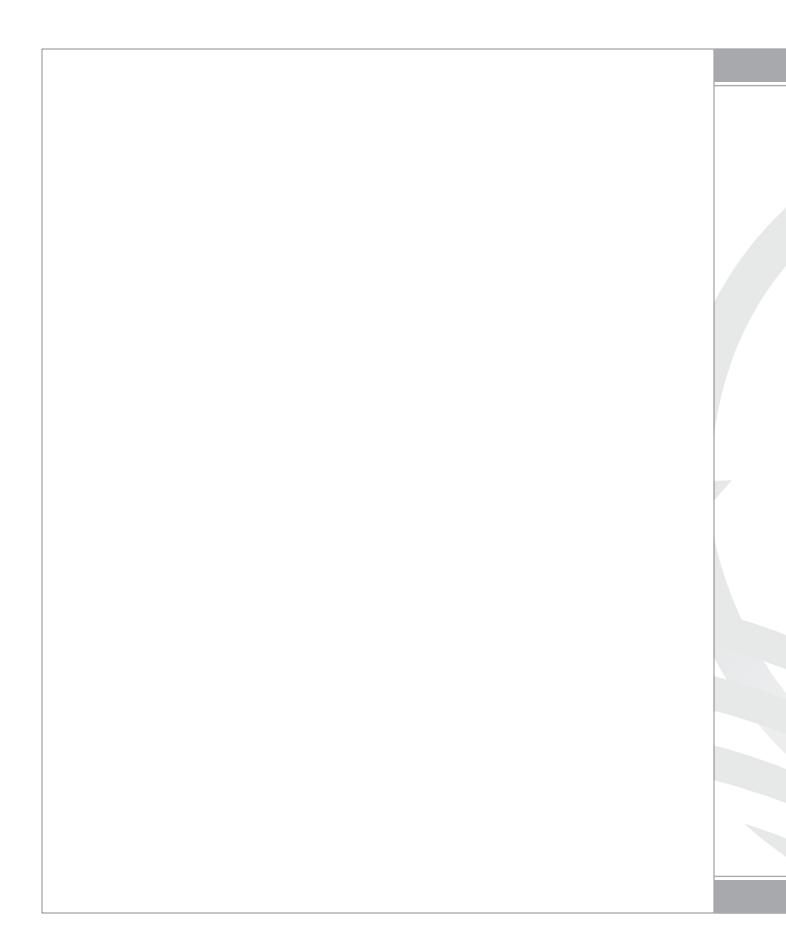


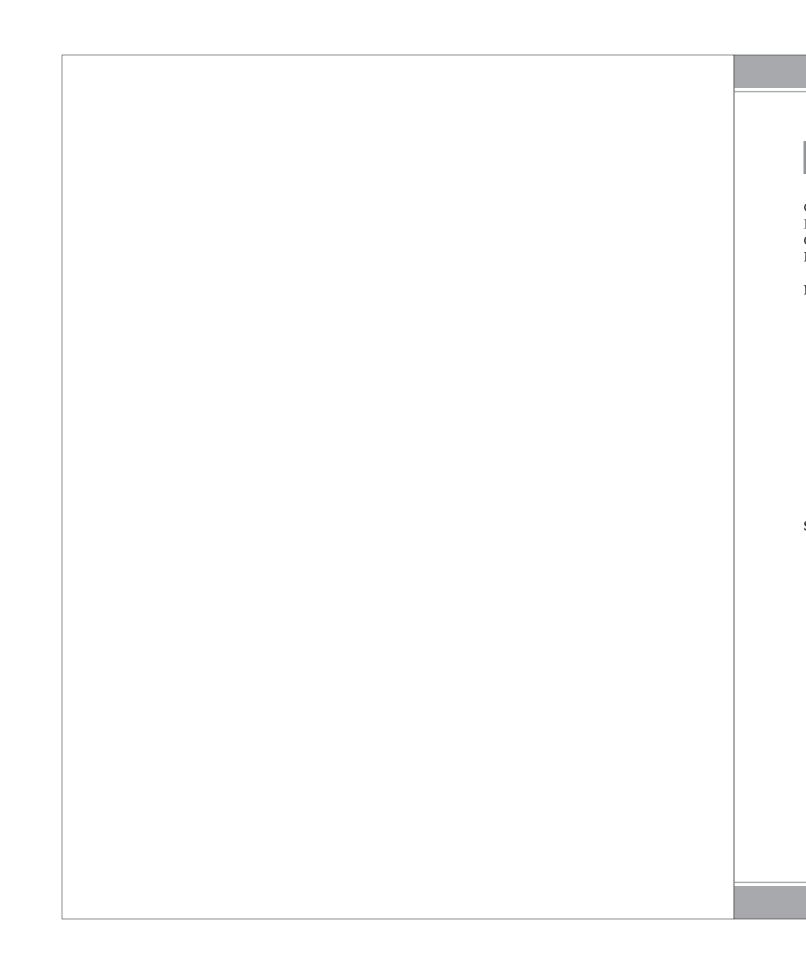
# UNIVERSITY OF ENGINEERING AND TECHNOLOGY TAXILA

# UNDERGRADUATE PROSPECTUS ENTRY- 2007



# DISCLAIMER

This prospectus is informational and should not be taken as binding on the University. Each aspect of the educational setup, from the admission procedure or criteria to the examination regulations or discipline, requires continuing review by the competent authorities. The university therefore reserves the right to change any rules and regulations applicable to students whenever it is deemed appropriate or necessary.



