session only. In the mean time, the construction of separate building for department worth Rs. 40 million with funding from HEC (Higher Education Commission) was completed in year 2006. Building comprises seven class rooms, nine labs, one girl's common room, two examination halls and twenty offices. Department has laboratories with sufficient hardware and software facilities. Each lab is equipped with thirty PCs. The labs are networked and the department has wireless network coverage as well.

Software engineering department organizes different events to encourage student's participation and groom their technical as well as non technical skills. The events that have been arranged so far are; programming exhibition (Term projects exhibition in JAVA, C# etc), Database exhibitions, annual students day, seminars and workshops related to Software Engineering topics.

Program Objectives

Software Program Objectives:

Graduates of Software Engineering Program shall be able to:

a. Apply proper theoretical, technical, and practical knowledge of software requirements, analysis, design, implementation, verification and validation, and documentation.

b. Develop appropriate solutions to a given problem using software engineering approaches that integrate ethical, social, legal, and economic concerns.

c. Design, synthesize, and analyze, software systems of increasing size and complexity at various abstraction levels i.e. from the individual component to the entire system architecture.

d. An ability to define, assess, and apply software quality practices for appropriate application on software development projects in a variety of domain areas.

e. Be an effective member of a multi-disciplinary software-intensive product development team.

f. Able to communicate, to varied stakeholder audiences, technical concepts in a complete, concise, and correct manner in a format appropriate for the audience.

g. Engage in lifelong learning of software engineering theories and technologies through graduate education, participation in professional activities, or the acquisition of new technical proficiencies, or q managerial and leadership skills.

Laboratories

a.   Software Engineering Lab

The Software Engineering Laboratory provides general purpose computing facilities to the students of Software Engineering discipline. The lab is equipped with thirty computers with latest specifications and the state of the art software tools and applications. This lab is fulfilling the requirements of courses related to software technologies, computer networks and internet technologies.

b.   Computer Graphics Lab

The purpose of this lab is to provide students a facility to conduct experiments related to Computer Graphics and visual programming courses.

c.   DOT IT Lab

This lab was solely constructed for research and development in the field of Databases, Web Engineering, Artificial Intelligence and Data mining.

d.   Elementary Computer Lab

This lab is dedicated for introductory courses including basic programming and computing. The lab is equipped with latest equipment and softwares to facilitate students.

e.   Final Year Project Lab

This lab is used by the students of final year to work on their final year project; the lab is equipped with all the necessary facilities that help the students.

Placement Bureau & Industrial Liaison Office at Software Engineering Department

A placement bureau has been established by the department to facilitate the placement of students in the industry. The Bureau communicates with public and private sector organizations and broadcast opportunities among the students. Interview arrangements are also made to facilitate employers. Industrial liaison officer has been designated at departmental level who co-ordinates the process of internships for students and hence serves the purpose of industry-university linkage.

Societies

Societies are developed in order to bring out potential qualities of students and enhance their skills. The major objective of these societies is to develop strong interaction among the students and faculty in their corresponding field of interests.

a. Soft Desk

Domain of software development is touching new heights for the past few years and software technologies are rapidly being developed and become obsure within months. There is every need to keep an eye on changing trends in the field of Software Engineering. For the above stated purpose a society has been established in the Department of Software engineering named **SOFTDESK**. The major achievement of **SOFTDESK** is to organize UET Taxila Olympiad at National leve where universites from aal over Pakistan participates every year.
Society Advisor: Ali Javed

b. Society for Extra-Mural Activities

It has been the tradition of Software Department to arrange the Annual Student Day since 2007. Society provides the students a platform to exhibit their co-curricular and extracurricular talent. It organizes competations of different categories like drama, signing, gaming and technical quizzes extra.
Society Advisor: Engr. Fahad Khan

c. Mobile Application Development wing

This society arranges seminars, workshops, trainings in the area of Mobile Application Development (MAD). Society Advisor: Engr. Ali Javed, Mr. Nadeem Majeed

d. Recreational Club

This society arranges trips to different parts of country. Society Advisor: Engr. Mubashir Ayub

Courses Under Semester System
BSc Software Engineering

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
SE-101	Introduction to Computing	3	1
SE-102	Programming Fundamentals	3	1
HU-103	Pakistan Studies	2	0
HU-104	Functional English	3	0
MA-105	Clculus and Analytical Geometry	3	0
	Total:	**14**	**2**
	Semester Total for Part-I & II	**16**	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
SE-106	Data Structures & Algorithm	3	1
EE-107	Digital Logical Design	3	1
NS-108	Applied Physics	3	1
ME-109	Discrete Structures	3	0
HU-110	Communication Skills	3	0
	Total	**15**	**3**
	Semester Total for Part-I & II	**18**	
	Total for 1st Year	**34**	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
SE-201	Object Oriented Programming	3	1
SE-202	Database Management Systems	3	1
SE-203	Introduction to Software Engineering	3	0
HU-204	Islamic Studies	2	0
MA-205	Liner Algebra and Differential Equations	3	0
	Total	**14**	**2**
	Semester Total for Part-I & II	**16**	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
SE-206	Software Requirements Engineering	2	1
SE-207	Operating Systems	3	1
SE-208	Software Construction	2	1
SE-209	Formal Methods in Software Engineering	3	0
MA-210	Numerical and Symbolic Coumpting	3	0
	Total	**13**	**3**
	Semester Total for Part-I & II	**16**	
	Total for 2nd Year	**32**	

5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
SE-301	Software Quality Engineering	2	1
SE-302	Software Design and Architecture	3	1
SE-303	Internet Application Development	2	1
SE-304	Elective General*	3	0
HU-305	Technical Report Writting	3	0
	Total	**13**	**3**
	Semester Total for Part-I & II	**16**	

6th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
SE-306	Digital Image Processing	3	1
SE-307	Computer Communication and Networks	3	1
SE-308	Elective General*	3	1
SE-309	Artificial Intelligence	3	0
SE-310	Domain Specific Elective*	3	0
	Total	**15**	**3**
	Semester Total for Part-I & II	**18**	
	Total for 3rd Year	**34**	

7th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
SE-401	Software Testing	2	1
SE-402	Preliminary of Project Studies	0	2
SE-403	Elective General*	3	1
SE-404	Domain Specific Elective *	3	0
HU-405	Engineering Economics	3	0
MG-406	Marketing Management	3	0
	Total	**14**	**4**
	Semester Total for Part-I & II	**18**	

Elective Courses for Software Engineering

Domain Specific Elective Courses

Course No.	Course Title
	System for Small & Mobile Platforms
	Net-Centric Systems
	Information Systems and Data Processing
	Agent Based Systems
	Enterprise Security Architecture
	Enterprise System Engineering
	Fault Tolerant and Survivable Systems
	Financial and E-commerce Systems
	Multimedia, Game and Entertainment Systems
	Embedded and Real Time Systems
	Visual Programming

Elective Genreral Courses

Course No.	Course Title
	Data Authentication and Security
	Digital Security & Encryetion
	Analysis of Algorithms
	Advance Operating Systems
	Data Warehousing & Data Mining
	Software Metrics
	Advanced Programming Techniques
	Web Technologies
	System Incident Handling
	RDBMS Using Oracle
	Distributed Computing
	Real Time Systems
	Computer Vision
	Wireless Networks

Elective Genreral Courses

Course No.	Course Title
	Advance Software Technologies
	Theory of Intelligent Systems
	Mobile Computing
	Open Source Systems
	Computer Forensic
	Network Security
	Advanced JAVA with Emphasis on Internet Applications
	Multimedia Systems
	Enterprise System Engineering
	Network Programing
	Design Patterns
	Artificial Neural Networks
	Machine Learing
	Business Process Automation

DEPARTMENT OF
TELECOMMUNICATION ENGINEERING

Chairman
Prof. Dr. Adeel Akram

Assistant Professors

Yasar Amin Bhatti
BSc Engg (Taxila)
MSc Engg (KTH, Sweden), MBA, (UTU, Finland)
PhD (KTH, Sweden)

Ghulam Shabbir
BSc (Taxila), MSc Engg (UMT LHR),
MS Telecom Management (INT France)

Rashid Saleem
BSc Engg (GIKI)
MSc Engg (Taxila), PhD (Univ. of Manchester, UK)

Muhammad Jameel
BSc Engg (Taxila)
MSc Engg (Taxila)

Ing. Rameez Asif
BSc Engg (Taxila), MSc (Taxila)
MSc NANO & Microelectronic(Italy), PhD (Germany)

Farzana Kulsoom
BSc (Taxila). MSc Engg (Taxila)

Farzana Arshad
BSc (Taxila)
MSc Engg (Taxila)

Syeda Iffat Naqvi
BSc Engg (Taxila), MSc Engg (Taxila)

Humayun Shahid
BSc (IST, IBA) , MSc Engg (NTU, Singapore)

Farhan Qamar
BSc (Taxila) MSc (Taxila)

Mudassar Ali
BSc (Taxila) MSc (Taxila)

Ali Riaz
BSc Engg (IOWA State, USA)
MSc Engg (IOWA State, USA)

Lecturers

Faisal Ali
BSc Engg (COMSATS, IBD)
MSc Engg (UK)

Zeshan Sarwar
BSc Engg (Taxila)
MSc Engg (Iqra Uni IBA)

Lubna Nadeem
BSc Engg (Taxila)
MSc Engg (Taxila)

Mian Shahzad Iqbal
BSc Engg (COMSATS)
MSc Engg (Taxila) (on higher studies abroad)

Salman Azam
BSc Engg (on higher studies abroad)

Usman Masood
BSc Engg (on higher studies abroad)

Lab Engineers

Annum Mushtaq
BSc Telecom Engg (Taxila)

Rizwana Shahzadi
BSc Telecom Engg (Taxila)

Abida Parveen
BSc Engg
MSc Engg (CVOMSAT)

The Department

Established in 2007, Department of ecommunication is concerned with the theory, development and application of telecommunication systems, their design and integration. The objective of the program is to provide students with a strong theoretical and practical background in the field of telecommunication, along with the engineering analysis, design and implementation skills necessary to work between the two. The program involves study of complete telecommunication systems, technologies running on it and how these technologies can be developed. After successful completion of the Telecommunication Engineering degree, the graduates will gain a broad range of skills in the area of telecommunication with strong analytical and critical abilities. These graduates are ready to embark upon an exciting career in a diverse range of telecommunication technology-rich companies and industries. The department offers 4 years degree program of BSc in Telecommunication Engineering.

Program Objectives

With the immense increase in the demand of telecommunication engineers, growth of global telecommunication industry, deregulation, privatization and rapid technological changes, UET Taxila established Telecommunication Engineering Department under the Faculty of Telecommunication and Information Engineering.

The department aims in imparting high quality education to the students with hands on training on the latest and emerging telecommunication technologies. For their engineers to measure up to international standards, the Telecommunication Engineering Department is inducting the cutting edge technologies in the form of equipment and expertise in the form of faculty and professional training experts. This will help in achieving the University goals to produce engineers that are capable to take up any challenge in the industry and are able to perform their tasks efficiently with high precision.

The department offers undergraduate programs with the following objectives:

- Allow R&D and Professional Trainings in relevant technologies and areas including Information technology, Optical Fiber Systems, Digital Switching, Digital Subscriber Loop, Digital Radio systems, ISDN and Broadband Networks, Digital and Broadband Switching, Voice over IP, as well as Mobile and Wireless Communication Systems.

- Provide a pool of expertise for defining optimal technology paths for the evolution of telecommunication networks and services these experts will be able to design the future telecommunication networks in our country. They also provide consultancy services to the industry.
- To provide much needed technical manpower that are well versed with the myriad of new telecommunication products being floated in the world market today.

Program Outcomes

Upon successful completion of the Telecom Engineering program, graduate will:

- Understand and be able to apply principles of Telecom Engineering practice and process subject to realistic constraints.

- be able to analyze, document and track system requirements.

- be able to design, implement and maintain telecom systems.

- be able to verify and validate telecom systems.

- have an awareness of current industry standards and practices.

- be able to work in one or more application domains.

- understand and apply principles of team process and project management.

- be capable of independent learning.

- understand professional responsibility and the application of ethical principles.

Laboratories

a. Electronic System and measurements Lab

This lab is basically developed for the experiment of subjects like basic electronic, digital logic design. circut analysis and amplifiers and oscillators, ect. This lab is equppied with latest equipment and all required software packeges used for simulation purposes.

b. Microprocessor and Computer Architecture Lab

Experiments for the subjects like Microprocessor systems, Microcontroller and Embedded systems, are conducted in this laboratory, The lab is equipped with latest equipment and all required software used for simulation purposes.

c. Antenna and RF Lab

This lab is bascillay developed for the experiments of subjects like antenna and Wave Propagation and Antenna, RF, Microwave Engineering, moblie and wireless communication and saltellite communication. The lab is equipped with latest equipment and all required software packages used for simulation purposes.

d. Computing Labs

The purposes of this lab is to conduct the practical work for various subjects like introduction to computer , object oriented programming and numerical medthos etc. This lab is equipped with all the necessary hardware and software facilities.

e. Telecommunication Engineering Lab

The purpose of this lab is to conduct the simulation work for various subjects like computer communication network , Digital Communication, Antenna and wave propagation , etc. This lab is equipped with all the necessary hardwar and software facilities.

f. Mobile Application Development Lab

Developed incollaboration with microsoft , a state of the art laboratroy for developing mobile application for windows mobile -OS , iOS , Blackberry , Tizen, andriod and firefox mobile OS plateform has recently being inaugurated at the department of Telocommunication Engineering.

g. Final Year Project Lab

 This lab is developed for final year students for the purpose of development and completion of their final year degree projects.

Courses Under Semester System
BSc Telecommunication Engineering

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
TE -101	Communication Skills	3	0
TE -102	Introduction to Computing	2	1
TE -103	Calculus & Analytical Geometry	3	0
TE -104	Applied Physics	3	1
TE -105	Linear Algebra	3	0
	Total:	**14**	**2**
	Semester Total for Part-I & II	**16**	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
TE-106	Critical Reading & Writing	3	0
TE-107	Object Oriented Programming	2	1
TE-108	Islamic Studies	2	0
TE-109	Introduction to Telecommunications	3	0
TE-110	Multivariable Calculus	3	0
TE-111	Pakistan Studies	2	0
	Total	**15**	**1**
	Semester Total for Part-I & II	**16**	
	Total for 1st Year	**32**	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
TE-201	Technical Report Writing	3	0
	ID Elective I	2	1
TE-202	Differential Equations	3	0
TE-203	Circuit Analysis	3	1
TE-204	Computer Aided Engineering Drawing	0	1
TE-205	Basic Electronics	3	1
	Total	**14**	**4**
	Semester Total for Part-I & II	**18**	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
TE-206	Computer Communication & Networks	3	1
TE-207	Amplifiers & Oscillators	3	1
TE-208	Signals & Systems	3	0
TE-209	Digital Logic Design	3	1
TE-210	Probability Methods in Engineering	3	0
	Total	**15**	**3**
	Semester Total for Part-I & II	**18**	
	Total for 2nd Year	**36**	

5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
TE-301	Electromagnetic Theory	3	0
TE-302	Control Systems	3	1
TE-303	Communication Systems	3	1
TE-304	Digital Signal Processing	3	1
TE-305	Engineering Economics	3	0
	Total	**15**	**3**
	Semester Total for Part-I & II	**18**	

6th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
TE-306	Digital Communication	3	1
TE-307	Wave Propagation & Antennas	3	1
TE-308	Wireless & Mobile Communication	3	0
TE-309	Microprocessors & Interfacing Techniques	3	1
TE-310	Professional Practices	3	0
	Total	**15**	**3**
	Semester Total for Part-I & II	**18**	
	Total for 3rd Year	**36**	

7th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
TE-401	Engineering Management	3	0
TE-402	RF & Microwave Engineering	3	1
	ID Elective-I	2	1
	MBC Depth Elective-I	3	1
	Final Year Design Project-I	0	3
	Total	**11**	**6**
	Semester Total for Part-I & II	**17**	

8th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
TE-403	Transmission & Switching Systems	3	1
	MBC Depth Elective-I	3	1
	Social Sciences Elective-II	3	0
TE-404	Final Year Design Project-II	0	3
	Total	**9**	**5**
	Semester Total for Part-I & II	**14**	
	Total for Final Year	**31**	
	Grand Total for Four Years	**135**	

Elective Courses for Telecommunication Engineering

Major Based Core (MBC) Depth Electives

Course No.	Course Title
TE-405	Multimedia System
TE-405	Digital Electronics
TE-407	Digital Image Processing
TE-408	Satellite Communication
TE-409	Optical Fiber Communications
TE-410	Telecom Policies and Protocols
TE-411	Telecom Traffic Engineering
TE-412	Spread Spectrum Communications
TE-413	Speech Processing
TE-414	Next Generation Networks
TE-415	Network Security
TE-416	Broadband Communication Networks
TE-417	Radar System Engineering
TE-418	Telecommunication Management Networks
TE-419	Compression Techniques
TE-420	Telecommunication Systems

IDE Electives

Course No.	Course Title
TE-211	Numerical Methods in Engineering
TE-212	Operating Systems
TE-213	Data Structure and Algorithms
TE-214	Database Management systems
TE-420	Embedded Systems
TE-421	Artificial Intelligence
TE-422	Reliability in Telecommunication Systems
TE-423	VLSI Systems

Social Sciences

Course No.	Course Title
TE-424	Organizational Behavior
TE-425	Psychology
TE-426	Public Policy
TE-427	Sociology
TE-428	Political Science
TE-429	Pakistani Culture and Society

DEPARTMENT OF COMPUTER SCIENCE

Chairman

Prof. Dr. Adeel Akram
PhD(Taxila)

Assistant Professor

Dr. Khurram Shehzad
PhD(UK)

Dr. Farrukh Zeeshan
PhD(Austria)

Syed Aun Irtaza
MS(CS, FAST)

Lecturer

Rao Wakeel Ahmad
MS (IT,NUST)

Abid Rauf
MS (IS, SICHUAN Uni. China)

Note: Faculty of Computer Engineering, Software Engineering, and Telecommunication engineering will be considered as shared faculty to teach the courses which are common in the respected domains.

THE DEPARTMENT

The Computer Science Department is working under the Faculty of Telecommunication and Information Engineering. Currently the second floor of the Central Library building is allocated for the Computer Science Department. The ultimate aim of the Computer Science degree programs is to produce computer scientists, and IT professionals who can strengthen the backbone of a rapidly growing computer industry. Department is equipped with fully established Computer Labs, Video Conference Room and state of the art class rooms.

OBJECTIVES OF COMPUTER SCIENCE DEPARTMENT

Computer Science & IT is distinct from other computing disciplines such as Computer Engineering and Software Engineering. It enshrines a more humanistic perspective of Computer Science and re volves around a deeper study of critical information technology topics, including:

1. System configuration and adminis   tration
2. Computer and network hardware in stallation and maintenance
3. Use and management of databases
4. Development and modelling
5. Creation and management of web   sites and web-based systems
6. E-governance and e-commerce
7. Digital voice and video communica-   tions
8. Computer and information security etc

Today, organizations operate and compete in the networked global economy. Advances in information and telecommunication technologies have created knowledge-centered organizations, which in turn

81

develop high value-added products and services. In such an environment, educating competent knowledge workers and future corporate leaders is a priority for Computer Science Department at UET Taxila.

BS in COMPUTER SCIENCE

Computers are playing a major role in our daily lives. It has changed the way we interact with each other. Computers have not only enhanced our productivity but also made possible automation of previously manual tasks. There is a continuing need for individuals with a bachelor's degree in Computer Science to fulfil the demands of IT (National as well as International) market. The curriculum for our computer science graduate is structured to provide a balanced mixture of learning experiences to make the graduate capable of sound professional decisions. Our graduate will be Computer Scientist, IT Professional, and Researcher.

DEMAND OF COMPUTER SCIENCE GRADUATE IN MARKET

Computer Science and Information Technology refer to meet the technology needs of Business, Government, Healthcare, Schools, Colleges & Universities, and Other kinds of organizations. And the way the usage of computer is increasing in every walk of life one can easily guess that in the future there will be a great demand for computer experts and lucrative career options will be available in various organizations. Computer Science profession is so broad that it has a variety of career options from programming to designing, and sales to research and development. With a degree in computer science, you can opt to join the

variety of fields including:-

1)   Computer Programming
2)   System Analyst
3)   Graphic Designer
4)   Network Administrator
5)   Web and Games Programmer's
6)   Mobile Application Developers, etc

COURSES OF STUDY

In all matters regarding courses of study and others, the department strictly follows the policies and guidelines of Higher Education Commission. The following are relevant details.

Courses Under Semester System
BS Computer Science

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS -101	Introduction to Computing	3	1
CS -102	Programming Fundamentals	3	1
MT-103	Calculus and analytical geometry	3	0
EG -104	English composition and Comprehensions	3	0
PK -105	Islamic and Pak Studies	3	0
	Total:	**15**	**2**
		17	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-106	Object Oriented Programming	3	1
CS-107	Discrete Structures	3	0
MT-108	Multivariable Calculus	3	0
MT-109	Probability and Statistics	3	0
EG-110	Technical and Business Writing	3	0
	Total	**15**	**1**
		16	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-201	Data Structures and Algorithms	3	1
CS-202	Digital Logic and Computer Architecture	2	1
PH-203	Physics	3	0
EG-204	Communication Skills	3	0
MT-205	Liner Algebra	3	0
	Total	**14**	**2**
		16	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-206	Operating Systems	2	1
CS-207	Database Systems	3	1
CS-208	Web Design and Development	3	1
MT-209	Concrete Mathematics	3	0
SS-210	Economics	3	0
	Total	**14**	**3**
		17	

5th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
CS-301	Software Engineering	3	0
CS-302	Computer Architecture and Assembly Language	3	1
CS-303	Theory of Automata	3	0
CS-304	Computer Communications and Networks	3	0
MG-305	Principles of Marketing	3	0
CS-306	Geographical Information Systems	3	1
	Total	**18**	**2**
		20	

6th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
CS-307	Design and Analysis of Algorithms	3	0
CS-308	Data Warehousing	2	1
MT-309	Numerical Methods	3	1
CS-310	Compiler Construction	3	0
MG-311	Human Resource Management	**3**	**0**
CS-312	Software Design Patterns	**3**	**0**
	Total	**17**	**2**
		19	

7th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
CS-501	Final Project - I	3	0
CS-502	Visual Programming	3	1
CS-503	Mobile Application Development	3	1
CS-504	Artificial Intelligence	3	0
CS-505	Computer Graphics	**3**	**1**
	Total	**15**	**3**
		18	

8th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
CS-506	Final Project - II	3	0
CS-507	Computer Vision	3	1
SS-508	Professional Practices	3	0
	Total	**9**	**1**
		10	

CS = Computing — Core Courses
EG, SS, PK, MG, PH = Computing — General Education
MT = Computing — Supporting Sciences

Note: The elective/supporting courses offered by the department in a semester can be changed depending on the availability of the teachers and related facilities and will be notified one week before the start of the semester.

FACULTY OF BASIC SCIENCES AND HUMANITIES **6**

Dean

Prof. Dr. Mukhtar Hussain Sahir

DEPARTMENT OF BASIC SCIENCES AND HUMANITIES

Chairman

Mahmood Akhtar

Assistant Professors

Nasir Siddiqui
PhD. Mathematics (QAU, Islamabad)

Muhammad Zubair
PhD, Physics (Harbin Engg. University, China)

Muhammad Sultan
PhD. Chemistry (QAU, Islamabad)

Malik Sajjad Mehmood
PhD. Physics, (PIEAS, Islamabad)

Muhammad Muddassar
M. Phil Mathematics (UET, Lahore)

Safeera Batool
M. Phil Mathematics (QAU, Islamabad)

Zaffer Elahi
M. Phil Mathematics (UET, Lahore)

Sumaira Nawaz
M. Phil. Islamic Studies (AIOU, Islamabad)

Naila Maqsood
M. Phil. Pakistan Studies (QAU, Islamabad)

Lecturer

Azeem Shahzad
PhD. Mathematics (QAU, Islamabad)

Kulsoom Rahim
M.Phil Physics (QAU, Islamabad)

Muhammad Tariq
M.Phil Physics (QAU, Islamabad)

Andleeb Abbasi
M.Phil Mathematics (QAU, Islamabad)

Sumaira Rashid
M.Phil Mathematics (QAU, Islamabad)

Syed Zulqarnain Haider
M.Phil Mathematics (QAU, Islamabad)

Syed Sabyel Haider
M.Phil Mathematics (QAU, Islamabad)

Haleema Sadia
M.Phil Mathematics (QAU, Islamabad)

Jawad Ahmad
M.Phil Mathematics (QAU, Islamabad)

Syed Muhammad Abdul Rehman Shah
MA Islamiyat (UOS)
MSc Economics (QAU, Islamabad)
MS Islamics Banking and Finance, (IIUI)

Fareeha Zaheer
M.A English (NUML, Islamabad)

Fatima-Tuz-Zehra
M.A English (PU, Lahore)

Mariam Batool
M.A English (PU, Lahore)

Tehmina Farrukh
M.A English (NUML, Islamabad)

The Department

The department was established in 1975 as a part of the University College of Engineering, Taxila and is as old as the institution itself. With the inception as an independent Univesity in October, 1993, the department has been placed under the Faculty of Basic Sciences and Humanities.

The department offers courses in Mathematics, Physics, Chemistry, Economics, Statistics, Islamic Studies, Pakistan Studies, Ethics and English. Mathematics is an essential pre-requisite and pivotal element for various fields of engineering and other sciences. In fact it plays a key-role for the comprehension of any subject of engineering and physical sciences. A practical engineer needs an adequate knowledge of modern mathematics to successfully cope with the complex real world problems. Therefore, all the degree programs offered by different engineering departments of the university have courses in applied mathematics, statistics and numerical analysis.

The courses offered in the subjects of Applied Physics and Chemistry are very essential for forming the base of the engineering subjects. Also the essential practical work in these subjects is carried out as a support to the immense forthcoming engineering practical work. The curricula of Physics and Chemistry including the recent development are constituted so as to meet the pre-requisites of the engineering subjects. The contents of the courses are regularly revised so as to keep abreast of the fast progress occurring in the various engineering faculties.

Appropriate courses in Islamic Studies have also been constituted to be taught to the Muslim students of all engineering faculties. The purpose is to englighten the soul and mind of the students and enable them to get appraisal of tenets of Islam so that they may perform their duties with integrity and diligence when the future responsibilities of serving the nation will be bestowed upon them.

In 1982 the Government of Pakistan also emphasized the need to teach the subject of Pakistan Studies to all students at degree level. The main purpose of this subject is to make the students to be acquainted with ideology of Pakistan. The Non-Muslims students are offered courses in the subject of Ethics as well.

It is an established fact that English is an international language, so proficiency in English language is required to compete with the modern world. Different courses are offered in different departments to enhance student's English language skills for professional purposes. Effective communication skills include everything from facial expression to visual literacy, from anxiety management to verbal skills, from body language to document presentation. Students can become more effective communicators by cultivating competency through these courses. These courses include Technical Report Writing as well which enhances students to write well in professional life.

In future language lab will be established in the department so that students could practice listening and speaking skills. This project of language lab will be helpful to provide students an environment where they can practice language. Along with language lab, the department is planning to start spoken english courses in summers, especially IELTS and TOFEL for University students who want to go abroad for higher studies.

Research Extension and Advisory Services

The faculty members are actively engaged in research work and have produced a number of research publications, which have been published in scientific journals of repute and presented in national and international conferences and seminars. The current research fields of interest in the subject of mathematics are: mathematics in manufacturing, algebraic optimization, numerical analysis, integral equations, linear programming, queuing theory and quantum mechanics.

The research field interests in the subject of Physics are; Safety and Reliability of Nuclear Industry, Nano Physics, Study Material Properties with X-ray Diffractrometer (XRD), Optical Spectrometer and LCR Meter.

The research in the subject of Islamic Studies is being carried out in the field of "Seerat-un-Nabi and Political System of Islam". Islamic Banking & Finance and Interest Free Islamic Economic System.
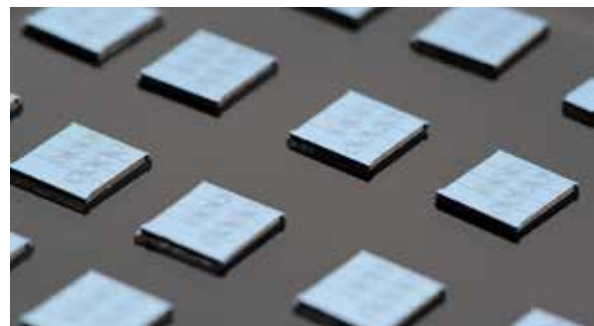
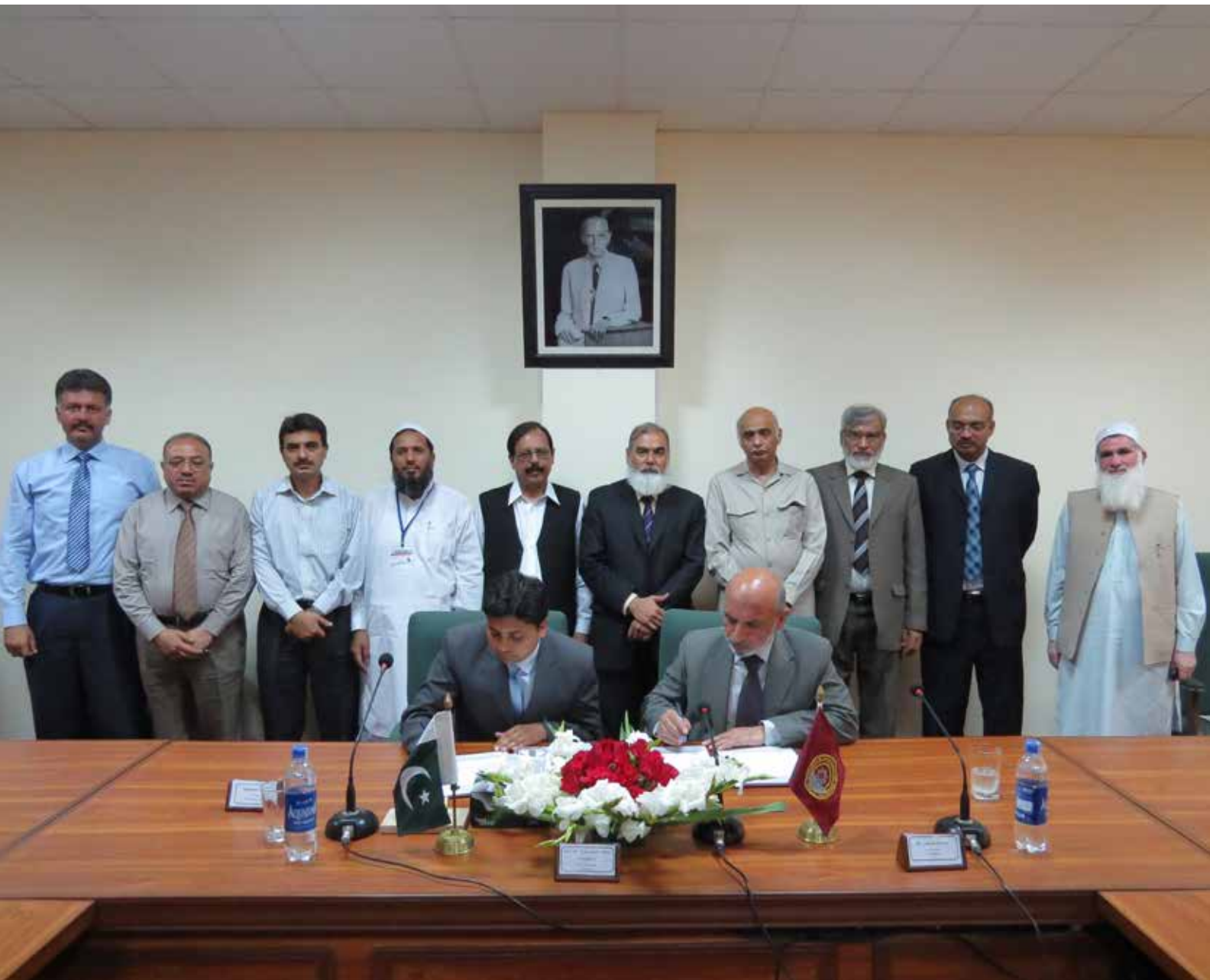## Postgraduate Studies and Research:

The Department started its Postgraduate Program in Applied Physics w.e.f February, 2014 and is going to start Postgraduate Program in Mathematics w.e.f August, 2014. Currently 15 students are enrolled in Applied Physics out of which two are gold medalist from their previous institution. After completing the course work students will have to conduct research work in the following fields:

- Renewable Energy
- Material Sciences & Engineering
- Laser & Optics
- Simulation and modeling

While the Postgraduate students of Mathematics will conduct their research work in the following fields:

- Fluid Mechanics
- Differential Equations
- Heat Transfer
- Group Theory
- Mathematical Analysis

To facilitate the Postgraduate students of UET Taxila in their research, the department has recently initiated and signed a research agreement with National Institute of Laser and Optoronics (NILOP) on April 30, 2014.

SERVICES AND COMMON FACILITIES

MAIN LIBRARY

The Central Library of the University plays a vital role in dissemination of knowledge, teaching, research, and extension services. It has a seating capacity for about 400 readers at its different halls, which provide congenial conditions for study. The library remains open from 8:00 am to 8:00 pm on all working days with usual break. The Library is stocked with encyclopedias, dictionaries, handbooks, standard specifications, yearbooks, almanacs, abstracts, indexes and a big reference collection of text and general technical books.

Stocks and Services

The Library has 64,739 volumes of books and scattered issues of scientific and technical serials on diverse fields. Besides engineering subjects considerable reading material on humanities, social sciences and Islamic Studies is available. The members can borrow books and other materials, (except serials, reference or reserved books) for specific periods. They can also reserve materials, which are out in circulation. For this, reservation cards are to be handed over at the circulation counter.

1.Reference Sections

(a) Reference Books.

It is located at the ground floor near the check post. This section is populated with large number of text books,encyclopedias, dictionaries, world bodies publications, annual reports and a large quantity of reverence books.

(b) Thesis/Dissertation

It is located at the end of ground floor. This section is comprises of more than five thousand reserch thesis/dissertation of UET students and scholars.

(c) Periobicals/Journals

At the right side of main entrance this sectionis populated with more than 50 scientific and research journals acquired by subscriptions, ehange and complimentary in addition with many magazines of general iterest.

(d) Scientific Journals
Following is the list of scientific journals being subscribed for the faculty and research scholars to cater their needs.
* ACI Structural, USA, ACI

* European Journal of Industrial Engineering, Inderscience Enterprises Ltd. UK.
* Journal of Applied Composite Materials Springer
* Journal of Environmental Engineering by ASCE (American Society of Civil Engineers)
* International Journal of Environmental Engineering Inderscience Enterprises Ltd. UK.
* SPIE journal of Electronic Imaging. SPIE, IS&T
* Journal of Fluid Mechanics Cambridge university press
* Wireless Communication IEEE transactions on Wireless Communications, IEEE Communication Society
* Antenna IEEE Transactions Antenna and propagations, IEEE Antenna and propagation Society Satellite Communications IEEE Journals on Selected Areas in Communications.

(e) Knowledge House

Knowledge house equipped with 100 Personal Computers with free access to internet, Digital Library and e-brary to supplement the information needs of students & research scholars of this University. Service of scanning and soft copying is also available here.

(f) Online Public Access Catalogs (OPACs)

Libaray catalog is accessible through internet from everywhere. Library has facilitiate its users by placing 6 latest PCs near to the Periodical Section and knowledge House which are dedicated only for OPACs and users may search / brows the library catalog using them.

(2)   BOOK BANK

The Library houses a Book Bank, which lends books to all undergraduate students for a whole semester on a nominal rent. Books are to be loaned for current semester only. Books are the property of the library and are to be returned at the end of semester irrespective of their date of issue.

(3)   CIRCULATION SECTION

Circulation is one of the key services of our library. It provides lending services and facilities for returnof loaned items. Renewal of materials and payment of fines are also handled at the circulation desk.

LIBRARY SERVICES

(a) Reference Service

At reight side of the main entrance infront of Periodical Section Reference Services Section is ready to answar tha user 's quires. It helps them in suing library and library materials. Staff deputed at the desk helps the users in locating their required materials from shelves.

(b) Books Lending Service

Library users can barrow books from both sections i.e Library Circulation and Book Bank as per library rules.

89

DIGITAL LIBRARY

To meet the information requirements of students and researchers of UET Taxila, the provision of quality scholarly information based electronic delivery through Pakistan Educational Research Network (PERN) is available in the Library. HEC has given the online access of journals and research papers to UET Taxila. Access to all these resources is free of cost from the UET Taxila intranet for students and researchers of UET Taxila.

Objectives

• To provide students/researchers in the university and eligible R&D organization with access to high quality journals, academic databases and articles across the widest range of disciplines.

• To address the specific information needs of the sector with the delivery of content relevant to national development objectives.

• To support the delivery of information and effective use of Information and Communication Technologies (ICTs) with extensive training for users with the library university and research community in Pakistan.

• To work with international organizations to enhance the scope of available content and implement revolutionary technologies for the delivery of content.

• To provide increased dissemination opportunities and promote the use and visibility of locally produced research information.

CURRENTLY AVAILABLE RESOURCES

American Association of Physics Teachers

Two AAPT publications provide up to date physics knowledge, at a level comprehensible for many users. AAPT publications assist in the learning of new and traditional teaching methodologies and the use of modern technology in Physics.

American Institute of Physics

It provides access to the full-collection of highly-rated of 11 Journals and conference proceedings Covers developments in Physics, Industrial Applications (Applied Physics), and advances in Scientific Computing.

American Physical Society

APS provides access to 9 prestigious research publications Includes the five-specialist Physical Review Publications, and the PROLA archive.

American Society of Civil Engineering

The ASCE Research Library provides access to more than 18,500 full-text papers from ASCE Journals and Proceedings.

American Society of Mechanical Engineering

ASME provides online access to 19 highly rated journals. Content related to the art, science and practice of Mechanical and Multidisciplinary Engineering and Allied Sciences.

Association of Computing Machinery

The ACM contains full-text from 28 ACM Journals and Transactions, 10 ACM Magazines, over 40 ACM Special Interest Newsletters, 15 non-ACM journal and publications and over 100 annual conference proceedings. Content strengths include all areas of Information Technology, with full archival content for all ACM publications.

EBRARY

EBRARY offers a wide variety of multidisciplinary content. It acquires large number of titles from leading academic publishers.

Subject Collection

· Computers and Information Technology
· Engineering and Technology
· Life & Physical Sciences

Elsevier (Science Direct)

Science Direct is the world's leading electronic collection of scientific journals. It is renowned for the high-quality of its content in all branches of science, technology and medicine.

Subscribed Subject Areas

- Energy
- Engineering
- Computer Science
- Materials Science

ESDU - Engineering Solutions for Academia

ESDU collection is based on industry standard tools and software as part of teaching and research projects. ESDU provide validated design guides, introductions, methods, data and software used in Industry and suitable for simple, rapid inclusion in these engineering programs

- Aerospace Engineering
- Civil Engineering
- Chemical Engineering
- Material Science
- Mechanical Engineering
- Process Engineering
- Structural Engineering

Institute of Electrical & Electronics Engineers (Ieee)

It provides access to almost a third of the world's current Electrical Engineering and Computer Science literature. IEL provides full-text access to 132 IEEE and 45 IEE journals, magazines, transactions and conference proceedings as well as active IEEE standards.

Journal of the Acoustical Society of America (Jasa)

Since 1929 the Journal of the Acoustical Society of America has been the leading source of theoretical and experimental research results in the broad interdisciplinary subject of sound. The Journal serves physical scientists, life scientists, engineers, psychologists, physiologists, architects, musicians, and speech communication specialists.

Optical Society of America

Access to 8 peer-reviewed journals that set the publications standard for advanced optics research within each major sector of the field. OSA journals cover the full spectrum of optics research, including the fields of Physics, Materials Research, Atmospheric Studies, Visual Psychology, Biomedical Optics, Physiology, and Ophthalmology, as well as Mechanical, Computer, Electrical and Optical Engineering.

Departmental Libraries

Following departmental libraies have been established

- Civil Departmental Library
- Mechanical Departmental Library
- Telecommunation Departmental Library
- Industrial Departmental Library
- Computer Departmental Library

Project Muse

Project MUSE provides access to 430 full-text journals from 108 publishers in humanities and social science. MUSE pricing meets library needs around the world.

Science Online

It provides access to the full text of the prestigious Science publication. It allows users to search within Science and across a multitude of scientific journals. It also provided to selected public-sector universities in Pakistan on the basis of identified research requirements.

Springerlink

SpringerLink provides access to 503 full-text Springer-Verlag Journals and 738 full-text journals formerly published by Kluwer Academic Publishing. One of the world's leading information services for Science, Technical and Medical journals.

Taylor & Francis Journals

Taylor & Francis have grown rapidly over the last two decades to become a leading international academic publisher, more than 1000 journal titles in a full range of disciplines.

Wiley-Blackwell Journals

Since the Blackwell-Synergy merger with Wiley-Interscience, all the journals available to HEC consortium are now available through Wiley-Interscience, online database containing over 1,234 journals in science, technology, medicine, humanities and social sciences.

Video Conferencing Facility

Video conferencing facility in Information Technology Centre is available in accreditation with HEC. This facility is used to bring people at different sites together for a meeting. This can be as simple as a conversation between two people in private offices (point-to-point) or involve several sites (multi-point) with more than one person in Videoconferencing Hall at different sites. Besides the audio and visual transmission of meeting activities, videoconferencing can be used to share documents, computer-displayed information, and whiteboards.

Director Networks

Prof. Dr. Adeel Akram

Web Manager

Syed Muhammad Adnan

Mission

NARC Research Facilities

Network Administration and Research Center (NARC) was founded to provide better support and services to the University. NARC is an outcome of University Computerization and Network Enhancement Program (UCNEP) project. Under UCNEP project, state of the art equipment was procured and latest technology was introduced to enhance the quality of communication infrastructure, existing Lab facilities and processes of the University.

NARC is responsible for design and development of networking infrastructure within University campus and sub campuses. It also provides 24 hour internet facilities for the university. Wireless hotspots are available in campus of the of the university to use internet and Intranet services for students and researchers.

NARC staff comprises of highly skilled, well qualified and technically competent workers who perform their tasks as a passion of their life.
NARC is not only limited to provide services to the University and its sub campuses, it also helps in providing technical assistance to other projects of national interest. NARC staff is actively involved in providing consultancy services to other universities and educational institutes, thus contributing towards the development of IT infrastructure of Pakistan.

NARC provides 24 hours research facilities to PhD scholars and researchers. All facilities provided by NARC are available round the clock. This includes Digital Library which provides free access to research papers and technical material from leading international forums and organizations around the world. It also provides High Performance Computing (HPC) facilities for students and researchers.
Necessary equipment required to complete the

students in their semester and final year projects is provided free of cost to the students. Moreover technical guidance is also provided to them. NARC hosted the 17th International Conference on Microelectronics (ICM'05) held in December 2005 and ICOCN-07(International Conference on Optical Communication and Networks)

NARC is currently providing support in the following areas:
- Wireless Adhoc Networks
- Wireless Mesh Networks
- Network Routing
- Network Simulation
- Stateful inspection Firewalls
- Optical Fiber
- Secure VoIP communication
- Clusters and Grid Computing
- WiFi
- Blade Server
- Students Email Service using Google Apps
- Central Storage System for Faculty and Students
- Online Course Management System

NARC is working in collaboration with national and international technological leaders to provide state of the art equipment and cutting edge technology to the University. NARC is also working as Cisco Local academy for CCNA & IT Essential certification courses.

93

DIRECTORATE OF ADVANCED STUDIES, RESEARCH AND TECHNOLOGICAL DEVELOPMENT (ASR&TD)

10

The Directorate of ASR&TD, which functions under the supervision of the Director, is the secretariat of the Board of Advanced Studies, Research and Technological Development. The Board comprises the Vice-Chancellor (Chairman), all the Pro-Vice-Chancellors, all the Deans, one University Professor from each faculty, one technologist, five members from the Industries and the Director of ASR&TD.

The Directorate performs a variety of functions to promote research, extension and advisory services in the University. The purpose of these functions is to:

a. Regulate MSc and PhD programs.
b. Provide funds and monitor faculty research.
c. Provide funds for M.Sc. Engg. and PhD research.
d. Approve thesis titles, supervisors and examiners.
e. Co-ordinate the Split PhD program with foreign Universities, Government of Pakistan.
f. Arrange visits of Pakistani Experts to give Workshops/ Seminars in their field of expertise under TOKTEN program.
g. Arrange visits of foreign Professors to the University and vice-versa.
h. Award of Research Assistant-ships.
i. Sponsor collaborative research work in engineering and allied disciplines at the University and promote the research work.
j. Assist the Departments in organizing Post-graduate Programs, extension lectures and seminars.

k. Coordinate advisory services of the University for the benefit of the Government departments and industries.
l. Arrange evaluation of Research publications of faculty members and publishing of Research Journal of the University.
m. Make arrangements for Extension Lectures of Senior Professors from foreign countries, under the proposed British Council Specialists visits to Pakistan and TOKTEN Schemes.
n. Arrange for PhD Programs in the University.
o. Regulate an endowment fund for Higher Education and R&D in IT & Telecom Division at University of Engineering & Technology, Taxila, created for an amount of Rs. 100 million. The main objective for the establishment of endowment fund is to provide a continuous service of funding the University for producing around four PhD and six MSc in the field of Signal Processing every year. Fund would be available for man power development in the following fields:

(1)   Computer/Data communication
(2)   Image Processing
(3)   Simulation and Modelling
(4)   Wireless communication

DIRECTORATE OF STUDENTS AFFAIRS 11

The primary function of the directorate is to organize extra-curricular activities of the students and to foster their intellectual, literary, and artistic potentialities, which remain untapped in the classroom. It functions normally through a large number of clubs and societies; each devoted to some sport or cultural and artistic activity. The students join these clubs and societies according to their inclinations and aptitudes. Another function of the directorate is to maintain liaison with a wide cross-section of students and to be responsive to their needs and problems. The directorate also works to promote, amongst students, respect for the dignified and disciplined behaviors befitting a university student and prospective member of the honored community of engineers of Pakistan. Following are the committees and societies functioning at UET-Taxila.