# CONTENTS

Importa	ational Setup nt Telephones Ethics <b>ction</b>	5
Profile o	of the University Faculties	
1.	<b>Faculty of Civil and Environmental Engineering</b> Department of Civil Engineering	12
2.	Faculty of Electronics and Electrical Engineering Department of Electrical Engineering	
3.	Faculty of Mechanical and Aeronautical Engineering Department of Mechanical Engineering	
4.	<b>Faculty of Telecommunication &amp; Information Engineering</b> Department of Computer Engineering Department of Software Engineering Department of Telecommunication Engineering	
5.	Teaching Staff of Basic Sciences and Humanities	
Services	and Common Facilities	
6.	Library 6-A Main Library 6-B Digital Library 6-C Information Technology Centre	
7.	Network Administration and Research Centre (NARC)	
8.	Directorate of Adv. Studies, Research and Tech. Development	
9.	Directorate of Students Affairs	
10.	Directorate of Undergraduate Studies	
11.	Directorate of Sports	
12.	Financial Assistance	
13.	Hostels	
14.	Estate Office	
15.	Health Facilities	
16.	Transport	
17.	Admission/Registration/Placement Office	
18.	Dues/Scholarship Section	

# C O N T E N T S

# **Rules and Regulations**

Teaching and Examinations	.42
Migration	.58
Students Discipline	.59
University Hostels	.66
Procedure for Allotment	.67
University Dress Code	. 68
Miscellaneous	. 68
	Migration Students Discipline University Hostels Procedure for Allotment University Dress Code

# **Admission Procedures**

42.	Set of Application Forms	Separately attached
41.	Admission Committee and Staff	
40.	Admission Schedule for 2007-Entry	
39.	Chakwal Campus	
	Bsc Telecommunication Engineering	
	BSc Software Engineering	
	BSc Mechanical Engineering	
	BSc Computer Engineering	
	BSc Electrical Engineering	
50.	BSc Civil Engineering	
38.	Curriculum Outlines under Term System	
37.	Fees and Other Charges	
36.	Procedure for the Selected Candidates	
35.	How to Complete the Application Form	
34.	Application Fee	
33.	Documents to be attached with F-1	
32.	Domicile Requirements	
31.	Merit for the 2006-Entry	
30.	Determination of Merit	77
29.	Categories and Symbols	74
28.	Seats Allocation Chart	
27.	Eligibility for Admission	
26.	General Instructions	

-

# ORGANIZATIONAL SETUP

Chancellor	•	<b>Lt. Gen. (Retd.) Khalid Maqbool</b> Governor of the Punjab
Pro Chancellor	•	<b>Mian Imran Masood</b> Minister for Education, Punjab
Vice Chancellor	•	Prof. Dr. Habibullah Jamal
Registrar	-•	Prof. Aftab Ahmad
Controller of Examinations	•	Mr. Mahmood Akhtar
Treasurer	•	Mr. Walid Tariq

A D M I N I S T R A T I O N

1

# **Deans of Faculties**

Faculty of Civil and Environmental Engineering Prof. Shaukat Ali Khan

Faculty of Electronics and Electrical Engineering Prof. Dr. Muhammad Amin

Faculty of Mechanical and Aeronautical Engineering Prof. Dr. Mukhtar Hussain Sahir

Faculty of Telecommunication and Information Engineering Prof. Dr. Muhammad Zafrullah

# Chairmen of Academic Departments

Department of Civil Engineering Prof. Dr. Abdul Razzaq Ghumman

Department of Computer Engineering Prof. Dr. Muid ur Rehman Mufti

Department of Electrical Engineering Prof. Umar Farooq

Department of Mechanical Engineering Prof. Dr. Shahab Khushnood

Department of Software Engineering Prof. Dr. Attaullah Solangi

Director Chakwal Campus Prof. Umar Farooq

# SERVICES AND COMMON FACILITIES

**Chairmen of Committees** 

Health Library Transport Sports Mosques Time Table Discipline Affiliation Committee

# Health Clinic

Chief Medical Officer Senior Medical Officer

### Library

Asstt. Librarian Asstt. Librarian (Evening) Director Digital Library & IT Centre

Sports

Assistant Director Physical Education

### Transport

Transport Officer

### **Estate Office**

Director Arboriculture & Land Management Estate Officer

### Halls of Residence

Senior Warden Warden Resident Tutor 1 - Iqbal (I) Hall Resident Tutor 2 Iqbal (I) Hall Resident Tutor 1 - Quaid-e-Azam (Q) Hall Resident Tutor 2 - Quaid-e-Azam (Q) Hall Resident Tutor 1 Omar (O) Hall Resident Tutor 2 Usman (U) Hall Prof. Mukhtar Hussain Sahir Prof. Dr. Muhammad Zafrullah Engr. Zahid Suleman Butt Engr. Liaqat Ali Qureshi Prof. Muhammad Iram Baig Prof. Sagheer Ahmad Prof. Dr. Mumtaz Ahmad Kamal Prof. Shaukat Ali Khan

Dr. Ali Akhtar Dr. Shaheen Sughra

Syed Mahmood Ali Zaidi Mr. Muhammad Anwar Mr. Shahbaz Pervez Chattha

Mr. Muhammad Akmal Hussain

Engr. Inam-ul-Hassan Sheikh

Engr. Nabi Ahmad Engr. Ch. Nisar Ahmad

Mr. Mahmood Akhtar Engr. Zahid Suleman Butt Engr. Faheem Butt Engr. M. Awais Tanveer Engr. M. Asjad Saleem Engr. Muhammad Ali Nasir Engr. Muhammad Obaidullah Engr. Ahsan Ali

#### Audit

Resident Auditor

### Accounts

Assistant Registrar (Audit Cell)

Dues/Scholarship Section Assistant Registrar

Examinations Branch Deputy Controller

#### Establishment

Deputy Registrar Assistant Registrar

## Academic & Regulation

Assistant Registrar

### Network Administration and Research Center

Director Networks Senior Network Engineer Web Manager Database Developer

# Vice-Chancellor's Office

Secretary to Vice Chancellor

### Directors

Advanced Studies, Research & Technological Development Undergraduate Studies Student Affairs Project Director (B&W) Telephone Exchange Digital Library & IT Centre Mr. Junaid Hameed Haq

Mr. Arshad Hameed Hashmi

S. M. Raza Kazmi

Maj. (R) Abrar Ahmad

Mr. Muhammad Azam Khan Mr. Muhammad Ilyas Khan

Mr. Ali Hussain Naqvi

Mr. Farhan Ahmed Nadeem Mr. Shahbaz Pervez Chattha Syed Muhammad Adnan Shah Mr. Muhammad Huzaifa

Mr. Muhammad Shafi

Prof. Ahmad Khalil Khan Prof. Dr. Mumtaz Ahmad Kamal Engr. Tahir Nadeem Malik Maj. (R) Tariq Mahmood Engr. Muhammad Iram Baig Mr. Shahbaz Pervez Chattha

4

#### **IMPORTANT TELEPHONE NUMBERS** Official Web Site: http://www.uettaxila.edu.pk 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 533 Electronics & Electrical Engineering 566 Telecom. & Computer Engineering Civil & Environmental Engineering 633 Mechanical & Aeronautical Engineering 666 CHAIRMEN OF ACADEMIC DEPARTMENTS Electrical Engineering 535 Computer Engineering 568 Software Engineering 569 Civil Engineering 638 668 Mechanical Engineering **OTHER ESTABLISHMENTS** Registrar 405 Deputy Registrar (Establishment) 407 Assistant Registrar (Establishment) 408 410 Assistant Registrar (Acad. & Regulation) Admissions Office (Under Graduate) 412 Treasurer 413 417 Accounts Branch Assistant Registrar (Dues & Scholarship) 421 Student Section 422 Resident Auditor 423 Controller of Examinations 428 Deputy Controller 430 432, 433 Examination Branch Project Director (Building & Works) 434 Executive Engineer 436 Assistant Engineer 437 Director Advance Studies 446 University Library 452 University Health Clinic 461 Network Centre 464 470 Transport Office Directorate Students Affairs 472 Sports Office 473 Post Office 474 Habib Bank Ltd. 475 Senior Warden 428 Quaid-e-Azam Hall 486 Iqbal Hall 487 Umar Hall 488

# 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, maliciously, 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 straightforward 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 engineers 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.

# INTRODUCTION

# THE CITY OF TAXILA

The antique name 'Takshasila' 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 vears 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 Technology, 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 the University 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 its permanent 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 2000.

### INTRODUCTION

# 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 twin cities 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.

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.

### **ACADEMIC PROGRAMS**

The University offers B.Sc. Degree Courses in Civil, Computer, Electrical, Mechanical, Software and Telecommunication Engineering.