Quaid-e-Azam Debating Society
University Arts and Literary Society
Hostels Athletics and Sports Club
An-Nisa Girls Scholar Society
UET Adventure Club
Environmental Protection Society
Student Welfare Society
Disaster and Crisis Management Cell
Student Counselling/Guidance Bureau
Students Placement and Training Bureau
Rashid Cheema Blood Donors Society
Al Mohandis University Magazine, Varsity News and University Quarter Bulletin
Department Technical Societies
Students Chapters
Price and Quality Control Committee

DIRECTORATE OF UNDERGRADUATE STUDIES 12

The primary function of the directorate is to plan and organize undergraduate teaching and notify schedule for each academic session. The directorate coordinates academic activities of the departments and acts as liaison office between the academic departments for the smooth conduct of courses. It also monitors the teaching progress and ensures the timely completion of courses by the respective department.
The Directorate also assists the Students Section to the following matters.

a.   Registration of fresh entrants
b.   Scholarships and Stipends
c.   Migration Cases

d.   Verification of Documents

DIRECTORATE OF SPORTS 13

The University provides ample facilities to the students for participation in games and sports, both outdoors and indoors. A Sports Committee comprising University teachers supervises the sports activities. Facilities are provided for all the major sports including cricket, hockey, football, tennis, badminton, basketball, squash and athletics. A series of inter-faculty and inter-hostel tournaments are held to provide participation to the maximum number of students. Outstanding sportsmen are encouraged to take part in the inter-university tournaments. The outstanding players are also participating in National level events likely hockey, volleyball and athletics. The exercise facilities are provided in the Gym in early morning and in the evening. Major types of fitness and exercise machines are available in the university.

FINANCIAL ASSISTANCE 14

The University has constituted a Students Welfare Society (SWS) to provide financial assistance to the most deserving students to defray tuition fee and hostel dues from the following financial resources:-

a.   Donations
b.   Fund raising campaign.
c.   Earning from Endowment Fund established for the purpose with an amount of Rs.5.000 Million.

The concerned students will apply on the prescribed form obtained from the office of Director Students Affairs.

HALLS OF RESIDENCES 15

The University has limited provisions for hostel accommodation at the Campus for both male and female students. The halls of residence for male students have an accommodation for about 1350 students and are named as:
■   Iqbal Hall
■   Quaid-e-Azam Hall
■   Abu Bakar Hall
■   Umer Hall
■   Usman Hall
■   Ali Hall

Abu Bakar hall with accommodation for 400 students is under completion. A separate hall for international students is being planned to be constructed in near future.

The hall of residence for female students is named as **Ayesha Hall.** It has an accommodation for 200 students.

The management of the halls is supervised by the Senior Warden. Each hall is looked after by Resident Tutor/s being faculty members.

The students themselves manage many aspects of life in the halls. The halls are provided with common rooms, dining halls, canteens, mosques and other such places of common utility. Each hall has its own mess with adequate messing and dining facilities. The mess is run on a no-profit no-loss basis. A Students Mess Committee under the supervision of a Resident Tutor regulates the weekly menu, finances, billing and quality of the food.

The students are required to abide by the rules and regulations governing residence in the University halls and are encouraged to develop community life conducive to healthy growth of the social aspects of their personalities.

Internet Facilities in the Hostels

The University has 16 Mbps internet bandwidth from PERN (Pakistan Educational Research Network) and provides high speed internet connectivity to all resident students in the hostels.

All the rooms of Iqbal Hall are connected with LAN of the University through five switches deployed at RT Room. These switches are connected to the Network Administration and Research Center (NARC) through optical fiber connectivity. The resident students are allowed to use LAN facilities in their rooms to make their assignments and other research work assigned to them.

Quaid-e-Azam Hall is also connected through optical fiber with NARC, while the other hostels are connected through UTP cables. The students are provided with Wireless Connectivity in these hostels.

Extra Curricular Activities in the Hostels

Besides providing adequate residential and messing facilities in the hostels, due consideration is also given to encourage the resident students to engage themselves in healthy physical and character building social activities.

For the purpose, various societies and clubs have been formed in the hostels. The functioning of these societies and clubs is monitored and supervised by the Senior Warden and are supported with financial assistance to promote sports and social activities in the hostels.

The most important societies and clubs functioning in the hostels are briefly described as under:-

Hostels Arts & Literary Society (HALS)

Being one of the most active and widely recognized society in the campus, it has added colors to the campus life.

The main objective of the society is to promote art, culture and literary abilities of the resident students and to boost up their confidence to perform in front of the people.

The society arranges and organizes:

- Qirrat and Naat competitions
- Dramatic and Cultural Shows
- Singing Competitions
- Sketching and Poster Competitions
- Declamation Contests, Debates and Discussions
- Quiz Competitions
- Story and Essay Writing
- Mehfil-e-Mushaira, Bait Bazi Sessions and such other activities

Hostels Athletics & Sports Club (HASC)

The Hostels Athletics & Sports Club has been formed to arrange and organize the sports activities for resident students in a proper and orderly manner.

The ultimate aim of the club is to produce the best athletes and sportsmen with good sportsman spirit for the University and for participation in the inter university tournaments. For this purpose, the club organizes friendly matches and competitions amongst the resident students throughout the year.

UET Adventure Club (UETAC)

The idea for having an adventure club is to provide an opportunity to the students to escape from the daily routine of the busy campus life and be able to enjoy the wilderness and natural resources of the mother land's nature.

The main objective of the adventure club is to organize and promote hiking, mountaineering, jogging, boating, excursion trips and other related activities.

Efforts will be made to affiliate the club with the Adventure Foundation of Pakistan and the Alpine Club of Pakistan. First Aid Training will also be arranged for the members of the Adventure Club.

ESTATE OFFICE   16

The University Campus spreads over 163 acres of land, and requires considerable efforts to keep the gardens, lawns, roadside rows of trees and flower-beds in good trim. The efforts of this office give the Campus a pleasing look, which attracts a large number of visitors in the mornings and evenings.

For the convenience of the students, a shopping centre is located near the University hostels. This centre has a laundry, a general store, stationery and fruit shop. The office looks after security, sanitation, maintenance of lawns and gardens, and shopping facilities at the campus. It has a large squad of uniformed watchmen who guard the University buildings and property. Its sanitation staff keeps the buildings, roads, lawns, and other spaces clean and tidy.

HEALTH FACILITIES   17

The University provides medical facilities to its employees and students. Salient features of the existing health policy for students are listed hereunder:

a. Students will be provided free consultation by the Medical Officer.

b. Available medicines will be issued to students through authorized prescription only.

c. Night dispensary service will be available in emergency only.

d. In acute emergency, where a student cannot move, immediate report be made to RT who will make arrangements for further treatment under rules (i.e. ambulance, consultation, admission etc.). The expenditure shall be borne by the student.

e. Boarders will be required to fill in the proforma of previous medical history mentioning the disease he carries.

f. Indoor treatment from unauthorized medical attendants is not allowed.

TRANSPORT   18

Adequate transport facility is provided for students and the buses are plying between Rawalpindi, Islamabad, Hassan Abdal, Wah Cantt. and the campus. This facility is, however, not obligation of the University and it can be reduced or terminated if the policy and/or the financial conditions so demand.

ADMISSION/REGISTRATION/ PLACEMENT OFFICE   19

The Section deals with matters relating to admission, registration and placement of students at undergraduate level and verification of documents, migration cases and miscellaneous certificates under the charge of Registrar.

DUES/SCHOLARSHIP SECTION   20

The Section deals with all kinds of fees/dues, scholarship, stipends, loans and fee concession under the charge of Treasurer.

QUALITY ENHANCEMENT CELL

The Quality Enhancement Cell was established at UET Taxila on 7th February 2011 in Phase-IV under the directions of Higher Education Commission, Islamabad. It is entrusted with the task to promote education for effective management of standards and quality of programs at all levels. It requires the developing quality assurance processes and methods of evaluation to maintain high educational standards of UET. These academic activities at UET are being regularly monitored by Quality Assurance Agency (QAA), HEC through Quality Enhancement Cell (QEC).

QUALITY ASSURANCE

It is observed that almost all the national universities, have similar scheme of studies for respective degree programs with minor variations, thanks to the information sharing in the age of IT. But the quality of outgoing graduates from these universities is conspicuously variant. We need to accept, that most of the universities here do not meet the international quality criteria. It is this dismal state of affairs, where most of our efforts needs to be focused. This is the only way to achieve value addition, international competitiveness and consequently, socio-economic up gradation. Seemingly, this idea became the founding stone of the Quality Assurance Agency (QAA), formed by the HEC. It has evolved well organized policies with quantifiable parameters of quality, required to enhance the educational standards in Higher Education.

QEC TEAM

Engr. Mubashir Nawaz TI (M)
Director

Mr. Iftikhar Ahmad
Deputy Director

Mr. Mazhar Iqbal
Computer Operator

Mr. Syed Aftar Shah
Naib Qasid

SELF ASSESSMENT OF THE PROGRAMS
PROGRAM TEAM:

Self Assessment of academic programs is conducted by Program Team (PT) is a group of professionals who are nominated by the head of the department. PT is responsible for writing of Self Assessment Report (SAR) and acts as a contact/focal group during the period of assessment process.

ASSESSMENT TEAM:

Assessment Team (AT) is a group of professionals who will review the SAR prepared by the PT and give its findings in the form of a report (AT Report).
Self Assessment of following departments has been completed:-

- Electrical Engineering Department
- Mechanical Engineering Department
- Civil Engineering Department
- Computer Engineering Department
- Software Engineering Department
- Telecom Engineering Department
- Electronics Engineering Department
- Environmental Engineering Department
- Industrial Engineering Department

Sub Campus Chakwal
- Mechatronics Engineering Depart ment

Self Assessment Process of following departments is under process:-

- Electronics Engineering Department
- Civil Engineering Department – 2nd Cycle
- Electrical Engineering Department – 2nd Cy cle
- Mechanical Engineering Department – 2nd Cycle

Memberships: University of Engineering and Technology, Taxila is member of Asia Pacific Quality Network (APQN).

Teaching and Examinations

Regulations Relating to Semester System of Teaching and Examinations for Bachelor Degree Programmes of the University of Engineering and Technology, Taxila.

a. **Short Title, Commencement and Applicability:**

i. These Regulations shall be called "The University of Engineering and Technology Taxila Regulations Relating to Semester System of Teaching and Examinations for Bachelor Degree Programmes".

ii. These shall come into force with immediate effect for undergraduate degree Programmes of the University and will be a applicable for all enrolled stu dens.

b. **Definitions:**

i. "Academic Council" means Academic Council of the University.

ii. "Academic Year" means a year normally consisting of two regular (i.e. Fall and Spring) semesters of 18-20 weeks duration each and one optional (i.e. Summer) semester of 9-10 weeks duration inclusive of examinations, internships or any other academic activity.

iii. "Board of Undergraduate Studies" means the Board of Undergraduate Studies of the concerned Academic Department of the University.

iv. "Candidate" means a student who intends to appear in an Examination.

v. "Casual Student" means a student who is not on the rolls of the University after passing out his session i.e. after completion of his minimum degree duration period but is otherwise eligible to take the courses and to appear in the examination. He shall, however, be governed by the University Examinations and Discipline Rules & Regulations.

vi. Chairman"means the Chairman of the concerned Academic Department of the University.

vii. Controller of Examinations"means the Controller of Examinations of the University.

viii. "Contact Hours" means the total number of lectures, tutorials and laboratory hours per week.

ix. "Course Teacher" means a person appointed by the competent authority, who teaches a course and then evaluates the students as per University rules and procedures.

x. "Credit Hour" means 1 hour of theory lecture or 3 hours of practical work in a course per week for the semester.

xi. "Cumulative Grade Point Average (CGPA)" means the credit-hour weighted average of the Grade Points earned for all the courses in all the semesters attended.

xii. "Dean" means the Dean of the concerned Faculty.

xiii. "Department" means an Academic Department of the University.

xiv. "End Semester Examination" means the examination to be held at the end of each semester on such dates as the University may determine.

xv. "Faculty" means the concerned Faculty of the University.

xvi. "Grade" means the letter grade earned by a student in a course depending on his performance in that course.

xvii. "Grade Points" means the points (numerical value) associated with each letter grade.

xviii. "Mid Semester Examination" means the examination to be held after eight (08) weeks of teaching in case of regular semesters and after four (04) weeks of teaching in case of optional semester on such dates as the University may determine.

xix. "Regular Student" means a bonafide student while enrolled during the minimum duration of a degree programme of this University and who does not maintain admission simultaneously in any other degree/diploma programme of this University or any other institution.

xx. "Semester" means a declared duration covering 18-20 weeks of teaching in case of regular semester and 9-10 weeks of teaching in case of optional semester including examinations.

xxi. "Semester Grade Point Average (SGPA)" means the credit-hour weighted average of the Grade Points earned for all the courses in a semester.

xxii. "Subject" means a course of studies as prescribed in the detailed syllabi approved by the competent authority, whose successful completion shall be the requirement of the Degree.

xxiii. "Syndicate" means the Syndicate of the University.

xxiv. "University" means the University of Engineering and Technology Taxila.

xxv. "Vice-Chancellor" means the Vice-Chancellor of the University.

c. Explanations:

In these regulations: -
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, and vice-versa.

d. Academic Programmes:

Bachelor of Science Degree shall be awarded in the following disciplines:

i.   Civil Engineering
ii.   Computer Engineering
iii.   Electrical Engineering
iv.   Electronic Engineering
v.   Environmental Engineering
vi.   Industrial Engineering
vii.   Mechanical Engineering
viii.   Software Engineering
ix.   Telecommunication Engineering
x.   Computer Science
xi.   Matallargy and MaterialEngineering
xii.   City and Regional Planning
xiii.   Mechatronics Engineering (Chakwal Campus)
xiv.   Electronic Engineering (Chakwal Campus)
xv.   Petrolum & Gas Engineering (Chakwal Campus)
xvi.   Management Sciences (Chakwal Campus)
xvii.   Computer Science (Chakwal Campus)
xviii. Any other discipline as and when approved by the University Authorities

e. Academic Calendar:

The Bachelor's Degree Programme shall be spread over four academic years (i.e. minimum Eight Regular Semesters). Each academic year shall consist of two regular teaching semesters i.e.; Fall and Spring and an optional Summer semester. Summer semester shall be primarily for those students who want to repeat / improve certain courses to make up for their academic deficiencies.
The minimum strength to offer a course in Summer Semester will be Five (05) students.
Tecaching shall be manadtory for all offered courses in sumer Semester.
It shall be in the best interest of the students to clear their failed courses or the courses where theywant to improve their grades by repeating the courses as early as possible. The University will not be responsible to offer failed or improvement courses in the final year unless and until the other conditions of Summer Semester registration are met. In case of regular semesters (i.e. Fall and Spring) there shall be sixteen weeks of teaching. End Semester Examination shall be held in the eighteenth and nineteenth weeks. While in case of Summer semester, ninth week shall be for End Semester Examination. The Director Academics shall notify academic schedule of complete year for its Fall, Spring and Summer Semesters for the convenience of students and faculty members mentioning the following:

i.   Semester registration date
ii.   Semester starting date
iii.   Mid semester examination week
iv.   Semester termination date
v.   End semester examination weeks

Students shall be responsible to meet the requirements and deadline published for each semester in the academic calendar. Students shall also be expected to know and adhere to the rules, regulations, course loads and policies of the University as well as those of the departments in which they are enrolled.

Part-I. GENERAL

a. The minimum duration of the degree programme shall be four academic years (i.e. Eight Regular Semesters). While the maximum duration allowed is seven years.

b. Notwithstanding anything to the contrary contained in these regulations, no candidate shall be admitted to an examination after the expiry of seven academic years. This period shall be counted from the date of his registration to the first semester in the University. Provided that in case a candidate is admitted directly to a higher class, he shall not be admitted to an examination after the expiry of the remaining period for the session to which he is admitted.

c. The total number of credit hours required for the award of degree shall be 130-136 while the number of credit hours per semester shall be 15-18. The courses of study, the credit hours allocated to each subject, the total credit hours offered in a semester and the detailed syllabi shall be as approved by the competent authority.

d. A minimum CGPA of 2.0 for the total semesters of a degree programme shall be required for the award of degree. The student affected by this regulation shall have the option to repeat the courses in which his grade is less than C- within the maximum allowable time period.

e. An academically deficient regular studentshall be allowed to repeat / improve the courses during the summer semester if offered as well as during the regular semesters whenever the teaching and examination schedule makes it possible for him to register himself for the courses and to take the end semester examination. While the academically deficient casual student shall be allowed to repeat/ improve the courses either during summer semester or whenever the teaching and examination schedule makes it possible for him to register himself for the courses and to take the End Semester Examination. In case of repetition/ improvement of a course the student shall have to pay course registration and examination fee as prescribed by the University.

It shall be noted that a student can only improve a grade lower than C- (i.e. D & F).

f. An academically deficient student (i.e. Regular and Casual) shall be allowed to get himself registered for two courses at maximum irrespective of the credit hours in a summer semester. The contact hours during the summer semester shall be doubled to ensure that the course is completely taught in a summer semester with half of the duration compared to a regular (Fall or Spring) Semester. An academically deficient regular student will also be allowed to get himself registered for two additional courses at maximum with lower semesters if offered with his regular semester. Whereas an academically deficient casual student will also be allowed to get himself registered for five courses at maximum with lower semesters if offered in regular semesters.

g. The registration, attendance, conduct of examination and result display policies etc. during the summer semester shall be same as in regular semester. Letter grade awarded during summer semester shall not be more than a 'B' grade.

h. 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 shall be either Urdu or English.

Part-II. SEMESTER REGISTRATION

The registration of the students for each semester other than the first semester shall be made by the concerned Academic Department of the University. The registration for the first semester shall be made by the Registrar of the University.

a. The registration of the students for each semester shall be made in accordance with the Academic Calendar notified by the Director Academics. The application forms shall be obtained from the office of the Chairman of the concerned Department. The students shall submit the forms duly filled up to the Chairman of the Department. After necessary verifications, the Chairman of the Department will notify the list of registered students within ten days of the start of regular semester and four days of the start of summer semester. He will also forward these lists to all concerned within a week.

b. In case of a regular semester if a student misses his registration for cogent reasons, and applies for it within ten days of the notification of the list of registered students, he may be allowed to get himself registered with his class by the Dean of the Faculty concerned. He will, however, be required to pay re-admission fee as prescribed under the rules. He shall not claim any other relaxation in the rules governing teaching and examinations.

c. If a student fails to get himself registered for a regular semester within the prescribed time, his name shall be deemed to have been struck off the University Rolls and he shall not be allowed to take the classes and appear in any examination.

Part-III. ATTENDANCE EQUIREMENTS

No candidate shall be eligible to appear in an End Semester Examination unless the following conditions are fulfilled:

• He has been on the rolls of the University during the semester for which the examination is being held, unless allowed by the regulations to take examination in order to repeat/improve a course.

• He is not debarred from taking the examination under the University rules and regulations in-force for the time being.

• He has attended a minimum of 75% of the total number of lectures delivered, the laboratory periods held, design and practical work done in a course during the Semester for which the exams is being held. The Dean of the concerned faculty may, for valid reasons, condone this deficiency upto 10% on the recommendations of the Chairman of the department in consultation with the course teacher concerned.

d. If a student does not fulfill the condition of attendance, he shall be awarded an F-grade in that course and will have to re-register for that course in the summer semester if offered or in a regular semester in which the course is being offered.

e. The course teacher concerned will prepare the attendance record and will display and forward the list of such candidates who do not fulfill the condition of attendance to the Controller of Examinations through the Chairman of the Department and Deans Committee immediately after the completion of the teaching session. Such candidates shall not be allowed to appear in the end semester examination of that course.

f. At the end of each month, the teacher concerned shall send to Chairman of the Department, a statement giving the total number of lectures delivered and practical conducted by hi together with the number of lectures and practical attended by each student.

Part-IV. CONDUCT OF EXAMINATION

1.   Students Evaluation System

The performance of every student shall be continuously monitored and assessed throughout the semester. During the semester a student's performance shall be evaluated by taking quizzes, assignments, mid semester examination, laboratory reports, and project presentations etc. An end semester examination shall also be taken at the end of each semester covering the entire syllabus.

The course teacher shall be responsible for the evaluation of work/performance of the students of his class and for the award of grades to them on the basis of such evaluation.

2.   Grading Mechanism

Course grades shall be awarded to the students preferably based on their relative performance in the course with minimum student's strength more than ten(10). Grading shall be usually carried out on the basis of normal distribution

curve using statistical methods with preferably B as the class average, however, the course teacher's decision in this regard shall be considered final. Grades shall be indicated by letters. There shall be 4-letter grades i.e. A, B, C & D for individual courses with 9 performance levels e.g;

Letter Grades	Performance Levels
2 As	A & A-
3 Bs	B+, B & B-
3 Cs	C+, C & C-
1 D	Simple D
F	Fail
I	Incomplete

The grade points assigned to the letter grades shall be indicated as under:

Letter Grade	Grade Points
A	4.00
A-	3.70
B+	3.30
B	3.00
B-	2.70
C+	2.30
C	2.00
C-	1.70
D	1.00
F	0.00

The following guideline for the award of Letter Grades can be followed by the course teachers in case of absolute grading and project evaluation etc.

Marks (%age)	Letter Grade
90-100	A
85-89	A-
80-84	B+
75-79	B
70-74	B-
65-69	C+
60-64	C
55-59	C-
50-54	D
<50	F

3. **Semester Grade Point Average (SGPA)**

The semester grade point average (SGPA) shall be calculated by multiplying the grade points earned in a course with the number of credit hours of that course, taking the sum of such products for each course taken in that semester and finally dividing the result by the total number of credit hours attempted in that semester.

4. **Cumulative Grade Point Average (CGPA)**

The cumulative GPA (CGPA) shall be calculated similarly (as that for SGPA) for all the courses taken in all the semesters of the degree programme.

5. **Evaluation Components**
   a. **Sessional Awards:**
      (i) **Quizzes:** There shall be an appropriate number of quizzes (announced/ nannounced) per course.
      (ii) **Mid Semester Examination:** There shall be one mid semester examination of 1.5 to 2.0 hours duration per course in a semester after eighth week of teaching in case of regular semester and after fourth week in case of optional semester.
      (iii) **Home Assignments / Mini Projects:** There shall be an appropriate number of Home Assignments and / or Mini Projects per course in a semester.
      (iv) **Laboratory Reports:** The students shall submit laboratory reports on each laboratory practical held, which the course teacher will evaluate. In this case each experiment, design, drawing, project or assignment shall be considered an examination.
   b. **End-Semester Examination**
      There shall be one End-Semester Examination of 2.00 to 3.00 hours duration covering the entire course at the end of each semester. The examination shall be held in the last two weeks of each regular semester and last one week of Summer Semester.

6. **Weightage of Evaluation Components**

The final grade shall depend on the marks obtained in each of the evaluation components listed above. The weightage given to each component is as follows:

In case of courses not having any laboratory / practical work, the weightage of End Semester Examination shall be 60%. While in case of courses having only laboratory / practical work, the weightage of laboratory reports shall be 100%.

Evaluation Component	Weightage
Unannounced Quizzes	10%
Mid Semester Examination	20%
Home Assignments / Mini Projects	10%
Laboratory Reports	20%
End-Semester Examination	40%

7. Choice in Question Papers

There shall be no choice of questions in any of the evaluation components.

8. Absence from Examination

Absentees in any of the evaluation components shall be awarded zero marks whereas the absentee of end semester examination shall be awarded an F grade irrespective of sessional marks.