### ADMINISTRATION

The Governor of Punjab is the Chancellor and the Education Minister is the Pro-

### **EXISTING FACULTIES AND DEPARTMENTS**

### 1. Faculty of Civil and Environmental Engineering

- Department of Civil Engineering
- 2. Faculty of Electronics and Electrical Engineering
  - Department of Electrical Engineering

### 3. Faculty of Mechanical and Aeronautical Engineering

• Department of Mechanical Engineering

### 4. Faculty of Telecommunication and Information Engineering

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

8

9

## **FUTURE PROGRAMS**

The following new departments will be established under the respective Faculties in near future:

### 1. Faculty of Civil and Environmental Engineering

• Department of Environmental Engineering

## 2. Faculty of Electronics and Electrical Engineering

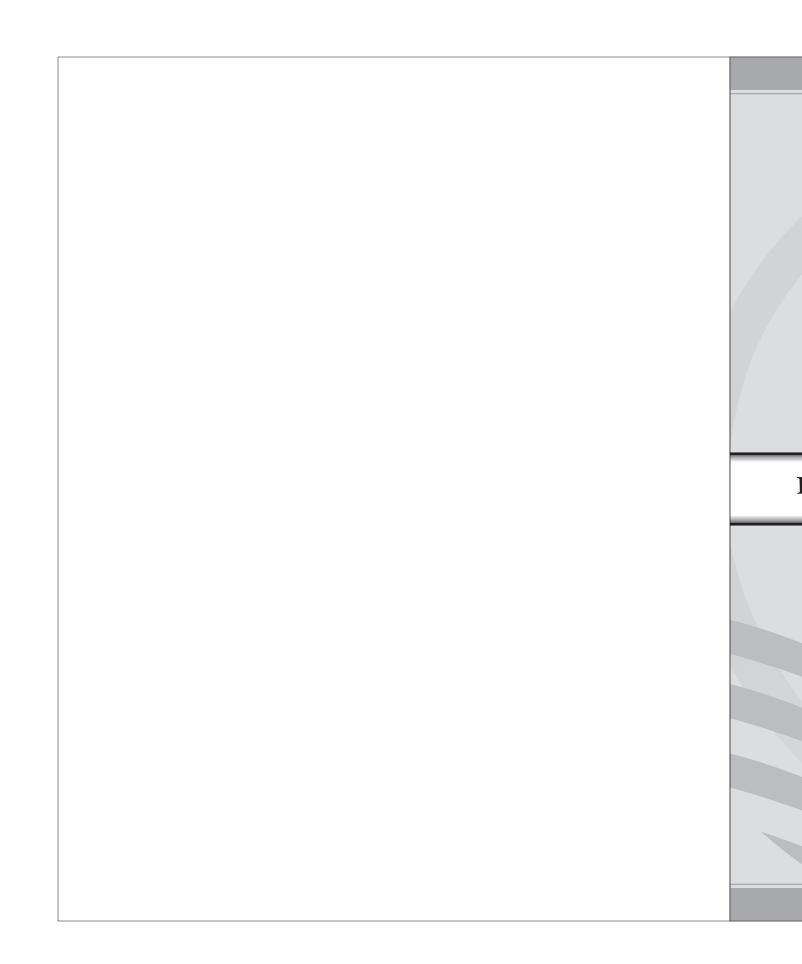
• Department of Electronics Engineering

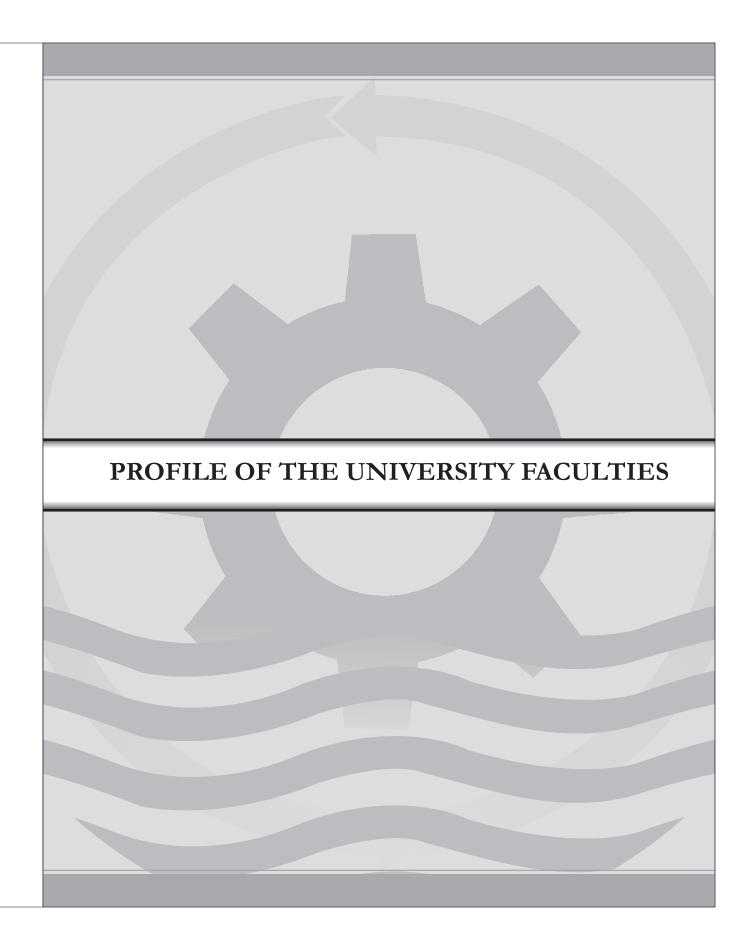
# 3. Faculty of Mechanical and Aeronautical Engineering

• Department of Aeronautical Engineering

## 4. Faculty of Industrial Engineering

- Department of Industrial & Manufacturing Engineering
- Department of Engineering Economic & Management





PROFILE OF THE UNIVERSITY FACULTIES

# 1. FACULTY OF CIVIL AND ENVIRONMENTAL ENGINEERING

Dean

Prof. Shaukat Ali Khan

## DEPARTMENT OF CIVIL ENGINEERING

### Chairman

Prof. Dr. Abdul Razzaq Ghumman

## Professors

- 1. Saeed Ahmad, PhD (UK) (on Leave abroad)
- 2. Abdul Razzaq Ghumman, PhD (UK)
- 3. Mumtaz Ahmad Kamal, PhD (UK)
- 4. Hashim Nisar, (Gold Medallist), PhD (UK)
- 5. Qaiser uz Zaman Khan, (Gold Medallist), MSc (UK), PhD (Japan)
- 6. Shaukat Ali Khan, MSc Engg (UK)
- 7. Liaqat Ali Qureshi, MSc Engg (Taxila)

## Associate Professors

8. Ashfaq Ahmad Tahir, MSc Engg (Taxila)

## Assistant Professors

- 9. Usman Ghani, (Gold Medallist), MSc Engg (Taxila) (on higher Studies abroad)
- 10. Kamran Muzaffar Khan, MSc Engg (Taxila)
- 11. Muhammad Yaqub, MSc Engg (Taxila) (on higher Studies abroad)
- 12. Muhammad Salman, MSc Engg (NUST)
- 13. Imran Hafeez, MSc Enng (Taxila)

# Lecturers

- 14. Ayub Elahi, MSc Engg. (Taxila) (on higher Studies abroad)
- 15. Naveed Ahmad, BSc Engg (Hons) (Taxila) (on higher Studies abroad)
- 16. **Faisal Shabbir,** MSc Engg. (Taxila) (on higher Studies abroad)
- 17. Muhammad Ali Shamim, BSc Engg (Hons) (Taxila) (on higher Studies abroad)
- 18. Naeem Ejaz, M.Sc. Engg. (Lahore)

- 19. Zafar Naushad, BSc Engg (Taxila) (on higher Studies abroad)
- 20. Jawad Hussain, BSc Engg (Taxila)
- 21. Faheem Butt, BSc Engg (Lahore)
- 22. Usman Ali Naeem, BSc Engg (Taxila)
- 23. Qazi Umar Farooq, BSc Engg (Hons) (Taxila) (on higher Studies abroad)
- 24. Abdul Qadeer BSc Engg (Taxila)
- 25. Aneeqa Hayat BSc Engg (Taxila)

### THE DEPARTMENT

Department of Civil Engineering is actively engaged in disseminating civil engineering education for the last thirty years. Whereas plans are also underway to establish the Department of Environmental Engineering.

The Department of Civil Engineering has an academic staff of 25, nearly 70% of whom contribute to postgraduate teaching and are involved in PhD research work. Approximately 450 undergraduate and 100 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 degree of BSc in Civil Engineering. The department also organizes a course of 18 months duration leading to MSc 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 wellequipped nine laboratories to meet the academic requirements of students and teachers as well as the professional needs of the government and private organizations:

- 1. Soil Mechanics & Foundation Engineering
- 2. Concrete Technology
- 3. Strength of Materials
- 4. Transportation Engineering
- 5. Hydraulics/Fluid Mechanics
- 6. Theory of Structures/Engineering Mechanics
- 7. Surveying
- 8. Public Health Engineering
- 9. Computer

Transportation and Structural Engineering Laboratories have recently been upgraded through funds provided by Higher Education Commission. In this connection, the equipment has been procured and installed.

# 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 teach research work.

The mission of the institute is to develop and implement innovative method, 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 MSc degree courses in Structural Engineering, Water Resources and Irrigation Engineering, Transportation Engineering, Soil Mechanics and Foundation Engineering and Environmental 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 universityindustry 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.Presently,21 PhD scholars have been registered for PhD research.