9. Maintenance and Display of Sessional Awards

a. The marked scripts of each examination component i.e. quizzez, assignments mid and end semester examination answer scripts concernedteachers. in case a students is not satisfied with his awards and /or clarification from the teacher concerned, he may make written complaint to the Chairman of the Department who will refer his case to decision of the Committee shall be final.

b. A student who fails to take his Mid Semester Examination due to some unavoidable circumstances (beyond his control) shall apply in writing to the Chairman for retaking mid semester examination before the End Semester Examination. The Chairman will refer his case to the Departmental Semester Committee for consideration and decision. The decision shall be communicated to the Controller of Examinations in writing. In case a student is allowed to retake Mid Semester Examination, the examination will be conducted by the course teacher before the End Semester Examination on payment of prescribed fee by the student.

c. The teacher concerned shall prepare four copies of the sessional awards. He shall retain one copy with him; shall send one copy each to the Chairman of the Department concerned and the Controller of Examinations immediately after the completion of the teaching session. He shall also display a copy of the sessional awards on the Notice Board before the start of end semester examination.

10. Place and Conduct of Examination Date Sheet

The Controller of Examinations shall issue the date sheet for each mid and end semester examination. Mid Semester examination shall be held on consecutive days excluding holidays which means that no gap shall be allowed between the two papers. While the End Semester examination shall be held on alternate days.

12. Paper Setting and Marking of Scripts for End Semester Examination

The course teacher(s) shall be responsible to set the question paper covering the entire syllabus, mark the answer scripts and prepare the award lists.

a. The course teacher after setting the question paper shall get it photo copied by himself in accordance with the number of students and deliver it to the Centre Superintendent on the date of examination as per date heet.

b. On receipt of Answer Scripts from the Centre Superintendent on the same day, the course teacher shall mark the scripts for each examination and prepare the award lists on the prescribed form. After the end semester examination, he shall send the award lists (hard and soft copies) along with the marked scripts and question papers of Mid and End Semester examinations to the Controller of Examinations through the Chairman of the concerned department after a departental faculty meeting. under sealed cover within the specified time limit.

c. The course teacher(s) shall be responsible to ensure that there is no discrepancy in the marks entered in the award lists, the marks entered on the cover page of the scripts and the marks awarded to the questions in the scripts. A fraction of half or more shall be counted as one mark and less than half ignored in grand total only.

d. The time limit for marking the scripts shall be ten (10) days. If a teacher cannot mark the scripts within the prescribed time limit due to unavoidable circumstances, he may obtain prior permission from the Controller of Examinations for extension of time before the expiry of the prescribed time limit. The extension in time limit shall, however, not be more than four days.

e. A deduction of Rs. 50/- per day will be liable to be made from the remuneration of the examinersfor delayed submission of results after the prescribed time limit.

13. Final Year Project

In the final year, students shall be required to do a project which is assigned six credit hours, two credits in the seventh semester and four credits in the eighth semester. A list of available projects shall be notified by the concerned department at the start of the academic year. Students shall be required to consult their faculty advisors for the selection of a project. Students shall be required to complete their projects and present their reports (in hard-bounded form) before the end semester examination of their eighth semester. A three members committee including the project supervisor nominated by the Chairman of the Department

and approved by the Vice-Chancellor shall evaluate these projects at the end of eighth semester. The eighth semester project evaluation shall be held after the examination weeks and shall be followed by an open presentation

14. Summer Internship

Every student shall be required to participate in an eight weeks practical training programme during the summer of their second or third year and submit a formal report to the Chairman of the Department.

15. Final Award

The final award once received by the office of the Controller of Examinations shall not be liable to a subsequent change except with the permission of the Vice-Chancellor.

16. Notification of Result

As soon as possible after the completion of the examination, the Controller of Examinations shall notify the result.

17. Re-Checking of Answer Scripts

There shall be no re-evaluation of answer scripts of the end semester examination. However, a candidate shall be allowed to have his answer scripts rechecked by the Controller of Examinations on payment of prescribed fee within fifteen days of the declaration of the result. The Dean of the Faculty concerned may condone the delay up to a maximum period of ten days on payment of double fee. The Controller of Examinations shall certify that:-

a) The script has not been changed.
b) No portion of the script has been left unmarked.
c) The marks awarded in the script have been correctly brought out on its cover.
d) The grand total on the cover of the script is correct.
e) The grand total on the cover of the script is correctly transferred to the award list.
f) The result has been correctly posted and notified

18. Academic Deficiencies

A student, who obtains one or more of the following in a semester result, shall be considered academically deficient:

i) One or more "F" grades in a semester.
ii) One or more "I" grades in a semester
iii) SGPA less than 1.00 at the end of 1st semester
iv) CGPA less than 2.00

(a) Academic Dismissal

A student who fails to obtain a minimum GPA of 1.0 at the end of 1st semester of a degree programme shall be placed on academic probation for the 2nd semester. In case, he fails to improve his CGPA to 1.0 at the end of 2nd semester, his name shall be removed from the Rolls of the University. Students dismissed on academic grounds shall, however, be furnished with an official transcript indicating the course completed along with grades earned in registered courses.

(b) Re-admission

Re-admission in the first year, without going through the admission process, is granted to only those undergraduate students who have been dismissed on academic grounds but only for once. There is no second re-admission.

c) Relegation to Lower Semester

An academically deficient student can apply to the Chairmen of concerned department for Willing Relegation to lower semester to overcome his academic deficiencies. The Chairman will refer his case to the Departmental Semester Committee for appropriate decision which will be forwarded to the Controller of Examinations through the concerned Dean for Vice Chancellor's approval and subsequent notification. The Willing Relegation to lower semester can only be availed once during the entire degree programme subject to written consent of the parents / guardians.

19. Incomplete (I) Grades

A student may request for the award of an 'I' (Incomplete) grade, if for some genuine reasons (beyond his control), he fails to appear in an end semester examination or final project. 'I' grade will not be awarded for any other deficiency in a course (e.g. shortage in attendance etc). For the award of an 'I' grade, the student will apply on a prescribed form "i.e. 'I' Grade Application Form" to the Chairman of the concerned department, who will refer the case to the Departmental Semester Committee for consideration. The Departmental Semester Committee will make its recommendations based on the genuineness of the case and on the basis of his performance in mid semester examination, lab work, home assignments, quizzes, class participation etc.

In case the student is allowed an 'I' grade in a course by the Chairman of the Department on the recommendations of the Departmental Semester Committee, he would be allowed to take only End Semester Examination of that course on payment of prescribed fee. The 'I' grade must be completed before the commencement of the forthcoming End Semester Examination, failing which the 'I' grade will automatically be converted to 'F' Grade. "I" grade will not be awarded in Summer Semester.

20. Repeating Courses / Improving Grades

a) If a student obtains 'F' Grade in any course, he shall have to repeat that or an equivalent course. Similarly whenever a student obtains a grade "D", he can repeat that course to improve his grade. A student shall be allowed to repeat a maximum of six courses to improve the grades during

the entire degree programme.

b) An academically deficient regular student will be allowed to repeat / improve maximum of two courses during a summer semester if offered as well as during a regular (Fall or Spring) semester whenever the teaching and examination schedule makes it possible for him to register himself for the courses, attend the classes and to take the Mid and End Semester Examinations. While the academically deficient casual student shall be allowed to repeat/improve if offered the courses either during summer semester or whenever the teaching and examination schedule makes it possible for him to register himself for the courses, attend the classes and to take the Mid and End Semester Examinations. Casual students can register for a maximum of Two courses in a Summer Semester and Five (05) Courses in a Post Eighth Regular Semester. In case of repetition / improvement of a course the student shall have to pay course registration and examination fee as prescribed by the University.

c) As soon as a student is registered for a course, his previous grade for that course whether low or high shall be cancelled, and only the latest grade earned by the student shall be considered for the computation of CGPA. It shall be noted that a student can only improve a grade D and F.

d) In case a student repeats a course which has already been taken, and in case a student takes a new course in lieu of the course in which he failed, both the courses alongwith grades will be reflected on his transcript.

21. Freezing of Semester

Students will be allowed to freeze a semester only once during the entire degree programme owing to some extreme and genuine reason to be determined by the Departmental Semester Committee. Students shall not be allowed to freeze their First and Second Semester(s), in any circumstances. Only those students who have completed their First Academic Year at the University shall be eligible to avail this facility. A student must apply to the Chairman of the Department, in writing, for freezing of one or two consecutive semesters within fifteen days of commencement of the semester. Students can request for freezing of at most two (02) consecutive semesters with Summer Semester not being counted. The Dean of concerned faculty will approve the request on the recommendation of the Departmental Semester Committee and Controller of Examinations shall notify the Freezing of Semester(s) accordingly. On his return, the student will be re-registered in the same semester with next junior class, in case of freezing two consecutive semesters and his courses shall be evaluated by the concerned Chairman of the department

to determine their relevance to the changes made in the curriculum (if any). In such a case, the student shall be required to modify the degree plan in order to ensure conformity to the recent curriculum. Also, students will be required to pay the difference of University fee (if any) besides the re-registration fee. In case of freezing one semester, the student may re-join his own class. The deficiency created by frozen semester shall be made up after completing the remaining courses with his class i.e. after eighth semester by enrolling as a Casual Student.

However, the students allowed to freeze their semester for proceeding abroad under Edcational Exchange Programs, will be elegible to register themselves for deficient courses in forthcoming Summer and / or Regular Semesters to overcome their academic deficiencies, provided the requirements for registration in Summer and/or in Regular Semesters (as additioonal courses) are fulfilled as prescribed in the prevailing regulations.

The maximum duration of the degree programme shall remain the same which will be considered from the date of his first semester registration including the frozen semesters.

22. Withholding of Comprehensive Result

The comprehensive result of a candidate, who is allowed to appear in the final semester examination while carrying courses of the lower semesters, shall not be declared till he clears the courses of lower semesters as a Casual Student. His Comprehensive result will be declared with the session in which he clears his last course of the degree programme. After the declaration of Final Semester Result, the students with status " Passed " shall be required to submit the " **DEGREE REQUIREMENTS COMPLETION FORM** " complete in all respects within four days of the notification. Failing which Comprehensive Result Notification will be issued and the students will have no claim to improve their grades afterwards.

Also, the students with status "Passed" and interested in improving their grades (D grade) and the students with status "Failed" shall be required to submit the "CASUAL STUDENT ENROLLMENT FORM" complete in all respects, for registration as Casual Students.

23. Transfer of Credits

Transfer of credits shall be applicable only for those students who have been migrated to this University. Credits for only those courses shall be transferred which fulfill the following criteria:

• Credits can only be transferred from a PEC (Pakistan Engineering Council) accredited programme.

• A course with similar title, standard, duration, credit hours and matching course description is available in the relevant academic programme of the University. The course equates in description and laboratories work (if any) with the similar course of the relevant academic programme of the University. The duration of the course must be same or more than the duration of the course in the programme of the

University.

- The candidate should have secured at least "B" grade in that course as per the grading system of the University.
- A maximum of 50% of the total credit hours of the relevant academic programme of the University shall be allowed for transfer.
- Transfer fee as prescribed by the University, shall be paid by the candidate.
- Transfer of credits is considered on the basis of course contents and credit hours to be decided by the Departmental Semester Committee.
- Transferred credits shall not be included in CGPA calculation however, will be reflected on the transcript as Transferred Credits.

24. Award of Degree

A candidate shall be admitted to the degree if:

a) He has earned total credit hours required for the degree within the prescribed duration of the degree programme.

b) He has obtained pass grades in all the courses offered in a semester.

c) He has passed all the semesters in the relevant discipline with at least 2.00 CGPA upto completion of a degree programme.

d) He has submitted the Degree Requirements Completion Form.

e) In case of the degree in Civil Engineering he has attended and satisfactorily completed annual survey camp organized by the University as certified by the Chairman of the Department.

25. Award of Honours

A candidate shall be declared to have obtained the degree with Honours and the fact shall be recorded on the provisional certificate as well as on the degree, provided that:

a) He has obtained CGPA of 3.7 or more.

b) He has completed the degree programme within the minimum duration as specified in the regulations.

c) He has not obtained 'F' grade in any course during the entire degree programme.

d) He has not improved any grade in the entire degree Programme.

e) He has not transferred any credit from other institutions.

26. Award of Medals

A candidate who fulfills all the requirements for the award of degree with Honours shall be entitled to the award of a medal for overall best performance on the basis of combined eight semester examinations result in each discipline.

27. Semester Grade Sheet

Obtaining of Semester Grade Sheets (SGS) at the end of each semester shall be mandatory for all students. Prescribed Fee will be charged at the start of each semester with semester registration fee and SGS will be issued to the students within ten days of their respective result notification without any application. The SGS shall indicate Courses alongwith Letter Grades, Grade Points, SGPA, and CGPA.

28. Transcript of Awards

A Transcript of Awards shall be issued to each student after completion of the degree programme on the payment of prescribed fee.

29. Provisional Certificate

A candidate who fulfills all the requirements for the degree shall be issued a provisional certificate on the payment of prescribed fee before the issuance of the degree. This provisional certificate will not itself confer any right or privilege for admission to the degree.

30. University Degree

The degree shall normally be issued to the graduates at the time of University Convocation without any fee. However, a graduate after obtaining the provisional certificate can apply for issuance of the degree before convocation on payment of the prescribed fee. The graduates who receive the degree in absentia after the convocation shall also be required to pay the prescribed fee.

31. Issuance of Certificates / Degrees

Subject to fulfillment of requirements and submission of application on prescribed forms with fee:

- Degree will normally be issued within two months of the receipt of the application.
- Any other certificate or duplicate copy (other than degree) will be issued within six days of receipt of application.

Note: A candidate shall deposit double the prescribed fee if he requires a certificate or duplicate copy (other than degree) within 24 hours.

32. Certificate Fees

The rates of fee for various certificates shall be as under:

a)	Semester Grade Sheet	Rs. 200
b)	Transcript of Awards	Rs. 1500
c)	Provisional Certificate	Rs. 1000
d)	Degree in Absentia/Degree Before Convocation	Rs. 2000
e)	Any other Certificate	Rs. 250
f)	Duplicate Certificate/ Degree	Double of the normal fee
g)	Verification fee of University Degree/Certificates:	
	Degree/ Transcript of Awards	Rs. 500 each
	S.G. Sheet/ Provisional Certificate/ Any other Certificate etc.	Rs. 250 each

33. Other Fees

a)	Semester Examination Fee	Rs. 1000/- per semester
b)	Summer Semester Registration Fee	Rs. 2000/- per credit hour
c)	Registration Fee for Improvement of a Course during Regular Semester	Rs. 2000/- per credit hour
d)	Post Eight Semester Registration Fee	Rs. 2000/- per credit hour
e)	Fee for 'I' Grade / Mid Semester Retake Examination	Rs. 1000/- per course
f)	Rechecking of Answer Script Fee	Rs. 500 per script

Note: **The rate of fee may be revised by the University Authorities from time to time and will be applicable to the currently enrolled students of previous entries also.Fee will not be refundable in any case.**

34. Disposal of Marked Answer Scripts

The marked answer scripts of a particular mid and end semester examina tions shall be retained in the office of the Controller of Examinations for a period of one year. After this period, the scripts shall be disposed off accordingly.

35. Departmental Semester Committee

1) **Constitution of the Committee**

Each Department shall have a Departmental Semester Committee constituted by the Vice Chancellor comprising the following:-
i) Chairman of the Department
ii) Two/ three senior most faculty members
iii) The teacher concerned may be co-opted in case of complaint of the students.

2) **Functions of the Committee**

- Ensure content coverage of courses by comparing test with the course outlines and work plan provided by the teacher.
- Monitor classroom activities as reflected in the course outlines.
- Examine all problems regarding uniformity before the declaration of results.
- Address and decide student's com plaints/appeals regarding sessional / grade awards.
- Examine & Approve students requests for Award of 'I' Grade, Freezing of Semester and Retake of Mid Semester Examination.
- Examine & Approve students requests for Willing Relegation to Lower Semesters only for the pur pose of overcoming their Academic Deficiencies.
- Examine & Approve Transferred Courses and corresponding credits for Migration Cases.

36. University Semester Committee

a. **Constitution of the Committee**

There shall be a semester implementation committee to be constituted by the Vice-Chancellor. The Committee shall consist of the following:
i) The Deans of all Faculties.
ii) The Director Quality Enhancement.
iii) The Director, Academics
iv) The Controller of Examinations.
v) The Deputy / Assistant Controller of Examinations (Secretary)

b. **Functions of the Committee**

i) Provide consultation to the Academic Departments converting to the semester system from the term system.
ii) Provide support in the imple mentation of semester system by arranging short courses for the faculty on its various aspects.
iii) Monitor the implementation of semester system.
iv) Address various issues arising with relation to the implementation of the semester system.
v) Recommend necessary amend ments in the semester regulations, if needed.
vi) Examine and Approve students requests for Re-admission.

MIGRATION 22

22.1 Subject to the provisions of Regulations, the Vice-Chancellor may admit a student to the University by migration from other universities or institutions accredited by the Pakistan Engineering Council.

22.2 No student shall be admitted to first year and final year classes by migration.

22.3 No student other than regular student shall be allowed admission by migration.

22.4 Admission by migration shall not be allowed ordinarily after the expiry of three weeks from the commencement of the session.

22.5 No student shall be admitted by migration unless he produces a "No Objection Certificate" and good

moral character certificate to the effect that:

a. He has obtained not less than 2.8 GPA or equivalent in the examination on the basis of which migration is requested.

b. He has neither been debarred from taking University examinations nor suspended nor expelled nor rusticated, for whatsoever reason, from the University or institution from which he intends to migrate.

c. No disciplinary action is pending against him.

22.6 a. The application shall be accompanied by a detailed marks certificate showing the examination passed by the student including Intermediate (Pre-Engg)/BSc Examination on the basis of which he secured admission in the parent university or institution.

b. No student admitted to any university or institution against seats reserved for special categories shall be eligible for admission by migration.

c. Only those students, who have academic merit at par with the students admitted in this University on open merit in the respective classes, shall be considered for admission by migration.

d. No student shall be migrated to the University who carries any of his papers of previous years.

e. No migration shall be allowed to and from the constituent/affiliated institutions.

f. Subject to eligibility under the regulations, 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.

g. Migration application will be entertained only on the prescribed application form, obtainable from the Student Section, at the cost of Rs.500/-.

h. A migration fee Rs 25,000/- (Twenty five thousand only) per year to be studied will be charged at this university.

22.7 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.

22.8 The student will be required to clear all the university dues before he applies for migration.

22.9 In case of a student who has been debarred from taking University examination or has been expelled or rusticated, for whatsoever reason, No Objection Certificate shall not be issued so far as the punishment is in force.

22.10 The Registrar shall issue No Objection Certificate,

which shall be valid only for sixty days.

22.11 A student who has obtained No Objection Certificate from this 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 regulations provided that:

a. His absence from the current teaching session of that class does not exceed four weeks, and that

b. He surrenders the No Objection Certificate.

22.12 Any changes/ additions/ modifications, if made in the above regulations, will also be applicable.

STUDENTS DISCIPLINE RULES 23

a. These rules shall be called the "University of Engineering and Technology, Taxila (Students General Discipline) Rules, 1998".

b. These Rules are in effect from 1998.

c. Unless otherwise explained in the context or explicitly expressed, the following terms shall mean as defined in each case:

(1) "Academic Department" means an academic department of the University.

(2) "Committee" means the Students Discipline Committee of the University constituted by these rules.

(3) "Country" means Pakistan in case of native students and in case of foreign students this term refers to the native country of such foreign students.

(4) "Examination Hall" means a place declared as examination hall or as such.

(5) "Hall of residence" means the hostel of the University or such place as may be declared as residence hall for students.

(6) "Student" means a bonafide student of the University, both native and foreign, in accordance with the respective rules.

(7) "University" means the University of Engineering and Technology, Taxila

(8) "Vice-Chancellor" and other officers /authorities mean the Vice-Chancellor and other officers / authorities of the University.

Note: The general pronoun "he" and its derivatives shall mean either of the sex, unless otherwise explicitly expressed.

d. Every student must observe the following code of honour:

(1) He must be faithful in his religious duties and respect the conviction of others in matters of religion and custom.

(2) He must be loyal to his country and refrain from doing things, which might lower its honour and prestige.

(3) He must be truthful and honest in his dealings with all people.

(4) He must respect the elders and be polite to all especially to women, children, old people, the weak and the helpless.

(5) He must respect his teachers and others in authority in the University.

(6) He must keep clean in body and mind, standing for clean speech, clean sport and clean 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.

e. No student shall :–

(1) Smoke in his classroom, laboratory, workshop, library, examination hall or convocation hall and during studio work or academic functions.

(2) Consume alcoholic liquor or other intoxicating drugs within the University campus or hall of residence or examination hall or during the instructional, sports or cultural tours or survey-camp; or enter any such place or attend any such tour or camp, while under the influence of such intoxication.

(3) Organize or take part in any function within the University campus or a hall of residence or organize any club or society of students except in accordance with the prescribed rules and regulations.

(4) 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 or any officer authorized by the Vice-Chancellor;

(5) Stage, incite, participate in or indulge in any walkout, strike or other form of agitation against the University or its teachers or officers.

(6) Interfere in the official proceedings of the examination or other University business.

(7) Threat or misbehave with the officers or other employees of the University or try to influence such officers or employees in any way in connection with their official assignments.

(8) Instigate or take part in any boycott of examination or create disturbance in or, around the examination hall.

f. 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 or the University. Should such misconduct occur in room when the student is under the charge of an instructor/supervisor, the latter shall report the matter, without delay, to the Chairman of the Department.

g. The Librarian shall be responsible for maintenance of order of the library. In case of disorderly conduct or any breach of rule he may require the student so offending to withdraw from the library for the remainder of the day and shall immediately report the offense to the Chairman, Library Committee.

h. The Senior Warden/Warden and the Resident Tutor shall be responsible for the maintenance of order among the students in hall of residence or hostels. The Director, Physical Education shall be responsible for the maintenance of order among the students on or near the playground or while otherwise under his charge.

i. (1) There shall be a Students Discipline Committee, to deal with the serious cases of in-discipline, consisting of the following :–

(a) Chairman, to be nominated by the Vice-Chancellor.

(b) One member to be nominated by the Syndicate

(c) One Member to be nominated by the Academic Council.

(d) Two members not below the rank of Associate Professor, to be nominated by the Academic Council.

109

      (e)   The Senior Warden, (Ex-Officio Member).

      (f)   The Director Students Affairs, (Ex-Officio Member/Secretary)

(2)   The term of office of the members other than ex-officio members shall be two years.

(3)   The quorum for a meeting of the Committee shall be four.

j.   The functions of the Committee shall be :–

(1)   To propose regulations to the Academic Council, and other authorities, for the conduct of the University students.

(2)   To maintain discipline and to guard against the breach of discipline.

(3)   To perform such other functions as may be prescribed.

k.   A student shall be guilty of an act of in-discipline and shall be liable for each act to one or more of the penalties mentioned in Rule 23l(2), if he :–

(1)   Commits a breach of any of the rules of conduct specified in Rule 23e; **or**

(2)   Disobeys the lawful order of a teacher or other persons in authority in the University; **or**

(3)   Habitually neglects his work or habitually absents himself from his class without reasonable cause; **or**

(4)   Willfully damages University property or the property of a fellow student or any teacher or any employee of the University; **or**

(5)   Does not pay the fees, fines or other dues leviable under the University Act, Statutes, Rules, Regulations or Instructions; **or**

(6)   Does not comply with the rules relating to residences in the hostels or hall of residence or the Rules relating to the University Dress Code; **or**

(7)   Uses indecent language, wears immoderate dress, makes indecent remarks or gestures or behaves in a disorderly manner; **or**

(8)   Commits any criminal, immoral or dishonorable act (whether committed within the University campus or otherwise) which is prejudicial to the interests of the University; **or**

(9)   Humiliates, or causes to humiliate, his fellow student or a teacher or officer or other employees of the University; **or**

(10)   Possesses, carries or uses any type of weapons/fire arms or explosive material within the University premises; **or**

(11)   Spreads by word, mouth or written material, religious, sectarian, ethnic, regional or linguistic conflicts/hatred; **or**

(12)   Uses or takes possession of theUniversity transport unauthorisedly;**or**

(13)   Shows immodest/indecent or contra-Islamic behavior with fellow boy/girl student; **or**

l.   (1)   The penalty or penalties imposed shall be appropriate and proportioned to the nature and gravity of the act.

     (2)   The penalties which may be imposed and the authority or authorities competent to impose each kind of penalty are specified in the table given below:

Sr. No.	Penalty	Authority Competent to impose the penalty
(a)	Exclusion from classroom 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.	In charge of the game
(c)	Exclusion from instructional or sports tour or survey camp.	Teacher In charge or Tour In charge/ Chairman
(d)	Exclusion from the Department for a period not more than one year.	Heads of Department/ Chairman
(e)	Exclusion from the Library for not more than two weeks.	The Chairman Library Committee
(f)	Exclusion from all classes or any class in any Faculty for a period not exceeding one year.	Dean of the Faculty
(g)	Exclusion from the Hall of residence for a period not exceeding six months.	Resident Tutor, Warden, Senior Warden

(h)	Exclusion from 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, if any	Director, Students Affairs
(k)	Suspension or removal from a position of authority in the University Sports	The Chairman, Sports Committee
(l)	Cancellation or removal from a position of authority in the University Sports	The Chairman, Sports Committee
(m)	Fine up to Rs. 2000/-	Teaching/ Research Associate, Resident Tutor
(n)	Fine up to Rs. 5000/-	Assistant Professor, Warden
(o)	Fine up to Rs. 10000/-	Associate Professor
(p)	Fine up to Rs. 20000/-	Chairman of a teaching department, Professor, Senior Warden, Director Students Affairs, Chairman Transport Committee
(q)	Fine without any limit	Dean of the Faculty
(r)	Rustication from the University: i) for a period not exceeding one year	Chairman of the Deptt.
(s)	ii) for any period	Discipline Committee, Dean of the Faculty
(t)	Expulsion from the University	Discipline Committee
(u)	Withholding of result/s, certificate of good moral character etc.	Dean of Faculty, Chairman of Deptt. Discipline Committee

Note: The terms "Teaching/Research Associate", "Assistant Professor", "Associate Professor" and "Professor" include non-teaching officers, in relation to these rules, holding the posts of corresponding pay scales.

m. (1) When a case against a student is referred to the Committee, the Committee may, if it deems 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) Notwithstanding any thing contained in rule 23m(1), the Vice-Chancellor shall have the powers to impose any of the penalties mentioned in rule 23l(2) or to refer the case to the Committee.

(3) A teacher or officer mentioned in these rules in whose presence or in relation to whom an act of in-discipline 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 severer than that which he is competent to impose is called for in the case; 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 to the appropriate authority.

ii. If he is the Dean of the Faculty, he shall refer the case to the Vice-Chancellor or the Committee.

(4) No student shall be rusticated or expelled from the University, unless he has been allowed reasonablechance of replying to the accusation against him.

(5) When in the opinion of the

Committee the penalty of rustication or expulsion is not called for in a case referred to it, it may impose any other penalty or penalties mentioned in the Rule 23l(2).

n. When a teacher or officer has imposed penalty/penalties on a student under sub rule l(2) of rule 23, the latter shall not be liable to a higher or an additional penalty unless the he has been given a reasonable opportunity of showing cause against the proposed action.

o. (1) A review petition against the imposition of penalty may be made within a week's time to the teacher/officer 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 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 23o(2) of these Rules.

    (2) An appeal against a decision on imposing a penalty mentioned in Sr. No.(r) and (s) of the table under rule 23l(2) shall lie with a committee comprising as mentioned below:
        (a) The Vice-Chancellor
        (b) All Deans of Faculties
        (c) One member to be nominated by the Syndicate.
        (d) The Registrar shall be the Secretary of the Committee.

    (3) No appeal shall lie against a decision of an authority imposing a penalty other than that mentioned in Rule 23 o(1) of these rules except on the ground that such authority has imposed a penalty which it was not competent to impose.

    (4) 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.

    (5) No appeal by a student under sub rule (1) or sub rule (4) of this rule 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 reasons, extend this period up to thirty days.

p. 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, or damage to property belonging to the University or to a fellow student or to an employee of the University caused by a willful act or gross negligence of the student and if the student does not pay such compensation within a time to be specified, the Vice-Chancellor may expel him from the University and loss/ damage/compensation be recovered from his parents / guardians through legal proceedings.

q. Code of hounour for Bus Routes:

    (1) An individual traveling in the bus must respect the elders and be polite to all especially female students, women, children, old people, the weak and the helpless.
    (2) All the students must respect the teachers and others in authority in the university.
    (3) Cassette Player, singing songs, use of vulgar language, card playing, fooling, passing remarks using nick names and smoking, playing music on the mobiles, are prohibited.
    (4) Hanging with door of buses is prohibited.
    (5) Forcing driver/cleaner for undue delay, stoppage, changing routes is prohibited.
    (6) All individuals traveling in the bus must cooperate with the driver/ cleaner.
    (7) For complaints / suggestions contact Chairman Transport/DSA.

r. Policy to deal discipline cases in the bus routes.
    (1) Any eventuality occurring in the bus routes will be immediately reported by the concerned driver/ cleaner to the chairman transport through transport officer/office in writing. Failing to do so action will be taken against them as per E&D rules of the university.
    (2) Keeping in view the gravity of the problem the Chairman Transport will serve first and second notice to

deal the indiscipline during the bus routes. In acute circumstances the discipline committee empowers the following committee to deal the indiscipline problems in bus routes:

(a)   Chairman Discipline Committee
(b)   Director Student Affairs
(c)   Chairman Transport Committee

UNIVERSITY HOSTELS — 24

24.1   Limited hostel accommodation is available at campus for male students. The rooms in the hostels are allotted on the basis of academic merit.
However, a casual student or a student involved in any act of misconduct, indiscipline, violation of rules or involvement in any political and objectionable activities, shall be ineligible for hostel accommodation.
If the attendance of a student is short, his hostel allotment shall be cancelled. He may apply for fresh allotment after the next semester if his attendance is up to the mark at that time.

24.2   A student shall not occupy a room without due allotment. He shall not transfer it to any other person, nor exchange it with another student without permission of the Senior Warden.

24.3   The furniture assigned to a room shall not be shifted from it. A resident shall be responsible for the articles issued to him and shall return them to the hostel authorities when leaving the room or hostel. He shall be responsible for making good, any loss or damage to these articles.

24.4   A resident who breaks or damages any University property shall have to pay the cost of the articles, in addition to any disciplinary action that may be taken against him.

24.5   The residents shall not tamper with the room fittings, nor shall they get the doors fitted with internal locks.

24.6   A room or any part of the hostel premises shall not be used **as an office, reading room, library or for any other similar purpose by a political, religious, regional or sectarian body of the students.**

24.7   The residents shall not leave lights, heaters or fans ON when the rooms are not in use.

24.8   The residents shall not use heaters and air coolers without payment of approved charges and prior permission of the Senior Warden. The use of room heater is restricted to 1000 W. Moreover, the use of electric heaters and air coolers is strictly phrohibited during generator (loadshedding) hours in case of violation, the appliance/device shall be confiscated.

24.9   The residents are not allowed to use air-conditioners, refrigerators, ovens or similar electrical appliances. A student who violates this restriction will be liable to punishment under rules of discipline, and shall also pay the cost of any damages to the wiring or other fittings, which will be determined by the Senior Warden.

24.10   The residents are advised in their own interest, not to keep in their rooms cash or valuable articles like radios, transistors, tape-recorders, TV sets, mobile phones , laptops etc.

24.11   The residents shall be responsible for keeping their rooms tidy and clean. They shall not dispose off litter in the verandahs or other parts of the hostel premises.
Smoking is strictly prohibited in the hostel premises.

24.12   Every part of the hostel shall be opened to the hostel authorities for inspection at any time during day or night.

24.13   The residents are not allowed to wear immodest dress in the hostel.

24.14   The residents shall not keep in the hostel any fire arms or other weapons, even if licensed. Violation of this rule shall render a resident liable to expulsion from the University.

24.15   A resident shall not indulge in any amusement, which is likely to cause nuisance to others. Loud speakers, woofers and other instruments causing disturbance to other resident students are not allowed in the hostel premises in case of violation, the appliance/device shall be confiscated.

24.16   Any religious ceremony likely to injure the sentiments of other residents shall not be performed in the hostel.

24.17   The residents are not allowed to gamble or to use any intoxicants and narcotics. Violation of this restriction shall render a resident liable to expulsion from the University hostel, in addition to any criminal proceedings that may be instituted against him under the Penal Law of Pakistan.

24.18   The resident students shall not be allowed to accommodate any body else with them. In case an unauthorized person or a non student is found residing in any room of the hostel, strict disciplinary action shall be taken against the resident students concerned which may result into immediate expulsion from the hostel.

24.19   Wall chalking, displaying of un-approved posters, pasting of unauthorized notices etc in the hostels as well as in the university premises is strictly prohibited.
The students involved in such activities shall be punished in accordance with the University Discipline Rules.

24.20   The students are not allowed to form and/or join any unauthorized society, association or group etc in the

113

hostels as well as in the university on regional, political and sectarian basis. The students showing affiliation with such associations will be dealt in accordance with the University Students Discipline Rules. Unauthorized gathering, arrangement of parties and tours etc and collection of donations by the students is also strictly prohibited in the hostels as well as in the university premises.

24.21 Guests may visit the male residents in the hostel between 9.00 a.m. to 7.00 p.m. The male residents shall not receive female guests in their rooms, but may see them in the place reserved for the purpose. The guests approved by the Senior Warden may visit the female residents in Girls Hostel between 4.00 p.m. to 7.00 p.m. only. The female residents can receive the guests in Guest Room only.

24.22 Guests are not allowed to stay overnight unless it is permitted by the hostel authorities and accommodation is available in the guest rooms.

24.23 The gates of the female hostel shall remain locked for the following hours:-**Summer:**
2200 hours to 0500 hours (April to September)
Winter:2100 hours to 0600 hours (October to March)

24.24 The female residents shall not meet their male guests in or around the hostel premises. A female resident shall not leave the Campus without the written permission of the Hostel Authorities.

24.25 Students will have to vacate the hostel accommodation within a week of the expiry of the final semester regular examination.

24.26 The Senior Warden may cancel the allotment of a student who violates the Students Discipline Rules of the University.

24.27 The resident students must respect every one specially the elders and the hostel staff. If he/she humiliates or causes to humiliates any one , strict disciplinary action shall be taken against him/her besides cancelltion of hostal allotment.

ALLOTMENT OF ROOMS IN HOSTELS 25

25.1 A student seeking accommodation in a University Hostel shall submit an application to the Senior Warden on the prescribed form. Allotment will be made by the Resident Tutors under the supervision of the Senior Warden. As far as possible international students shall be provided hostel accommodation.

25.2 Students residing within the limits of Taxila, Wah Cantt., Rawalpindi and Islamabad shall not be provided hostel accommodation, unless vacancies are available after accommodating students from outside the above limits.

25.3 The types of accommodation presently available in the hostels are;
(a) Cubicle   (b) Dormitory

25.4 The order of preference for allotment of the accommodation shall be as follows:
a.   Final year students
b.   Third year students
c.   Second year students.
d.   First year students

25.5 Within each of the categories mentioned in sub-rule 25.4 except categories d, the order of preference shall be as follows:-
a.   Students who have passed the next below regular semester examination, taken as a whole
b.   Students who have failed in not more than three of the papers of the next below regular semester examination
c.   Others

25.6 **Confinements:**
a.   Hostel accommodation is not a right but facility provided by the University. It is solely
the prerogative of the University to offer a place in the hostel.
b.   A student, who fails to fulfill the degree requirements within the minimum prescribed time duration, shall not be allowed to reside in the university hostels.

UNIVERSITY DRESS CODE 26

The students shall wear dress that ensures modesty, sobriety and dignity. The dress must neither be offensive to social norms and ethical values of the society nor injurious to feminine grace and gentleness. Female students shall, preferably, wear a scarf and an overall sufficient to conceal their posture.

MISCELLANEOUS 27

27.1 **Liability for Injury Damage and Loss:**
The University teaching programs include training in its workshops and laboratories, places of engineering 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.

27.2 **Modification of Rules and Regulations:**
The rules and regulations governing various aspects of students' life at the University (such as discipline, admissions, examination, migrations, fees and charges etc.) are given in this prospectus or elsewhere 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.

ADMISSION PROCEDURE

28.1 The application along with the required documents should be submitted as early as possible. Please do not wait for the last date.

28.2 As soon as the process of selection is complete, the merit list will be notified showing the percentage of the applicants admitted in different disciplines against different categories.

28.3 All documents to be attached with the Application Form (F-I) should be attested by a class-I gazetted officer of the government or a class-A officer of this University.

28.4 Any information regarding admissions can be obtained during working hours by calling Phone Nos: (051)9047412, (051)9047427 and (051)9047405. Members of the Admission Committee will also be available for consultation, in person, during admission period.

ELIGIBILITY FOR ADMISSION 29

29.1 Eligibility Requirements

a.   An applicant for admission to BSc Degree Course in Civil, Electrical, Electronics, Mechanical, Computer, Software, Industrial, Telecommunication, Mechatronics and Environmental Engineering must fulfill the following eligibility requirements:

(1)   He should have passed the Intermediate (Pre-Engg) Examination with Mathematics, Physics and Chemistry from a Board of Intermediate and Secondary Education of Pakistan or an equivalent examination so recognized by the university.

Note: For admission to Computer, Software, Telecommunication & Electronics Engineering the candidate having passed F.Sc. with Physics, Mathematics and Computer Science as major subjects will also be eligible.

(2)   He should have passed the examination (up to the latest annual examination) on the basis of which he seeks admission.

(3)   He should have obtained at least 60% marks in examination on the basis of which he seeks admission. Marks for NCC and Hifz-e-Quran, where applicable, shall be added only for determination of merit and not towards eligibility.

(4)   He should be bonafide resident of the area from where he seeks admission.

(5)   He should meet standards of physique and eyesight laid down in the medical certificate F-V.

(6)   He should have appeared in the Entry Test for the respective Session arranged by the University with the following combinations (English, Mathematics, Physics, Chemistry/Computer Science)

NB: A person, whose name has once been removed from the rolls of this University (for whatsoever reason), will not be eligible to seek admission again in this University.

b.   **Equivalent Examination:**
The university recognizes the following examinations as equivalent to the Intermediate (Pre-Engg) Examination with Chemistry, Mathematics and Physics of the Pakistani Boards of Intermediate and Secondary Education:-

(1)   Intermediate (Pre-engineering) Examination of the Board of Intermediate & Secondary Education, Azad Kashmir.

(2)   FSc. (Pre-medical) with Mathematics as an additional subject.

(3)   Cambridge Overseas Higher School Certificate with Physics, Chemistry and Mathematics.

(4)   British General Certificate of Education (Advanced Level) with Physics, Chemistry and Mathematics.

(5)   American High School Graduation Diploma (HSG Diploma).

(6)   Any foreign equivalent certificate or diploma accepted by IBCC (Inter Board Chairmen Committee).

Note: Applicants (Sr. No. 3 to 6) are required to attach an equivalence certificate (Pre-Engineering) issued by the IBCC, with the application for admission.
The following is the address of the IBCC:
Inter Board Committee of Chairmen,
Federal Board of Intermediate and
Secondary Education Building
H-8/4, Islamabad-PAKISTAN

29.2 Eligibility for Diploma Holders

a.   For admission against seats reserved for holders of the Diploma of Associate Engineer, he should have passed the diploma examination from the Punjab Board of Technical Education, Lahore in the relevant technology, obtaining not less than 60% marks.

b.   Applicants seeking admission against seats reserved for the holders of diploma of Associate Engineer shall not be eligible

unless their diplomas are in the relevant technology as specified against each degree course given below:

Electrical / Electronic Engineering
- Diploma in Electrical Technology
- Diploma in Electronics Technology
- Diploma in Instrument Technology

Mechanical Engineering
- Diploma in Mechanical Technology
- Diploma in Refrigeration and Air-conditioning Technology

Industrial Engineering
- Diploma in Industrial Technology
- Diploma in Mechanical Technology
- Diploma in Cast Metal and Foundry
- Diploma in Mechanical (Production)

Civil Engineering
- Diploma in Civil Technology

Mechatronics Engineering
- Diploma in Mechatronics
- Diploma in Automation and Control

Computer Engineering
- Diploma in Computer Technology

Telecom Engineering
- Diploma in Telecom Technology

Note: **Diploma holders are eligible to apply in Category-I and Category-I1 in their specific field only. They are not eligible to apply in any other category.**

29.3 Provisions about admission on the basis of a BSc Degree

Given the qualifications and restrictions stated below, a person is eligible for admission to the Bachelor's Degree courses at the University on the basis of a degree of Bachelor of Science.

a. For admission to the BSc courses in any engineering discipline, an applicant must have passed the BSc Examination with Physics and Mathematics.

b. A person possessing a BSc degree is NOT eligible for admission to any Bachelors Degree course at the university unless he has also passed FSc. Pre engineering or Pre Medical Examination.

29.4 Gender

Both male and female persons are eligible to apply for seats shown in the Seats Allocation Chart in section 30. The general pronoun "he" and its derivatives imply either of the sex.

Number of seats allocated for various categories are tabulated below. Admission is granted in each category on merit, subject to eligibility under relevant Sections.

	CATEGORIES	Civil	Mechanical	Electrical	Electronic	Environment	Industrial	Computer	Software	Telecom	City & Regional Planning	Metallurgy & Materials	Computer Science	Total
A	Punjab	153	149	154	34	34	34	79	77	82	45	45	45	931
B.	Sind	1	1	1	-	-	-	-	-	-	-	-	-	3
C.	Balochistan	2	2	2	-	-	-	-	-	-	-	-	-	6
D.	Khyber Pakhtunkhwa	1	1	1	-	-	-	-	-	-	-	-	-	3
E.	A.J.K. and Gilgit Baltistan													
	(i) Azad Kashmir	2	2	1	-	-	-	-	-	-	-	-	-	5
	(ii) Kel Area	(OPEN)												1
	(iii) Gilgit Baltistan	1	1	1	-	-	-	1	1	1	-	-	-	6
F	HEC Nominees from Balochistan and FATA	4	4	4	1	1	1	2	2	2	-	-	-	21
G	Disable Persons	-	-	-	-	-	-	-	2	-	-	-	-	2
H.	Foreign Nationals													
	(i) Foreign Countries	3	3	3	-	-	-	-	-	-	-	-	-	9
	(ii) Afghan Nominee	(OPEN)									-	-	-	1
	(iii) Bangladesh Nominee	1	2	1	-	-	-	-	-	-	-	-	-	4
	(iv) Indian held Kashmir	-	1	-	-	-	-	1	1	-	-	-	-	3
I.	Diploma of Associate Engineer	5	5	5	2	2	2	4	4	4	-	-	-	33
J.	Children of Armed Forces personnel													
	(i) Army	1	2	1	-	-	-	-	-	-	-	-	-	4
	(ii) Air Force	-	1	-	-	-	-	-	-	-	-	-	-	1
	(iii) Navy	-	-	1	-	-	-	-	-	-	-	-	-	1
K.	Federally Administered Tribal Areas	(OPEN)									-	-	-	2
L.	Backward Areas	(OPEN)									-	-	-	2
M.	Children of University Employees	(Maximum five seats in a discipline)												25
N.	Children of Graduate Engineers/ Architects/ City & Regional Planners	1	1	1	-	-	-	-	-	-	-	-	-	3
O.	Children of University Alumni	(OPEN)									-	-	-	1
Q1.	Tribal Areas of DG Khan District	(OPEN)									-	-	-	1
Q2.	Tribal Areas of Rajanpur District	(OPEN)									-	-	-	1
T	Tehsil Taxila	maximum one seat in a discipline												2
X	Overseas Pakistanis Students	15	15	15	8	8	8	10	10	10				99
	TOTAL													**1170**

1. Reciprocal Basis
2. Attock, Bahawalnagar, Bahawalpur, Bhakkar, Chakwal, D.G. Khan, Jhang, Jhelum, Layyah, Muzaffargarh, Mianwali, Rahim Yar Khan and Rajanpur Districts.

Seats Allocation Chart 2014 ENTRY (Sub Campus Chakwal)

	Catagories	Electronics	Mechatronics	Petroleum & Gas	Management Sciences	Computer Science	Total
W	Punjab	42	42	45	45	45	219
S	Chakwal Domicile (High Merit)	2	2	-	-	-	4
P	Tribal Areas of (DG Khan)	1	1				2
R	Federally Administered Tribal Areas	(OPEN)		-	-	-	2
Y	Gilgit Baltistan	1	1				2
Z	Children of Overseas Pakistanis	2	2	-	-	-	4
I(1)	Diploma of Associate Engineer	01	01				02
	TOTAL						**235**

CATEGORIES AND SYMBOLS 31

31.1 Category A (Punjab Province)
The applicant should be a bonafide resident of the Punjab province. The selection and allocation of disciplines are made according to merit.

31.2 Category B (Sind Province)
The applicant should be a bonafide resident of the Sind province. 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. Diploma holders are not eligible to apply in this category. The last date for receipt of nominations at UET Taxila (irrespective of mode of communication or the date of postage) is 7days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations. Nominations and allocation of disciplines are made by the Department of Education, Government of Sind, Karachi.

31.3 Category C (Balochistan Province)
The applicant should be a bonafide resident of the Balochistan province. Applications are to be submitted to the Secretary, Department of Education, Government of Balochistan, Quetta. Nominations and allocation of disciplines are made by this Department. Diploma holders are not eligible to apply in this category. The last date for receipt of nominations at UET Taxila (irrespective of mode of communication or the date of postage) is 7 days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations.

31.4 Category D (Khyber Pakhtunkhwa Province)
The applicant should be a bonafide resident of the Khyber Pakhtunkhwa Province. Applications are to be submitted to Registrar, Khyber Pakhtunkhwa University of Engineering and Technology, Peshawar. Nominations and allocation of disciplines are made by the Department of Education, Government of Khyber Pakhtunkhwa, Peshawar. Diploma holders are not eligible to apply in this category. The last date for receipt of nominations at UET Taxila (irrespective of mode of communication or the date of postage) is 7 days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations..

31.5 Category E (AK including KEL Area & Gilgit Baltistan)
The applicant for the Azad Kashmir & Kel Area seats should be a national of Azad Kashmir, and the applicant for the Gilgit Baltistan seat should be bonafide resident of these Areas. For the seats reserved for Azad Kashmir and Kel Area, applications are to be submitted to the Secretary Education, Azad Jammu & Kashmir Government of Muzaffarabad.
For the seats reserved for the Gilgit Baltistan applications are to be submitted to the Director of Education, Gilgit Baltistan. Nominations and allocation of disciplines are made by the Nomination Board for the Azad Kashmir and Gilgit Baltistan. Diploma holders are not eligible to apply in this category. The last date for receipt of nominations at UET Taxila (irrespective of mode of communication or the date of postage) is 7 days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations.

31.6 Category F (HEC Nominees from Balochistan and FATA)
The applicant should be a bonafide resident of the Balochistan province or FATA. Applications are to be submitted to the Higher Education Commission (HEC), Islamabad. Nominations and allocation of disciplines are made by HEC. Diploma holders are not eligible to apply in this category. The last date for

receipt of nominations at UET Taxila (irrespective of mode of communication or the date of postage) is 7 days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations.