Research is being carried out in the following areas:

- 1) Structural Engineering
- 2) Soil Mechanics and Foundation Engineering
- 3) Transportation Engineering
- 4) Water Resources and Irrigation Engineering
- 5) Hydraulic Engineering

- 6) Environmental Engineering
- 7) Concrete Technology

Numerical modeling and computerapplication 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.

# 2. FACULTY OF ELECTRONICS AND ELECTRICAL ENGINEERING

Dean

Prof. Dr. Muhammad Amin

# DEPARTMENT OF ELECTRICAL ENGINEERING

Chairman

Prof. Umar Farooq

### **Professors**

- 1. Habibullah Jamal, PhD (Toronto)
- 2. Muhammad Zafrullah, (Gold Medallist) Phd (Taxila)
- 3. Muhammad Amin, PhD (Taxila)
- 4. **Umar Farooq,** MSc Engg (Japan)
- 5. Ahmad Khalil Khan, MSc Engg (USA)
- 6. Mohammad Ahmad Choudhry, PhD (USA)
- 7. Tahir Nadeem Malik, MSc Engg (Lahore)
- 8. Aftab Ahmad, MSc Engg (Lahore)
- 9. Muhammad Iram Baig, MSc Engg (Lahore)
- 10. Sakhi Muhammad Bhutta PhD (Belgium)
- 11. Muhammad Javed Mirza, Phd (USA)

### Assistant Professors

- 12. Tahir Mahmood, MSc Engg (Lahore),
- 13. Ilyas Ahmad, MSc Engg (Taxila)
- 14. Gulistan Raja, MSc Engg (Japan)

PROFILE OF THE UNIVERSITY FACULTIES

- 15. Inamul Hasan Shikh, MSc Engg (Taxila)
- 16. Aamir Hanif, MSc Engg (Taxila)
- 17. Muhammad Obaid Ullah, MSc Engg (Taxila)
- 18. Shabbir Majeed Chaudhry, MSc Engg (Taxila)

### Lecturers

- 19. Ahsan Ali, MSc Engg (Taxila)
- 20. Hafiz Muhammad Irfan Arshad, BSc Engg (Taxila)
- 21. Sarmad Sohaib, BSc Engg (GIKI) on higher studies abroad
- 22. Hassan Bhatti BSc Engg (Taxila)
- 23. Saif Siddique Butt BSc Engg (Taxila)
- 24. Ayesha Ijaz BSc Engg (Taxila)

### THE DEPARTMENT

The educational objectives of the undergraduate program of the Department of Electrical Engineering are to develop professional skills in the students that prepare them for immediate employment in Electrical Engineering. The department aims to develop abilities in the students for the application of the necessary mathematical tools, scientific basics and fundamental knowledge of Electrical Engineering. The students are provided with an educational foundation that prepares them for leadership roles along diverse carrier paths in large companies concerned with communications, electronics, industrial control & automation, computers and electrical energy. There is hardly any sphere of modern life that is not affected one way or the other, by some aspect of electrical engineering.

Currently Faculty of Electrical Engineering

is running two degree awarding programs: B.Sc. Electrical Engineering in Taxila and B.Sc. Electronics Engineering in Chakwal. Electrical Engineering department Taxila has an enrollment of more than 600 undergraduate, 143 M.Sc. and 25 PhD students. The department is housed in a Block that covers an area of 57,500 sq.ft. The department has well equipped laboratories for undergraduate classes and the equipment is upgraded as the need arises. Lecture theatres, classrooms, laboratories, faculty offices etc are all housed in the same Block. Detailed information about Electronic Engineering in Chakwal can be seen from relevant section in the prospectus.

### **COURSES OF STUDY**

All courses have a core set of subjects, allowing students to specialize further in electrical subjects, or go more deeply into computer and telecommunications. Electrical Engineering Course content includes analogue, digital and solid-state electronics, digital systems, telecommunications, and electromagnetics, with in-depth study of mathematics and computers in the context of electrical engineering. Practical skills in designing, making and testing are developed through laboratory work and computer-aided design. Laboratory projects are encouraged in second and third years whereas final year projects are assigned in consultation with industrial experts. The campus is located in an industrial environment and the students have a fair chance of industrial visits.

The Elective Courses are included in the program to provide more breadth to the knowledge. In 3<sup>rd</sup> and 4<sup>th</sup> years, the students can register for the Elective Courses according to their interests. Our degrees are highly regarded by industry and independent assessors. The course is accredited by the Pakistan Engineering Council as satisfying the academic requirements for Professional Engineer (PE) status.

# POSTGRADUATE STUDIES & RESEARCH

The department started its postgraduate program in 1984 and has been offering courses for the degrees leading to Master of Science in electrical engineering with specialization in:

- Electrical Power Engineering
- Electronics Engineering
- Control Engineering

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 fulltime students. At present more than 90% students are enrolled in the part-time program. Most of these students are working with major engineering organizations of the country.

Research work being carried out at the department has direct bearing on the needs of national industry. This research is partially funded by the Directorate of Advanced Studies, Research and Technological Development of the University. Projects, to meet the requirements of the neighboring industries are also conducted in the department. The faculty members and postgraduate students have published a number of research papers. These have been published in major national and international journals.

The department has a well-stocked and up to date library for use of the teachers and postgraduate students. It also offers consultancy services and testing facilities to local manufacturers of electrical and electronics equipment. It also arranges frequent seminars and workshops in various areas of electrical, electronics, control and computer engineering. The faculty members, postgraduate students and prominent researchers from home and abroad participate in these seminars. PROFILE OF THE UNIVERSITY FACULTIES

# 3. FACULTY OF MECHANICAL AND AERONAUTICAL ENGINEERING

### Dean

Prof. Dr. Mukhtar Hussain Sahir

## DEPARTMENT OF MECHANICAL ENGINEERING

### Chairman

### Prof. Dr. Shahab Khushnood

## Professors

- 1. Shahab Khushnood, (Gold Medallist), Ph.D. (NUST)
- 2. **M. Shahid Khalil,** PhD (UK)
- 3. **Prof. Dr. Mukhtar Hussain Sahir**
- 4. **Muhammad Anwar Khan,** MSc Engg (UK)
- 5. **Rafi Javed** (on leave abroad), MSc Engg USA)
- 6. Sagheer Ahmad, MSc Engg (Lahore)
- 7. Khawaja Sajid Bashir, MSc Engg (Lahore)

# **Professors (Foreign Faculty)**

- 8. M. M. I. Hammouda, PhD (UK)
- 9. Ali Roheim el Ghalban, PhD (Germany)
- 10. Fathi M. Mahfouz, PhD (Saudi Arabia)

## Associate Professor

11. Nabi Ahmad, MSc Engg. (Taxila)

### Assistant Professors

- 12. Nasir Ahmad Mian, BSc Engg (Lahore)
- 13. Khalid Masood Khan, MSc Engg (UK)
- 14. Mirza Jahanzeb, M.Sc. Engg. (Taxila)
- 15. Riffat Asim Pasha, M.Sc. Engg. (Taxila)
- 16. Zahid Suleman Butt, MSc Engg (Taxila)
- 17. Wasim Ahmad, BSc Engg (Hons) (Taxila)
- 18. Muhammad Kashif Iqbal, BSc Engg (Hons) (Taxila)
- 19. Muhammad Ali Nasir, MSc Engg (Taxila)

20. Tanzeel ul- Rashid, MSc. Engg (Lahore)

### Lecturers

- 21. Muzaffar Ali, BSc Engg (Taxila)
- 22. Nazir Ahmad Anjum, BSc Engg (Hons) (Taxila)
- 23. Hafiz Zafar Sharif, BSc Engg (Nawabshah)
- 24. Ghulam Mustafa, BSc Engg (Taxila)
- 25. Ahtesham-ul-Haq BSc Engg (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 equipment.

The department offers four years degree program leading to BSc in mechanical engineering. At present, around 400 students in BSc, 150 students in MSc and 30 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:

- Engineering Drawing and Drafting
- Thermal Systems Engineering
- Applied Mechanics and Design
- Industrial and Manufacturing Engineering
- Computer based Mechanical Engineering

The courses in Thermal Engineering include applied Thermodynamics, Refrigeration and Air Conditioning, Heat Transfer and Power Plant. The department offers a wide range of courses in Applied Mechanics and Design area. Starting from a basic course in Engineering Mechanics, a series of courses is offered in Mechanics of Materials. Mechanics of Machines and Fluid Mechanics. 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. Industrial and manufacturing engineering deals with the smart and economical product development methodologies. Students start with Workshop Technology in this area. Successive courses in Machine Tools, Engineering Materials, Production

### PROFILE OF THE UNIVERSITY FACULTIES

Engineering and Production Automation provide the students further insight to this area. Additional courses like Engineering Optimization and Industrial Engineering 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 Industrial 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 and a large number of units in the Hattar area. The students pick real world problems either for their term papers or as final year project from these organizations and brush their skills.

The department is offering master degree program since 1983. Sizable engineering graduates have made use of this program in a variety of areas. The program involves two years of part-time study and consists of lectures, design, office work, laboratory investigation 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 to meet the need of postgraduate students to do their master program. The department is also offering PhD Program.