31.7 Category G (Disabled Persons)

The applicant should be bonafide resident of Punjab Province. The applicants will have to furnish a certificate from concerned Medical Superintendant of DHQ Hospital. Verification of his disability in view of provided certificate in relation to engineering

education will be done by the Chief Medical Officer, UET, Taxila. The selections are made by the University according to merit. Diploma holders are not eligible to apply. The blind, deaf & dumb persons are not eligible to apply in this category.

31.8 Category H (Foreign Countries)

The applicant is required to get his application sponsored by his government, and sent in triplicate to the Ministry of Finance and Economic Affairs (Economic Affairs Division) Government of Pakistan, Islamabad, through Pakistan's representative accredited to his country. The applications should be accompanied by the following documents:

a. Educational Certificates (attested photocopies) and details of syllabi and courses of study of the examinations passed with English translation if these are in a different language
b. Domicile/Nationality Certificate
c. Passport
d. Character Certificate
e. Health/Fitness Certificate
f. Information regarding the class and discipline in which admission is required Nominations. Allocation of disciplines is made by the Ministry of Finance and Economics Affairs (Economic Affairs Division) Islamabad. The prescribed application forms may be obtained from the ministry. Diploma holders are not eligible to apply in this category.

31.9 Category I (Diploma Holders)

The applicant should be a bonafide resident of the Punjab province and should have passed the relevant diploma examination from the Punjab Board of Technical Education, Lahore. Selection and allotment of disciplines are made according to merit.

31.10 Category J (Children of Armed Forces Personnel)

Applications are to be submitted to the Headquarters of the Army, Air Force or the Navy (depending upon the service to which the parent belongs) in accordance with the procedure notified by them. Diploma holders are not eligible to apply in this

category. The last date for receipt of nominations at UET Taxila (irrespective of mode of communication or the date of postage) is 7 days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations. Nominations and allocation of disciplines are made by the respective Headquarters.

31.11 Category K (FATA)

The applicant should be a bonafide resident of the Federally Administered Tribal Areas. The applications are to be submitted to the Secretary, State and Frontier Regions Division, Government of Pakistan, Islamabad. Nominations and allocation of disciplines are also made by this Division. Diploma holders are not eligible to apply in this category. The last date for receipt of nominations at UET Taxila (irrespective of mode of communication or the date of postage) is 7 days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations.

31.12 Category L (Backward Areas of Punjab)

The backward areas of Punjab include districts of Bahawalnagar, Bahawalpur, Attock, Rahim Yar Khan, Muzaffargarh, Leiah, Rajanpur, Bhakkar, Jhang, D.G. Khan, Chakwal, Mianwali and Jhelum. The applicant should be a bonafide resident of any of these districts. The selection and allocation of disciplines are made by the university according to merit.

31.13 Category M (Children of University Employees)

Real children of those university employees who have completed five years of service being physically present are eligible to apply in the following order of preference. The selection is made by the university according to merit.

1. Real children (having passed F.Sc) of those university employees whose services have been transferred to University of Engineering and Technology, Taxila vide office no. 23, dated 11-11-1993.
2. Real children (having passed F.Sc) of those university employees who have joined UET Taxila after 1993.
3. Real children (having passed DAE examination in relevant field) of those university employees whose services have been transferred to UET, Taxila vide office order no.23, dated 11-11-1993 issued by UET, Lahore in accordance with UET, Taxila ordianance 1993.
4. Real children (having passed DAE examination in relevant field) of those university employees who have joined UET Taxila, after 1993.
5. However only a maximum one candidate will be admitted in one engineering discipline if the real children (having passed DAE examination in relevant field) of an

employee is eligible for admission subject to fullfilling the conditions as mentioned in subclause 3 & 4. The applicants have to furnish with their applications a certificate from the Registrar of the University on Form F-IX (available in Registrar's office).

31.14 Category N (Children of Graduate Engineers)

The applicant should be a bonafide resident of the Punjab province. The selection and allocation of disciplines are made by the university according to merit.

Applicants should furnish with their applications attested photocopies of their parent's Bachelors Degree in Engineering and renewed PEC Registration card. Other qualifications such as AMIE (Pak) are not recognized for inclusion in this category.

31.15 Category O (Children of University Alumni)

The selection and allocation of disciplines are made by the University according to merit. The applicant should furnish with his application an attested photocopy of the Provisional Certificate 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 University College of Engineering.

31.16 Category Q1 (Tribal Areas of DG Khan)

The applicant should be bonafide resident of the area of D.G. Khan Tribal Areas. The selection and allocation of disciplines are made by the University according to merit. Diploma holders are not eligible to apply.

Applicant must furnish a certificate from the District Coordination Officer Dera Ghazi Khan verifying that he/she is a bonafide resident of the Tribal Areas of D.G. Khan District and his domicile should also depict that he is a resident of the tribal area of DG Khan.

31.17 Category Q2 (Tribal Areas of Rajanpur)

The applicant should be bonafide resident of the area of Rajanpur Tribal Areas. The selection and allocation of disciplines are made by the University according to merit. Diploma holders are not eligible to apply.

Applicant must furnish a certificate from the District Coordination Officer Rajanpur verifying that he/she is a bonafide resident of the Tribal Areas of Ranajpur District and his domicile should also depict that he is a resident of the tribal area of Rajanpur.

31.18 Category T (Tehsil Taxila Domicile)

The applicant should be a bonafide resident of Tehsil Taxila. The selection and allocation of disciplines are made by the university according to merit. Diploma holders are not eligible to apply in this category.

31.19 Category X (Children of Overseas Pakistanis)

Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. 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 (can be downloaded from university website) regarding his parent's employment in a foreign country issued by the Pakistani Embassy in that country.

ii) A photocopy of his parent's valid resident visa for that country attested by the Pakistani Embassy.

Note: Only real children of overseas Pakistanis are eligible to apply. Diploma holders are not eligible.

Categories and Symbols for Chakwal Campus

31.20 Category W (Punjab Province)

The applicant should be a bonafide resident of the Punjab province. The selection and allocation of disciplines are made by the university according to merit. Diploma holders are not eligible to apply.

31.21 Category S (Chakwal Domicile)

The applicant should be a bonafide resident of district Chakwal. The selection and allocation of disciplines are made by the university according to merit. Diploma holders are not eligible to apply.

31.22 Category P (Tribal Areas of D.G. Khan)

The applicant should be bonafide resident of the area of D.G. Khan Tribal Areas. The selection and allocation of disciplines are made by the university according to merit. Diploma holders are not eligible to apply. Applicant must furnish a certificate from the District Coordinator Officer Dera Ghazi Khan verifying that he/she is a bonafide resident of Tribal Areas of D.G. Khan District and his domicile should also depict that he is resident of the tribal area of D.G. Khan.

31.23 Category R (FATA)

The applicant should be a bonafide resident of the Federally Administered Tribal Areas. The applications are to be submitted to the Secretary, State and Frontier Regions Division, Government of Pakistan, Islamabad. Nominations and allocation of disciplines are also made by this Division. Diploma holders are not eligible to apply in this category. The last date for receipt of nominations at UET Taxila (irrespective of mode of communication or the date of postage) is 7 days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations.

31.24 Category Y (Gilgit Baltistan)

The applicant should be bonafide resident of Gilgit Baltistan. The applications are to be submitted to the Director of Education, Gilgit Baltistan. Nominations

and allocation of disciplines are made by the Nomination Board of the Gilgit Baltistan. Diploma holders are not eligible to apply in this category. The last date for receipt of nominations at UET, Taxila (irrespective of mode of communication or the date of postage) is 7 days before date of closing of admission. Unfilled seats (if any) will be cancelled after the prescribed date for receipt of nominations.

31.25 **Category Z (Children of Overseas Pakistanis)**

Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. 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 (can be downloaded from university website) 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.

Note: Only real children of overseas Pakistanis are eligible to apply. Diploma holders are not eligible.

31.26 **Category I(1) (Diploma Holders)**

The applicant should be a bonafide resident of the Punjab province and should have passed the relevant diploma examination from the Punjab Board of Technical Education, Lahore. Selection and allotment of disciplines are made according to merit.

Note: Only one F-1 is required in disciplines of Main Campus Taxila and Sub Camups Chakwal. The applicant should precisely and care fully fill the preferences table.

DETERMINATION OF MERIT 32
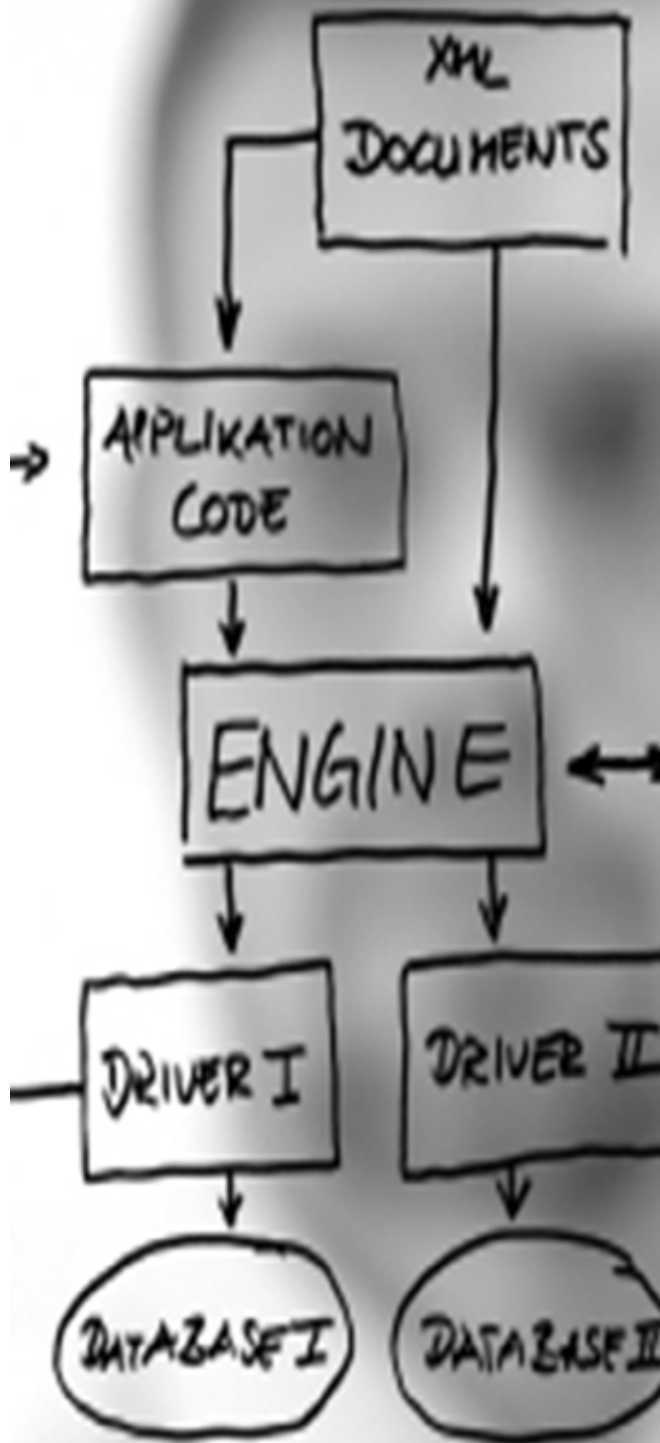
32.1 Examinations Considered for Merit

For admission to all the Bachelors Degree Courses and determination of merit the following examinations are considered:

i) Higher Secondary School Certificate Examination (HSSC) Pre-Engg or equivalent.
ii) Bachelor of Science (BSc) or BASc.
iii) Diploma of Associate Engineer.
iv) Entry Test.

32.2 Weighted Percentage

The comparative merit of applicants will be determined on the basis of weighted percentage marks obtained by them in these examinations.

A) For Applicants with HSSC (Pre-engineering) as the Highest Qualification

i)	HSSC (Pre-engineering) or Equivalent	70%
ii)	Entry Test	30%

B) For Application with BSc OR BASc as the Highest Qualification

i)	BSc or equivalent	35%
ii)	HSSC or equivalent examination	35%
iii)	Entry Test	30%

C) For Applicants Having Diploma of Associate Engineer as the Highest Qualification

i)	Diploma of Associate Engineer	70%
ii)	Entry Test	30%

32.3 Merit of FSc (Pre-medical) with Mathematics

In determining the merit of an applicant having FSc (Pre-medical) with Mathematics as an additional subject, the marks obtained in the subject of Biology are replaced by those obtained in Mathematics.

32.4 Credit for NCC

Twenty marks are added to the marks obtained in the highest examination of an applicant who has successfully completed the NCC training. An applicant gets the benefit only if he submits with his application an attested photocopy of the original certificate issued by the Director General National Cadet Corps & Women Guard. No substitute for the original certificate is recognized.

32.5 Credit for Hifz-e-Quran

Twenty marks are added to the marks obtained in the highest examination of an applicant who is Hafiz-e-Quran. He gets the benefit only if he:

i) fills in the necessary column provided in the

application Form (F-I), and

ii) appears before the 'Verification Committee' appointed by the Vice-Chancellor and the Committee accepts his claim of being a Hafiz-e-Quran.

The Verification Committee will meet for this purpose in the office of the Convener, Admission Committee, on the notified date and time. No separate call letters will be issued in this connection.

32.6 Determination of Merit in case of Equal Percentage of Admission Marks

If two or more applicants have equal percentage of admission marks (up to three decimal places), 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 three 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 the Discipline/Category.

32.7 Merit Determined Category Wise

The seats for admission to the Bachelor's degree courses at the university are distributed over various categories. These categories are discussed in Section 31. The details of the distribution of seats are available in the Seats Allocation Chart in Section 30.

The eligible applicants for each category are grouped separately. Then on the basis of the weighted percentage of marks obtained in the relevant examinations, comparative merit of the applicants comprising the group is prepared. The applicants belonging to a category thus compete for admission amongst themselves for the seats allocated to it.

32.8 Transfer on the Basis of Given Preferences and Merit

In case a seat in any Discipline/ Category of higher preference given by a candidate falls vacant and he is eligible for transfer to that Discipline/Category on the basis of his merit, he shall be automatically transferred to that Discipline/Category. He will have no right to retain his admission in the previous Discipline/Category because the seat vacated by him shall be simultaneously allotted to the next eligible candidate on merit.

32.9 Freezing in any given Discipline and Category

If an applicant requests in writing to retain the discipline and category in which he has been selected for admission on merit, then he will not have any right to claim his admission in any other discipline and category of higher or lower merit if a seat falls vacant in any discipline.

Applicant desiring to freeze category / discipline should have to apply in person on prescribed form for this purpose.

32.10 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.

32.11 Typical Examples for the Calculation of Weighted Percentage for Admission

CASE 1:
Applicants having HSSC (FSc) or Equivalent as the highest qualification
Formula :
(70×((HSSC marks obtained + NCC + HIFZ-E-QURAN)/HSSC total marks))+ (30×Entry Test marks obtained/Entry Test total marks))
Example
An applicant obtained 848/1100 in HSSC (having passed the HSSC examination as a whole) and 300/400 in Entry Test. He has obtained NCC Certificate as well.
% Admission Marks
(70×((848+20)/1100))+(30×(300/400))= 77.736 %

CASE 2:
Applicants having BSc or BASc as the highest qualification
Formula :
(35×(HSSC marks obtained/HSSC total marks))+ ((35×BSc marks obtained + NCC + HIFZ-E-QURAN)/BSc total marks))+(30×(Entry Test marks obtained/Entry Test total marks))
Example
An applicant obtained 820/1100 marks in HSSC, 624/800 marks BSc (Passed all of them as a whole) and 360/400 marks in Entry Test, having also NCC certificate:
% Admission Marks
(35×(820/1100))+(35×((624+20)/800))+(30×(360/400))
= 81.265%

CASE 3:
Applicants having Diploma of Associate Engineer as the highest qualification
Formula :
(70×((Diploma marks obtained + NCC+HIFZ-E-QURAN)/ Diploma total marks))+ (30×Entry Test marks obtained/Entry Test total marks))
Example
An applicant 2570/3100 in Diploma and 240/400 in Entry Test. He has obtained NCC Certificate as well.
% Admission Marks
(70×((2570+20)/3100))+ (30×(240/400)) = 76.483 %

CATEGORIES	A- Open Merit	G-Disabled Person	L-Backward Areas	O-Alumni	I-Diploma Holders	N-Children of Graduate Engineers	Q1- DG Khan Dist	Q2-Rajan Pur Dist	T-Tehsil Taxila	X-Overseas
Mechanical	76.750	-	77.302	-	72.072	75.068	70.693	54.395	76.225	66.848
Electrical	74.698	-	-	73.205	71.460	74.391	-	-	78.025	63.914
Civil	74.398	-	-	-	69.682	73.595	-	-	-	64.207
Electronic	73.761	-	-	-	70.653	-	-	-	-	62.286
Telecom	71.084	-	-	-	62.455	-	-	-	-	57.645
Industrial	72.611	-	-	-	69.754	-	-	-	-	57.418
Computer	71.180	-	-	-	60.328	-	-	-	-	55.052
Software	71.757	66.286	-	-	-	-	-	-	-	54.357
Environmental	70.091	-	-	-	-	-	-	-	-	47.655

Merits for the Session 2013 (Chakwal Campus)

CATEGORY	W-Open Merit	I-1 Diploma Holders	S- Tehsil Chakwal Open Merit	P- DG Khan Dist	Z-Overseas
Mechatronics	70.541	62.939	72.355	-	59.770
Electronics	69.559	69.300	69.682	67.261	49.766

Note: The figures given in this table show "weighted percentage" based on all requisite components.

DOMICILE REQUIREMENTS — 34

34.1 Domicile Certificates to be submitted by All Applicants

All applicants are required to submit with their applications an attested photocopy of their domicile certificate failing which their applications shall not be considered for admission.

34.2 Applicants Required to Submit Additional Documents

Applicants for categories A, G, I, L, N, Q1, Q2, T, W, I-1, S, and P who have passed either the Secondary School Examination or the Higher Secondary School Examination from any Board of Intermediate and Secondary Education not included in the Punjab Province or Federal Capital Area, Islamabad, will have to submit additional documents in support of their domicile.

34.3 Additional Documents Required

The applicants who are required to submit additional documents may fall into the following three categories:

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 F-II 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. **Others**

Applicants other than those at sub para "a" above have to submit the following additional documents in support of their domicile certificate:

i) An attested Photocopy of father's/ mother's domicile certificate of the Punjab Province or the Federal Capital Area, Islamabad.

ii) Documentary Proof in the form of a certificate on Form F-III from the election officer of concerned area of the Punjab Province/ Federal Capital Area, Islamabad to the effect

that name of the father/mother of the applicant appears in the electoral rolls.

    iii)   An attested Photocopy of the relevant page of the electoral rolls on which the name of the father/mother of the applicant appears.

    iv)   An attested Photocopy of the identity card of the applicant's father/mother.

    v)   An undertaking from the candidate on Form F-IV.

c.   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 evidence of his father's/mother's immovable property in Punjab or Federal Capital Area, Islamabad.

    ii)   Documentary proof of his father's death.

34.4   Domicile Requirements for 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 A, he has to submit with his application a certificate from the GOC of the area regarding the place of his parent's posting.

DOCUMENTS TO BE ATTACHED WITH FORM F-I   **35**

An applicant must exercise great care in ensuring that his application form (F-I) is submitted accompanied by the required documents. An application shall stand rejected if any of the required documents is missing. No document shall be accepted after the last date for receipt of applications. The documents required from applicants for different categories are summarized below:

35.1   Documents to be submitted by All Applicants: (Attested Photocopies)

a.   Certificate of Secondary School Examination (Detailed Marks Certificate).

b.   Degree, Diploma or Certificate of the examination on the basis of which admission is sought (i.e. FSc, BSc, or Diploma of Associate Engineer etc.). Results cards issued by the board/university are acceptable. Provisional Certificate in place of Degree/Diploma will not be accepted.

c.   Detailed Marks Certificate of the examination on the basis of which admission is sought.

d.   Domicile Certificate.

35.2   Additional Documents (Mandatory)

To whom applicable:

a.   If you have passed FSc. (Pre-medical), you have to submit an attested photocopy of the certificate for additional Mathematics.

b.   If you are seeking admission on the basis of BSc Degree you have to submit an attested photocopy of the FSc Certificate as well.

c.   If you are applying for G category seats, you have to submit a certificate from concerned Medical Superintendant of D.H.Q. Hospital.

d.   If you are applying for the M Category seats, you have to submit in original a certificate from the Registrar of the university on prescribed **Form F-IX** (Available in the Registrar's office).

e.   If you are applying for the N Category seats, you have to submit an attested photocopy of the relevant degree of your father or mother.

f.   If you are applying on O category seats, you have to submit an attested photocopy of the educational degree/certificate of your parent as an evidence of the fact that he (parent) was a graduate of this university or its parent institution, i.e. the former University College of Engineering.

g.   If you are applying on P, Q1 or Q2 category seats, you have to submit a certificate from the District Coordination Officer verifying that he is a bonafide resident of the tribal areas of respective districts.

h.   If you are applying on X or Z category seats, you have to submit

    i)   A Certificate on **Form F-VIII** (can be downloaded from university website) regarding his parent's employment in a foreign country issued by the Pakistani embassy in that country.

    ii)   A photocopy of his parent's valid resident visa for that country attested by the Pakistani Embassy.

i.   If you have successfully completed the NCC training and wish to claim 20 marks you have to submit an attested photocopy of the certificate issued by the Director General National Cadet Corps and Women Guards.

j.   If you are claiming 20 marks for being Hifz-e-Quran, read clause 32.5 of the

prospectus carefully.

k. If you are the son of Armed Forces Personnel and are seeking admission not against the seats reserved for the province of your domicile but against the seats reserved for the province where your parent is posted, you have to submit in original certificate from the GOC of the area about the place of your parent's posting.

l. If you are applying for any category requiring the Punjab domicile and you have passed either the Secondary School Examination or the Higher Secondary Examination from a Board or Institution not included in the Punjab/Federal Capital Area, Islamabad. You should read section 34.2 carefully to find out the additional documents, you have to submit alongwith **Form F-I**.

Note: **The Form F-V, Form F-VI and Form F-VII are not to be submitted along with the application. They are required at the time of admission/registration.**

HOW TO COMPLETE THE APPLICATION FORM   36

Only online filled application Forms will be accepted. A candidate can fill the application form, available online at: **admissions.uettaxila.edu.pk**

While filling the FORM F-I please read the following instructions carefully.

Instructions for Online Filling of Application Forms.

On the web-link admissions.uettaxila.edu.pk then click on **My UET** button. Enter your ID Card/B Form No. issued by NADRA and set password then click **Register** button for registration with UET to access the application Form.

Candidate can **Sign in**. Please fill the perosnal information, applicable option, Educational information and preferences .

The candidate can **Sign in** again and again to see/ edit his/her data until he /she submits his/her final printed application Form **BY HAND** in Admission Office ,UET , Taxila.

Online Filling of Application Form:

After filling the Application Form online according to given instructions, applicant will get its prinout, sign it and attach requisite documents,along with the Declaration Form-I (avaiable in the Prospectus) and then submit **BY HAND** in the Admission Office ,UET , Taxila

36.1 Only one application form is to be submitted for any number of disciplines and categories you apply for.

36.2 All entries should be in BLOCK LETTERS.

36.3 **Fill the column for preferences very carefully. The order of preferences once given shall be final and cannot be changed subsequently, after the submission of Application Form in Admission Office.**

36.4 Under column "Discipline" use the following abbreviations.

Taxila Campus

Civil Engineering	**Civil**
Computer Engineering	**Computer**
Electrical Engineering	**Electrical**
Electronic Engineering	**Electronic**
Mechanical Engineering	**Mechanical**
Software Engineering,	**Software**
Telecommunication Engineering	**Telecom**
Industrial Engineering	**Industrial**
Environmental Engineering	**Environmental**
Metallurgy and Material Engg	**Metallurgy**
City and Regional Planning	**C&RP**
Computer Science	**CS**

Chakwal Campus

Electronic Engineering	**Electronic**
Mechatronics Engineering	**Mechatronics**
Petroleum and Gas	**P&G**
Management Sciences	**Management**
Computer Science	**CS (Chakwal)**

36.5 Under the column "Category" use only the symbols (i.e. A, G, I, L, M, N,O, Q1, Q2, T or X) for Main Campus and use the symbols W, S, P, Z or I1 for Chakwal Campus.

For Example :

Sr. No.	Discipline	Category
1	Electrical	A
2	Electronic	A
3	Mechanical	A
4	Computer Science	A
5	Petroleum & Gas	W
6	Electronic	W

Now the above table shows that your:

• 1st preference is Electrical (Main Campus) for Open merit seats.

• 2nd preference is Electronic (Main Campus) for Open merit seats.

• 3rd preference is Mechanical (Main Campus) for Open merit seats.

• 4th preference is Electronic (Chakwal Campus) for Open merit seats.

36.6 **Deadline for Receipt of Applications**

a. The application form complete in all respects along with the requisite documents should be sumitted Personally (by hand) in the Admission Office, UET, Taxila on or before the last date notified for submission of applications.

36.7 Incomplete Applications

Incomplete applications shall not be entertained. Application form, fee and the documents submitted with it shall not be returned on any ground.

PROCEDURE FOR THE SELECTED CANDIDATES 37

37.1 Notification of Selection

A list of selectees will be displayed on official University web site(admissions.uettaxila.edu.pk). The applicants can check the merit lists according to the schedule given in Section 40.

IMPORTANT : Consideration in 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 UNIVERSITY DUES AND ORIGINAL DOCUMENTS**. **If he fails to do so, his name would be excluded from any future merit lists and his admission would be cancelled.**

37.2 Depositing of Dues and Documents

Within specified days mentioned in the admission schedule (Section 40), a selectee is required to pay the university dues and submit the following documents to the Convener, Admission Committee.

a. Bank Challan receipt in support of the University Dues deposited in the Habib Bank Ltd., Engineering University Branch Taxila.
b. Medical Certificate (F-V) duly signed and stamped by the District Medical Superintendent or the Medical Officer of the university or a Commissioned Medical Officer
c. Ten attested and most recent photographs.
d. Attested Certificate of parent's/guardian's income.
e. Original degrees, certificates and result cards of SSC, FSc. BSc, GCE(A), Diploma of Associate Engineers or the equivalent qualifications and their duplicate attested photocopies.
f. Original Marks Sheet of Entry Test.
g. Original NCC certificate.
h. Original Domicile certificate.

i. Attested photocopy of National Identity Card/Form B.
j. Bio-Data Sheet (F-VI) duly completed.
k. Undertaking (F-VII) on a Rs.100/- judicial paper duly completed.

37.3 Relaxation in Time Limit

If a selectee is prevented by unavoidable circumstances from timely fulfillment of the requirements laid down in 37.1 and 37.2, he should intimate the Chairman/Convener Admission Committee about it within the prescribed time limit along with relevant documentary proof. The Chairman/Convener Admission Committee may, at his discretion, grant relaxation in the time limit, which shall not exceed THREE days.

37.4 Forfeiture of Right for Admission

A selectee who fails to fulfill the requirements laid down in 37.1 and 37.2 within the prescribed time limit shall forfeit his right of admission and **will not be considered in subsequent merit lists.**

37.5 Provisional Admission

On fulfillment of the obligations mentioned in 37.1 and 37.2 a selectee will be admitted to the university. This admission shall however, be provisional until all the original degrees or certificates, submitted by him, have been verified for their veracity. In case any document proves to be false, fake, fabricated or do not comply towards eligibility criteria mentioned in section 29 found 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 favor of the university.

37.6 Deadlines for Admission

Admission shall be closed from date as given in admission schedule (clause 40).

37.7 Notification of Selection of Categories B, C, D, E, F, H, J, K, R, Y

The applicants for the seats reserved for these categories will be informed about selections by the authority responsible for their selection. After that the university will issue them call letters with a target date to report in the Admission Office to complete the remaining admission formalities.

38.1 The following fees and charges are to be paid by the students admitted to the bachelor degree courses. The same are subject to revision/modification by the University authorities at any time without prior notification.

Subject	Open Merit and all other categories except X & Z	Children of Overseas Pakistanis Categories X & Z
Non-Recurring (Payable at the time of admission)	**(In Pak. Rupees)**	**(In Pak. Rupees)**
Admission fee/Re-admission Fee	2000	5000
Registration Fee	2000	2000
University/ Library Security (Refundable)	10000	10000
Survey Camp Charges (for Civil Engg. Only)	1500	1500
Students Bus Card Fee	30	30
Students Identity Card Fee	125	125
Verification Fee	1000	1000
Recurring Fee (per semester)		
Tuition Fee	26000	90000
Tutorial Fee	200	200
Inter-University Tournament Fee	200	200
Magazine Fee	200	200
Medical Fee	500	500
Library Fund	500	500
Book Bank Rent	300	300
Instructional Tour Fee	500	500
Recreation Fee	600	600
Bus Fare for Resident	1500	1500
Bus Fare for Non-Resident	6000	6000
Stationery Charges	100	100

38.2 For Examination Fees, see the relevant section.

38.3 The University also grants fee remission and fee concession as per rules to subsidized students. Students are directed to maintain their own personal record of original receipts of dues till clearance to avoid problem in future. Non production of original Dues/receipts on demand can be considered as non-deposit of fee.

38.4 The Dean of the concerned faculty, on the recommendation of the Chairman concerned, may grant extension in payment of dues to the needy students on cogent reasons recorded in writing for a maximum period of 60 days beyond the schedule of the dues circulated by Dues & Scholarship Section. He / she may also allow the payment of dues in TWO installments. However, remission of late fee fine or re-admission fee cannot be waived off if extension is not allowed by Dean beyond the extension period. endation of the Chairman concerned, may grant extension in payment of dues to the needy students on cogent reasons recorded in writing for a certain period beyond the schedule of the dues circulated by the Treasurer. He/She may also allow the payment of dues in TWO installments. However, remission of late fee fine or re-admission fee cannot be waived off in any case.

38.5 Once a student is registered, no refund of any amount deposited by the student for admission, except the securities, shall be allowed in any case at any stage.

38.6 (i) University dues received in favor of students under loan scheme of National Bank of Pakistan will be adjusted against his / her outstanding dues. In case, the university has extended fee concession to a student, the same will not be withdrawn. The amount equal to fee concession will be paid to the concerned student to enable them to return the amount to NBP themselves to reduce their loan liability.

38.6 (ii) Financial assistance / Scholarship received from Pakistan Bait Ul Mall Scheme or any other agency / organization for a student will be adjusted against his / her outstanding dues. The amount will not be refunded to the student. In case he/she has already been granted Half/ Full fee concession for the said period, it will stand cancelled automatically and he / she will deposit the fee concession amount in favor of the university or financial assistance will be adjusted against outstanding dues. Student can avail one financial assistance / scholarship from any agency at a time.

38.7 HOSTEL CHARGES

	(In Pak. Rupees)
Hostel Security (Refundable) Payable at the time of admission	5000
Mess Security (Refundable) Payable at the time of admission	3000
Service and Contingency Charges (Payable at the time of admission)	1000
Room Rent (Per Semester)	
Cubicle	1500
Dormitory	1200
Electricity Charges (Per semester)	2400
Room Heater/fans	1800
Sui Gas Charges	600
Air Cooler Charges (per session)	1200

129

UNIVERSITY OF ENGINEERING AND TECHNOLOGY- TAXILA / UNDERGRAD PROSPECTUS 2014

38.8 Periods of Fees and Other Charges:

The Non-Recurring fee are charged at the time of admission while the recurring fee are charged per semester. The hostel charges are payable for the whole semester. Electricity charges for fans are payable for summer session and will be charged with the fee during spring semester. While the electricity charges for room heaters are payable for winter session and will be charged with the fee during fall semester. With the prior permission of the Senior Warden, the resident students can use air coolers during summer session. They will be charged an additional amount of Rs. 1200/- per room per session. room heaters are payable for winter session and will be charged with the fee during fall semester.

With the prior permission of the Senior Warden, the resident students can use air coolers during summer session. They will be charged an additional amount of Rs. 1200/- per room per session.

38.9 Securities

All kind of securities mentioned above remaining unclaimed for two years from the date of becoming due for refund shall lapse to the University for transfer to the Endowment Fund.

38.10 Refund of Securities

The university security, library security, hostel security and mess security are refunded when a student leaves the university or the hostel (in case of mess security) after deduction of outstanding dues of the university, library, or the hostel respectively. The university security, however, shall stand forfeited if a student withdraws from or leaves the university before completing the first year.

38.11 Non-payment of Fee and Charges

A fine of Rs.10.00 per day will be charged for a period of 10 days after the last date fixed for payment of fees and charges. After that, the name of the defaulter will be struck off the rolls of the university and he / she will have to pay the re-admission fee along with the fees and fine before he is re- admitted. Application to this effect shall be submitted to the concerned Dean of Faculty. However, a student who receives scholarship through the university Treasurer may pay his / her fee and charges without fine within a week of receipt of the scholarship for the corresponding period.
scholarship for the corresponding period.

CHAKWAL CAMPUS

CHAKWAL CAMPUS
UET TAXILA

39

Campus Director

Prof. Dr. Aftab Ahmad
PhD (UET, Taxila)

The Chakwal City

The city was founded during the era of Mughal emperor Zaheer-ud-Din Babar. Alexander the great also passed through this region in 326 B.C. One of the Muslim Scientists Al-Beruni came to this valley and stayed here for some time. During his stay at Katas, he not only learned Sanskrit but also performed various geographic experiments and successfully measured the radius of earth.

Chakwal district is rich in natural resources such as coal, limestone, gypsum, salt, petroleum and other valuable minerals. Three cement plants with total production capacity of 24000 tons per day are already operational. Some textile factories and oil exploration companies are also working in the surrounding area.

The Sub-Campus Chakwal

Almost thirty years after the establishment of the main campus, first campus of UET Taxila at Chakwal started functioning in the year 2005. So far, seven sessions have been enrolled in Electronics and Mechatronics engineering. Annual intake in each discipline is 50.

Location

The Sub-campus is situated in the heart of the Chakwal city in old Kachehri complex on Talagang road Chakwal is located 110 Km south-east of the capital city of Islamabad in the Dhanni region of the Pothohar Plateau. The Chakwal campus can easily be approached by either of the two exits on the Motorway M2. i.e., Balkassar and Kallar Kahar. The main campus is under construction near the Balkasaar Interchange.

Administration

The Campus Director under the supervision of Vice-Chancellor UET Taxila is the administrative and academic head of the Sub-Campus Chakwal. The overall management policy guidance is provided by the University Syndicate. The various academic and administrative bodies delineated in the UET's charter, function actively. The normal academic procedures and administrative rules of the UET Taxila are followed in the Sub-Campus Chakwal.

Faculty of Engineering

Two departments are functioning under the faculty of engineering. At present, degrees of B.Sc. Engg are offered in the following departments:
Departments of Electronics Engineering
Departments of Mechatronics Engineering

Academic Programes

The sub-Campus Chakwal of UET Taxila offers four years under graduate programs in Electronic and Mechatronics Engineering. These programs are accredited by Pakistan Engineering Council (PEC).

Future Plan

The Sub-Campus Chakwal has planned to establish three more departments in the second phase with the help of Punjab Govt. / Higher Education Commission.

Hostel Facility

At present, Hostel facility is NOT available at the sub-campus Chakwal. Students applying for admission at Chakwal Campus must keep in mind that they have to arrange for their residence at their own in Chakwal City.

Rules and Regulations

In general, all the rules and regulations mentioned for the main campus (UET Taxila) in the prospectus are applicable for Sub- Campus Chakwal.

DEPARTMENT OF
ELECTRONIC ENGINEERING

Electronics Engineering is one of the major fields in industry. It finds vast range of applications. At sub campus Chakwal we offer BSc. Electronics Engineering. Department has twelve full time Faculty members and around 200 Students enrolled. Three batches of Department have passed and the program is PEC accredited. We have well equipped laboratories of Electronics, Computer, Embedded Systems, Communication Systems and Circuits & Measurements. Department has established Industrial Linkages to Support its students for their Projects, Internships and Jobs.

Laboratories

Electronic Lab
(Lab Director Engr. Ahmed Umar Niazi)

Electronics Lab is one of the major Labs in the department. The lab is equipped with Basic Electronic Trainer, Power Electronics Trainers and Test Equipment including Function Generators, Power Supplies, Oscilloscopes and DC Power Supplies. The scope of the Lab includes subject like Basic Electronic Engineering, Electronic Circuit Design, Integrated Electronics, Power Electronics and other related courses.

Circuits and Measurements Lab
(Lab Director Engr. Khawaja Shafiq Haider)

The lab includes courses of Basic Circuit Analysis, Network Analysis, Instrumentation and Measurement, Industrial Electronics and other related courses. The lab includes state of art equipment to support the subjects.

Embedded Systems Lab
(Lab Director Engr. Haseeb Rehan)

The Laboratory covers the scope of courses like FPGA based system design, Digital Logic Design, Microprocessor and Microcontrollers and other related subjects. The lab includes Xilinx based FPGAs, Microcontroller trainers of PIC and 8051, Texas DSP kits and other test equipment.

Computer Lab
(Lab Director Engr. Furqan Shaukat)

The lab has latest computers to support all courses requiring computer simulations including Computer Fundamentals, Computer Programming, Computer Aided Engineering Design, Computer Communication Networks and other related courses.

Communication Systems Lab
(Lab Director Engr. Furqan Shaukat)

The lab is equipped with Antenna Trainers, Communication Trainers, Transmission Line Trainer, Spectrum Analyzer and other test equipment. The lab supports courses like Analog and Digital Communications, Antenna and Wave Propagation, Micro Wave Engineering and other related courses.

Project Lab
(Lab Director Engr. Faisal Masood)

The lab is equipped with Computers and related facilities. The lab support students to develop their projects.

ASIC (Application-specific integrated circuit) and DSP (Digital Signal Processing) Laboratory*
Lab. Director: Engr. Kamran Javed

The objective of ASIC & DSP Lab. is to covers the area of advance digital design and Signal & image processing. This Laboratory is used as practical hand-on training of FPGA Based Design, Digital Signal Processing (DSP), Digital Image Processing, Digital Design and other courses.The advance equipments of Texas Instruments, Analog Devices, Xilinx and National Instrument are available in the laboratory.

Electrical Machines Laboratory*
Lab. Director: Engr. Faisal Masood

The objective of Electrical Machines Lab. is to covers the area of Electrical Machines and Transformers. This Laboratory is used as practical hand-on training of a course on Electrical Machines. The electrical machines covered in this lab. are Asynchronous Machines, Synchronous Machines, DC Machines and Transformers. They are treated in detail by explaining the objectives, discussing electrical diagram, by showing a brief overview of the theory and associated formulae for a thorough understanding and summarization of the results for subsequent analysis and discussion.

*Laboratories are in Process

Faculty

Professor
Dr. Aftab Ahmad
PhD. (UET, Taxila)

Assistant Professor
Dr. Tariq Mehmood
PhD (QAU, Islamabad)

Engr. Ahmad Umar Niazi
MSc. Engg. (UET Taxila)

Engr. Furqan Shaukat
MSc. (UET, Taxila)

Engr. Hammad Zakki
MSc. Engg. (UET, Taxila)

Engr. Muhammad Usman
MSc. (Engg.) (UET Taxila)

Engr. Khawaja Shafiq Haider
MSc. (NUST , Islamabad)

Engr. Abdul Basit

MSc. UET Taxila (abroad for higher studies)

Engr. Akhtar Rasool
MSc. (Engg) (DU, Sweden) (aboard for higher studies)

Engr. M. Laiq Ur Rahman Shahid
MSc. Engg. UET Taxila (abroad for higher studies)

Lecturers

Engr. Faisal Masud
MSc. Engg. (UET, Taxila)

Engr. Haseeb Rehan
MSc. Engg. (BEIHANG CHINA)

Engr. Haq Nawaz
MSc. Engg. UET Taxila (abroad for higher studies)

Lab Engineers

Engr. Safia Bibi
BSc. Engg. (UET, Taxila)

Engr. Usman Zahid
BSc. Engg. (BUITMS Quetta)

Engr. Muhammad Kamran Javed
BSc. Engg. (UET, Taxila)

Courses of Study for Undergraduate Program
BSc Electronic Engineering

1st Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
EE- 111	Circuit Analysis-I	2	1
CS- 112	Programming Fundamentals	3	1
BH-113	Applied Physics	3	0
BH-114	Calculus and Analytical Geometry	3	0
BH-115	Pak Studies	2	0
BH-116	Functional English	3	0
		16	**02**
	Total	**18**	

2nd Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
EE-121	Basic Electronic Engineering	3	1
EE-122	Digital Logic Design	3	1
CS-123	Object Oriented Programming	3	1
BH-124	Differential Equations	3	0
BH-125	Linear Algebra	3	0
		15	**03**
	Total	**18**	

3rd Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
EE-211	Circuit Analysis-II	3	1
EE-212	Electronic Circuit Design	3	1
CS-213	Digital Systems	3	1
CS-214	Engineering Drawing	0	1
BH-215	Complex Variables and Transforms	3	0
BH-216	Islamic Studies	2	0
		14	**04**
	Total	**18**	

4th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
EE-221	Electrical Machines	3	1
EE-222	Electromagnetic Field Theory	3	0
EE-223	Microprocessor And Microcontrollers	3	1
EE-224	Signal and Systems	3	0
BH-225	Understanding Psychology and Human Behavior	3	0
		15	**02**
	Total	**17**	

5th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
EE-311	Instrumentation and Measurements	3	1
EE-312	Integrated Electronics	3	1
EE-313	Control Systems	3	1
EE-314	Probability And Random Variables	3	0
BH-315	Technical Writing	2	0
BH-316	**Chemistry/Biology**	**3**	**0**
		17	**03**
	Total	**20**	

6th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
EE-321	Digital Signal Processing	3	1
EE-322	Analog And Digital Communication Systems	3	1
EE-323	Power Electronics	3	1
BH-324	Numerical Analysis	3	0
BH-325	Communication skills	3	0
		15	**03**
	Total	**18**	

7th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
EE-411	Elective-I	3	1
EE-412	Elective-II	3	0/1
EE-413A	Electronic Engineering Project	0	3
ME/MT-414	IDEE	3	0
MS-415	Entrepreneurship	3	0
		12	**4-5**
	Total	**16-17**	

8th Semester			
Course No.	**Course Title**	**Credit Hours**	
		Part I	**Part II**
EE-421	Elective-III	3	1
EE-422	Elective-IV	3	0/1
EE-413B	Electronic Engineering Project	0	3
MS-424	Engineering Economics and Management	3	0
		09	**04**
	Total	**13**	
	Grand Total	**138**	

Abbreviations used:

BH: Basic Sciences & Humanities
EE: Electronic Engineering
CS: Computer Sciences
MS: Management Sciences

Ratio of Engineering to non Engineering Subjects:

Engineering Subjects:	27	65%
Non Engineering Subjects:	15	35%
Total Subjects:	42	

Ratio of Engineering to non Engineering Credit hours

Engineering Credit hours:	96	70%
Non Engineering Credit hours:	42	30%
Total Credit hours:	138	

List of Elective Courses

- EE-4XX   Microelectronic Technology
- EE-4XX   Opto-Electronics
- EE-4XX   Digital Instrumentation Systems
- EE-4XX   Industrial Electronics
- CS- 4XX   Advanced Objected-Oriented Programming
- EE-4XX   VLSI Design
- EE-4XX   Microwave Engineering
- EE-4XX   Wave Propagation and Antennas
- EE-4XX   Navigational Aids
- EE-4XX   FPGA-Based Systems Design
- EE-4XX   Digital Control Systems
- EE-4XX   Digital System Design
- EE/CS-4XX   Computer Communication Networks
- EE/CS-4XX   Artificial Intelligence
- EE-4XX   Biomedical Instrumentation
- EE-4XX   Laser and Fiber Optics
- EE-4XX   Mobile Communications
- EE-4XX   Satellite Communications
- EE/CS-4XX   Introduction to Neural Networks
- EE/CS-4XX   Fuzzy Logic and Simulation
- EE-4XX   Advanced Communication Systems
- EE-4XX   Optical Communication Systems
- EE/CS-4XX   Digital Image Processing
- EE/CS-4XX   Pattern Recognition and Matching
- EE-4XX   Embedded System Design
- EE-4XX   Advance Topics in Electronics
- EE-4XX   Filter Design
- EE-4XX   Medical Imaging

List of Interdisciplinary Engineering Electives (IDEE)

- MT-4XX   Introduction to Robotics
- MT-4XX   Mechatronics Applications
- ME-4XX   Thermodynamics
- MT-4XX   Mechanics of Materials
- ME-4XX   Theory & Design of Machines
- ME-4XX   Engineering Dynamics
- MT-4XX   Materials & Manufacturing Processes

Note:

All the above mentioned Elective courses are either 3+0 credit hours or 3+1 credit hours. The Elective courses (either 3+0 or 3+1) offered by the department in a semester can be changed depending on the availability of teachers and related Lab facility and will be notified before the start of the semester.

137
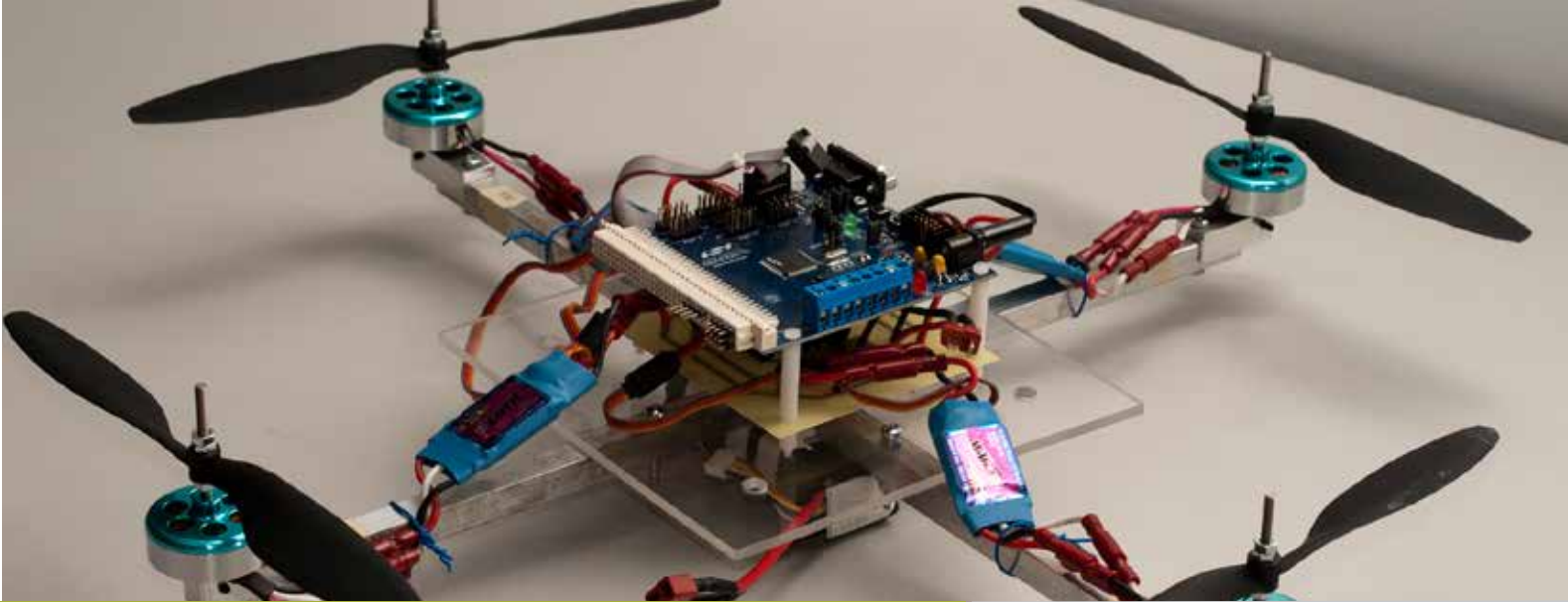
DEPARTMENT OF MECHATRONICS ENGINEERING

Mechatronics is the synergistic combination of precision mechanical engineering, electronic control and systems thinking in the design of products and manufacturing processes. To meet the quality and productivity demands, industries are compelled to use sophisticated electromechanical systems. Mechatronics Engineering caters the national needs of industries in the field of Robotics, Automated Manufacturing Equipment, Automobiles, Security Systems, Treatment Plants and Medical Equipments, etc.

Laboratories

Computer and Simulation Lab
(Lab Director: Engr. Bushra Nawaz)

Modeling and simulation is an integral part of Mechatronics design apoach. This lab offers computer facilities that can be used by students for developing model of real systems and testing of these systems by simulation . The laboratory has latest computers to support the courses like Computer Programming, Computer Aided Design (CAD), Numerical Methods, Modeling and Simulation and Artificial Intelligence.

Robotics and Automation Lab
(Lab Director: Engr. Shahbaz Ahmad)

Automation place a key role in moderen production industries. Industrial Robots , CNC machines , programable logic controllers (PLC's) are important constituents of mordern manfacturing system. This lab address the needs of Mechatronics engineers here, students get hands on experience on PLC's , industrial Robots and CNC machines. The lab equipment includes SCARA Robot, Gryphon Robot, CNC machines, PLC and Pneumatic Trainer. The lab has resources for conducting experiments for the subjects of Robotics and Industrial Automation.

Mechanics Lab
(Lab Director: Engr. Mubbashar Mehmood)

This lab enables students to test their mechanics concepts. Mechanics is very important for motion controlled systems like Robots and CNC machines. By performing experiments on equipment offered in lab , students can test their porjects for statics and dynamic lab equipment include basic roof truss creep test apparatus, torsion of shaft apparatus. Screw jack derrick crane force and moment kit, worm and shaft wheel apparatus stepped shaft apparatus friction on inclined plane . Appratus Hook's law, apparatus simple moment , appratus being reaction , apparatus shear apparatus. The lab equipment includes Universal Testing Machine, Impact Testing Machine, Hardness Testing Machine, Creep Testing Machine, Torsion Shaft Apparatus and Beam Reaction Apparatus. The lab is well equipped for conducting experiments of Mechanics of Materials subject.

Instrumentation and Control Lab
(Lab Director: Engr. Ahmed Zaidi)

Instrumentation and Control engineering are crucial areas of Mechatronics Engineering. Sensors availaility is not that common in Pakistan and students generally struggle to buy many types of sensors. This lab is equipped with interactive sensor kits which help in developing concepts related to general working of control systems. Also, servomechanisms can be used to verify control system's concepts. The lab covers courses like Instrumentation and Measurments, Control Sytems and Advanced Control Systems. The lab is equipped with Sensor Transducer Kits, Magnetic Levitation system, Servo Mechanism Laboratory, Bridges, and Actuators.

Workshop (Lab Director: Engr. Khurram Ali)

This lab enables students to fabricate different jobs used in their projects. Fabrication, furnishing, welding, grinding and

138

other operations can be done here. The lab also provides an idea about conventional machining to press, Welding Plant, Soldrering Units and all hand tools required for the practical work in Smithy Shop, Fitting Shop, Electrical, PCB work Shop and Carpentry Shop etc. The laboratory covers the scope of coureses like Workshop Practice and Machine Tools and manufacturing Processes. Students use this facility in fabricating their projects.

Mechatornics System Design Lab
(Lab Director: Engr. Muhammad Asif)

This lab offers equipment and facilities that can be used for student projects. This lab provides conducive environment to students working on their final year projects. The lab is equipped with Computers, Oscilloscopes, Power Supplies, Function Generators, PIC Training Kits, 8051 Training Kits, Digital Multimeters, Soldering Stations, Bread Boards, Motors, Various ICs and work benches which provide the students solid platform to construct their projects.

Faculty

Professor
Dr. Mukhtar Hussain Sahir
PhD (UET Taxila)

Assistant Professor
Engr. Amir Sultan
M.Sc. Engg. (UK)
Engr. Hafiz Muhammad Khurram Ali
M.Sc. Engg. (UET Taxila)
Engr. Shahid Mehmood
MSc. Engg. (UET Taxila)
Engr. Abdul Mannan
MSc. Engg. (UET Lahore) (abroad for higher studies)
Engr. Muhammad Khuram Saleem
MSc. Engg. (UET Lahore) (abroad for higher studies)
Engr. Ahmed Nouman
MSc. Engg. (UET Lahore) (abroad for higher studies)
Engr. Irfan Azhar
MSc. Engg. (UET Taxila) (abroad for higher studies)
Engr. Javed Akhter
MS.c Engg.

Lecturers
Engr. Sadaqat Ali
M.Sc. Engg. (UET, Taxila)
Engr. Mubbashar Mehmood
M.Sc. Engg. (UET Taxila)
Engr. Bushra Nawaz
M.Sc. Engg. (UET Taxila)
Engr. Muhammad Asif
M.Sc. Engg. (UET, Lahore)

Lab Engineers
Engr. Shoaib Aslam
B.Sc. Engg. (UET Taxila)
M.Sc Engg. (UET Taxila) In Progress
Engr. Shahbaz Ahmad
B.Sc. Engg. (UET Taxila)
M.Sc Engg. (UET Taxila) In Progress
Engr. Ahmed Zaidi
B.Sc. Engg. (UET Taxila)
M.Sc Engg. (COMSAT)

Shared Faculty

Professors
Dr. Shahab Khushnood
Prof. Dr. Iram Baig
Dr. M.S.I Alvi
Prof. Sagheer Ahmed

Associate Professors
Dr. Hafiz M. Yasin Butt
Mr. M. Aslam Kahut
Dr. Riffat Asim Pasha

Assistant Professor
Dr. Haroon Yousaf
Dr. Salman Hussain
Dr. Muhamamd Ali
Dr. Tariq Mahmood
Engr. Zahid Suleman Butt
Engr. M. Kashif Iqbal

Courses of Study for Undergraduate Program
BSc Mechatronics Engineering

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
GS-111	Calculus and Analytic Geometry	3	0
HS-112	Communication Skills	3	1
GS-113	Applied Physics	3	0
MT-114	Workshop Practice	0	1
ET-115	Electric Circuits and Network Analysis	3	1
HS-116	Islamic Studies	2	0
	Total	**14**	**3**
	Semester Total for Part-I & II	**17**	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
GS-121	ODEs and Linear Algebra	3	0
MT-122	Engineering Statics	2	1
MT-123	Engineering Drawing and CAD	0	2
CS-124	Computer Programming - I	1	1
HS-125	Technical Report Writing	3	0
HS-126	Pakistan Studies	2	0
	Total	**11**	**4**
	Semester Total for Part-I & II	**15**	
	Total for 1st Year	**32**	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
GS-211	Vector Calculus	3	0
ET-212	Electronic Devices and Circuits	2	1
MT-213	Engineering Dynamics	2	1
MT-214	Materials and Manufacturing Processes	3	0
CS-215	Computer Programming-II	0	1
CS-216	Digital Logic Design	2	1
	Total	**12**	**4**
	Semester Total for Part-I & II	**16**	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
GS-221	Complex Variables and Transforms	3	0
ET-222	Electronic Circuit Design	3	1
HS-223	Social Sciences Elective	3	0
MT-224	Mechanics of Materials	2	1
MT-225	Thermodynamics	2	1
MT-226	Electromechanical Systems	3	1
	Total	**16**	**4**
	Semester Total for Part-I & II	**20**	
	Total for 2nd year	**36**	

List of Elective Courses

Social Sciences Elective (3+0)
- Professional Ethics
- Sociology and Development
- Organizational Behaviour
- Or any other relevant course (s)

Management Sciences Elective (3+0)
- Engineering Management
- Entrepreneurship, Leadership and Team Management
- Principles of Management
- Research Methodology
- Production Management
- Or any other relevant course (s)

Engineering Electives-I (3+1)
- Modeling and Simulation
- Filter Design and Digital Signal Processing
- Artificial Intelligence
- Embedded Systems
- Or any other relevant course (s)

Engineering Electives-II (3+1)
- Machine Vision
- Digital Control
- Advanced Control Systems
- Neuro-Fuzzy Control
- Special Topics in Mechatronics
- Machine Learning
- Digital Image Processing
- Or any other relevant course (s)

PETROLEUM & GAS ENGINEERING

Undergraduate Program:

B.Sc Petroleum & Gas Engineering

The department offers a Bachelor degree program in Petroleum & Gas Engineering. A key source of energy is oil and natural gases. Efficient recovery of these resources requires Petroleum Engineers with a sound knowledge of fundamentals and latest technological developments relevant to this field. The mission of the petroleum Engineering education is to produce graduates who can not only satisfy the current needs of the Pakistani petroleum industry, but also able to develop indigenous technologies.

Shared /Visiting Faculty

Dr. Waseem
Dr. Muhammad Sultan
Dr. Tariq Mehmood
Dr. Muhammad Zubair

Courses of Study for Undergraduate Program
BSc Petroleum & Gas Engineering

1st Semester

Course No.	Course Title	Lecture Hrs	Lab Hrs	Credit Hours
HU-101	Functional Engilish	2	0	2
HU-102	Islamic Studies	2	0	2
PG-101	Fundamentals of Petroleum Engineering	3	0	3
Phy-103	Applied Physics	3	3	4
MA-104	Applied Mathematics-I	3	0	3
WS-105	Workshop Practices	0	6	2
	Total	**13**	**09**	**16**

2nd Semester

Course No.	Course Title	Lecture Hrs	Lab Hrs	Credit Hours
HU-106	Pakistan Studies	2	0	2
Geo-107	Applied Geology	3	3	4
Chem-108	Applied Chemistry	3	3	4
MA-109	Applied Mathematics-II	3	0	3
ME-110	Engineering Drawing & Graphics	1	3	2
HU-111	Communication Skills	1	3	2
	Total	**13**	**12**	**17**

3rd Semester

Course No.	Course Title	Lecture Hrs	Lab Hrs	Credit Hours
Geo-212	Stratigraphy and Strustural Geology	2	3	3
CS-213	Computer Programming and Software applications	2	3	3
EE-214	Introduction to Electrical Engineering	2	3	3
MA-215	Applied Mathematics -III	3	0	3
CE-216	Fluid Mechanics	2	3	3
HU-217	Technical Writing & Presentation Skills	2	0	2
	Total	**13**	**12**	**17**

4th Semester

Course No.	Course Title	Lecture Hrs	Lab Hrs	Credit Hours
PG-202	Drilling Engineering	3	3	4
Ch.E-218	Applied Themodynamics	2	3	3
MA-219	Applied Statistics	3	0	3
PG-203	Petroleum Geology & Geophysical Exploration	3	3	4
CE-220	Machanics of Materials	2	3	3
	Total	**13**	**12**	**17**

5th Semester

Course No.	Course Title	Lecture Hrs	Lab Hrs	Credit Hours
PG-304	Petrophysics	3	3	4
PG-305	Properties of Reservior Fluids	3	3	4
PG-306	Drilling Engineering-II	3	3	4
CS-321	Applied Numerical Methods	2	3	3
HU-322	Social Sciences	3	0	3
	Total	**14**	**12**	**18**

6th Semester

Course No.	Course Title	Lecture Hrs	Lab Hrs	Credit Hours
PG-307	Well Logging	2	3	3
PG-308	Reservoir Engineering	3	3	4
PG-309	Petroleum Production Engineering-I	3	0	3
PG-310	Natural Gas Engineering	3	3	4
Man-323	Environmenta and Safety Management	3	0	3
	Total	**14**	**09**	**17**

7th Semester

Course No.	Course Title	Lecture Hrs	Lab Hrs	Credit Hours
PG-411	Well Testing	3	3	4
PG-412	Petroleum Production Engineering-II	3	3	4
PG-413	Gas Reservoir Engineering	3	3	4
Man-424	Project Planning & Management	2	0	2
Ch.E-425	Instrumentation and Process Control	3	3	4
PG-414	Project	0	6	0
	Total	**14**	**18**	**18**

8th Semester

Course No.	Course Title	Lecture Hrs	Lab Hrs	Credit Hours
PG-415	Principles of Enhanced Oil Recovery	3	3	4
PG-416	Reservoir Simulation	3	3	4
PG-417	Petroleum Economics	3	0	3
Ch.E-426	Petroleum Refinery Engineering	3	3	4
PG-414	Project	0	6	2
	Total	**12**	**15**	**17**
	Grand Total	**106**	**99**	**137**

Computer Science

DEPARTMENT OF COMPUTER SCIENCE

Undergraduate Program:

The Department of Computer Science offers the following undergraduate Degree Program.

- BS-Computer Science

Faculty:

Note: Faculty of Computer Engineering, Software Engineering and Telecommunication engineering at UET, Taxila will be considered as shard faculty to teach the courses which are common in the respected domains.

BS in Computer Science

Computers are playing a major role in our daily lives. It has changed the way we interact with each other. Computers have not only enhanced our productivity but also made possible automation of previously manual tasks. There is a continuing need for individuals with a bachelor's degree in Computer Science to fulfil the demands of IT (National as well as International) market. The curriculum for our computer science graduate is structured to provide a balanced mixture of learning experiences to make the graduate capable of sound professional decisions. Our graduate will be Computer Scientist, IT Professional, and Researcher.

Courses Under Semester System
BS Computer Science

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS -101	Introduction to Computing	3	1
CS -102	Programming Fundamentals	3	1
MT-103	Calculus and analytical geometry	3	0
EG -104	English composition and Comprehensions	3	0
PK -105	Islamic and Pak Studies	3	0
	Total:	**15**	**2**
		17	

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-106	Object Oriented Programming	3	1
CS-107	Discrete Structures	3	0
MT-108	Multivariable Calculus	3	0
MT-109	Probability and Statistics	3	0
EG-110	Technical and Business Writing	3	0
	Total	**15**	**1**
		16	

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-201	Data Structures and Algorithms	3	1
CS-202	Digital Logic and Computer Architecture	2	1
PH-203	Physics	3	0
EG-204	Communication Skills	3	0
MT-205	Liner Algebra	3	0
	Total	**14**	**2**
		16	

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-206	Operating Systems	2	1
CS-207	Database Systems	3	1
CS-208	Web Design and Development	3	1
MT-209	Concrete Mathematics	3	0
SS-210	Economics	3	0
	Total	**14**	**3**
		17	

5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-301	Software Engineering	3	0
CS-302	Computer Architecture and Assembly Language	3	1
CS-303	Theory of Automata	3	0
CS-304	Computer Communications and Networks	3	0
MG-305	Principles of Marketing	3	0
CS-306	Geographical Information Systems	3	1
	Total	**18**	**2**
		20	

6th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-307	Design and Analysis of Algorithms	3	0
CS-308	Data Warehousing	2	1
MT-309	Numerical Methods	3	1
CS-310	Compiler Construction	3	0
MG-311	Human Resource Management	**3**	**0**
CS-312	Software Design Patterns	**3**	**0**
	Total	**17**	**2**
		19	

7th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-501	Final Project - I	3	0
CS-502	Visual Programming	3	1
CS-503	Mobile Application Development	3	1
CS-504	Artificial Intelligence	3	0
CS-505	Computer Graphics	**3**	**1**
	Total	**15**	**3**
		18	

8th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CS-506	Final Project - II	3	0
CS-507	Computer Vision	3	1
SS-508	Professional Practices	3	0
	Total	**9**	**1**
		10	

CS	= Computing — Core Courses
EG, SS, PK, MG, PH	= Computing — General Education
MT	= Computing — Supporting Sciences

Note:
The elective/supporting courses offered by the department in a semester can be changed depending on the availability of the teachers and related facilities and will be notified one week before the start of the semester.

DEPARTMENT OF MANAGEMENT SCIENCES

The department of Management Sciences offers the following Undergraduate degree program.

• BACHELORS OF BUSINESS ADMINISTRATION (BBA)

The four years BBA programme is tailored made to serve the needs of the bright young persons who have completed twelve years of education and are looking for a career education in management profession.

The programme curricula offer to the students a rich blend of general education, general management skills disciplined based core courses and the specialization based elective courses.

Programme Details:

Duration   -   4 Years
Regular Semesters   -   8
Specializations - Finance/ Hu man resource/ Marketing
Total Credit Hours   -   135
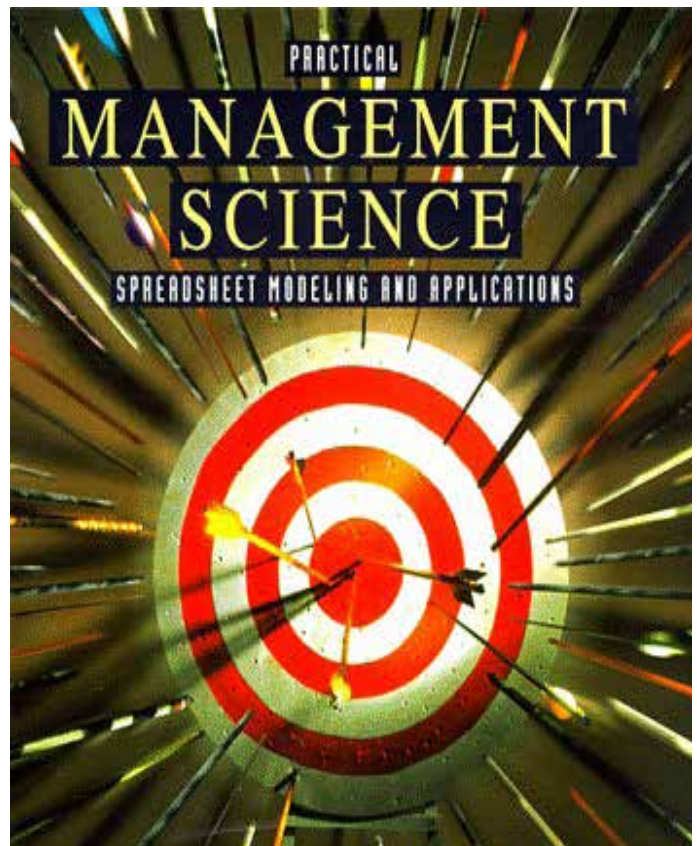
Courses Under Semester System
Bachelors of Business Administration (BBA)

1st Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
BBA-101A	English -1	CR	3
BBA-102	Introduction to Information Technology	GR	3
BBA-103	Introduction to computing	Core	3
BBA-104	Verbal and Presentation Skills	GR	3
BBA-105	Islamic studies	CR	3
	Total		15

2nd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
BBA-101B	English-2	CR	3
BBA-107	Pakistan Economy	GR	3
BBA-108	Business Mathematics	CR	3
BBA-109	Human Psychology	GR	3
BBA-110	Introduction to management	core	3
BBA-111	Microeconomics	CR	3
	Total		18

3rd Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
BBA-201	Oral Communication	CR	3
BBA-202	Business Statistics	CR	3
BBA-203	Macro Economics	Core	3
BBA-204A	Financial Accounting I	Core	3
BBA-205	Introduction to HRM	Core	3
BBA-206	Sociology	GR	3
	Total		18

4th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
BBA-207	Business Communication	CR	3
BBA-208	Principles of Marketing	Core	3
BBA-209	Environmental Sciences	GR	3
BBA-204B	Financial accounting II	Core	3
BBA-211	Elective I	Elective	3
BBA-212	Business Finance	Core	3
	Total		18

5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
BBA-301	Elective II	Elective	3
BBA-302	Marketing Management	Core	3
BBA-303	Project Management	GR	3
BBA-304	Financial Management	Core	3
BBA-305	Business law	Core	3
BBA-306	Money & Banking	Specialization	3
	Total		**18**

6th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
BBA-307	Business Ethics	GR	3
BBA-308	Elective III	Elective	3
BBA-309	Elective IV	Elective	3
BBA-310	Management Information System	Core	3
BBA-311	Management of Financial Institutions	Specialization	3
BBA-312	Global Marketing	Specialization	3
	Total		**18**

7th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
BBA-401	Business Research and report Writing	Core	3
BBA-402	Operations Management	Core	3
BBA-403	Elective V	Elective	3
BBA-404	Research Methodology for Business and Finance	Specialization	3
BBA-405A	Project I	FYP	3
	Total		15

8th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
BBA-406	Business Policy	Core	3
BBA-407	Elective VI	Elective	3
BBA-408	Marketing Research	Specialization	3
BBA-409	Pakistan Studies	CR	3
BBA-405B	Project II	FYP	3
	Total		15

TENTITIVE ADMISSION SCHEDULE FOR UNDERGRADUATE ADMISSION–ENTRY 2014 — 40

Internet submission of Entry Test Form	15-July-2014
Entry Test (centralized)	24-Aug-2014
Availability of Undergraduate Prospectus + Admission Form	24-Aug-2014
Last Date of Submission of Admission Form	10-Sep-2014
Hifz-e-Quran Test	11-Sep-2014
1st Merit List on the website	15-Sep-2014
2nd Merit List on the website	20-Sep-2014
3rd Merit List on the website	27-Sep-2014
Issuance of Registration No. to admitted students	13-Oct-2014
Start of 1st Semester Classes	29-Sep-2014
Admission Closed	27-Oct-2014

Important Notes:
- No application shall be entertained after the last date. The selected candidate in a merit list must join the
- University within specified time limit as per requiremnets laid down under clause 37. If he fails to do so, his name would be excluded from any future merit lists and his admission would be cancelled.

- No call letters shall be posted to selected candidates. The detailed lists can be viewed at the official website of the university at **admissions.uettaxila.edu.pk**
- The display of metit lists shall continue till the date of admission is closed.

ADMISSION COMMITTEE UNDERGRADUATE- ENTRY 2014 — 41

Dr. Muhammad Sultan (Convener)	051-9047427

Members

Prof. Dr. Tahir Nadeem Malik (Registrar)	051-9047405
Mr. Mahmood Akhtar (Controller Of Examinations)	051-9047428
Engr. Muhammad Kashif Iqbal, Assistant Professor, MED	051-9047687
Dr. Khalid Bashir Bajwa , Assistant Professor ,TED	051-9047740
Dr. Muhammad Zubair, BSD	051-9047400
Mr. Nadeem Majeed Choudhary, CED	051-9047740
Engr. Afaq Ahmad, CED	051-9047636
Engr. Shahid Mehmood, Assistant Professor, Chakwal Campus	0543-602004

Admission Office Staff

Mr. Muhammad Asghar Mehmood	
Mr. Abdul Waheed	051-9047412
Mr. Waqas Mehmood	
Mr. Hafiz Muhammad Shahid	