# LABORATORIES AND OTHER FACILITIES

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

- 1) Applied Thermodynamics
- 2) Mechanics of Materials
- 3) Metrology
- 4) Refrigeration & Air Conditioning
- 5) Fluid Mechanics and Hydraulics
- 6) Heat and Mass Transfer
- 7) Mechanics of Machines
- 8) Machine Tools.
- 9) Industrial Engineering
- 10) Workshop Technology
- 11) CAD-I
- 12) CAD-II
- 13) Engineering Optimization
- 14) Mechatronics
- 15) Advance Manufacturing System
- Engineering Mechanics (Statics & Dynamics)
- 17) CNC Center
- 18) Drawing Hall

A CAD 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. Two new laboratories are established in the department with HEC funding of 40 million. The Labs 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 also introduces new courses and keeps on progressing and establishing **Mechatronics** Lab. The students can program, make their own

circuit boards and test their logics in the lab. The department is equipped with the latest and modern world-class manufacturing facilities in the **AMS Laboratory**. Recently established AMS Laboratory. of the department has state of the art equipment including Robots, **Computer Integrated Manufacturing System (CIM**) and Rapid Prototyping System, which is not only being used for teaching and research but also provides services to the neighboring industries

# 4. FACULTY OF TELECOMMUNICATION & INFORMATION ENGINEERING

### Dean

Prof. Dr. Muhammad Zafrullah

### DEPARTMENT OF COMPUTER ENGINEERING

#### Chairman

Prof. Dr. Muid ur Rehman Mufti

### **Professors**

- 1. Muhammad Zafrullah, (Gold Medallist), PhD (Taxila)
- 2. Muid ur Rehman Mufti, PhD (USA)

### Assistant Professors

- 3. Hafiz Adnan Habib, PhD (Taxila)
- 4. Adeel Akram, PhD (Taxila)
- 5. **Yasar Amin,** MSc Engg (Sweden)
- 6. **M. Haroon Yousaf,** MSc Engg (Taxila)

#### Lecturers

7. Muhammad Rizwan, BSc Engg (Taxila)

- 8. Malik Muhammad Asim, BSc Engg (Hons) (Taxila)
- 9. Syed Sohail Ahmad, MSc Engg (Hons) (Taxila)
- 10. Fawad Hussain, BSc Engg (Hons) (Taxila)
- 11. Rana Awais Tanvir BSc Engg (Hons) Taxila
- 12. Muhammad Awais Azam BSc Egg (Hons) Taxila
- 13. Syed Muhammad Anwar, BSc Engg (Hons) (Taxila) (On higher studies abroad)
- 14. Muhammad Majid, BSc Engg (Hons) (Taxila) (On higher studies abroad)
- 15. **Muhammad Jamil Khan** BSc Engg (Taxila)
- 16. **Saba Shoaib** BSc Egg (Gold Medalist (Taxila)

### THE DEPARTMENT

Established in 2001, the Department of Computer Engineering is concerned with the theory, design, development and applications of computer systems and information processing techniques. The objective of the program is to provide students with a strong theoretical and practical background in computer hardware and software, along with the engineering analysis, design and implementation skills necessary to work between the two. The program involves study of complete computer system from design of its circuits to its operating system and the algorithms that run on it.

By successfully completing the Computer Engineering degree, the graduates will gain a broad range of skills in the area of computer systems with strong analytical and critical thinking abilities. These graduates are ready to embark upon an exciting career in a diverse range of information and computer technology-rich companies and industries.

The department offers 4 years degree program of B.Sc. in Computer Engineering.

At present, more than 200 students are enrolled in the program.

#### **Courses of Study**

The Computer Engineering program involves the integrated study of digital design, data communications, computer organization and architecture, and systems software. This is accomplished within an engineering context that encompasses aspects of management and design, with a study of relevant technologies. The computer-engineering curriculum provides a proper balance of computer systems, hardware and software as well as theory and applications. With the rapid developments in the computer and information technologies, the computer engineering curriculum is revised and improved on regular basis. The instructional and research facilities are continuously upgraded so that the students have a solid background within the field as well as in-depth knowledge and hands-on experience in relevant areas. By properly choosing elective courses, students may specialize in one or more of the following areas: computer systems, computer communications, networking, computer-vision, pattern recognition, expert systems and multi-media systems.

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

### Laboratories

- 1. Elementary Computer Laboratory
- 2. Software Engineering Laboratory
- 3. Electronic System Laboratory
- 4. Video and Image Processing Laboratory
- 5. Computer Communication Laboratory
- 6. Digital System Laboratory
- 7. Information Technology Laboratory
- 8. DOTIT Laboratory

### Postgraduate Studies & Research

In order to satisfy the increasing demand for advanced technological education, the department offers MSc degree courses in Computer Engineering. The MSc and PhD curriculum is designed to develop individuals with outstanding technical and managerial skills, expertise in decisionmaking and capacity for sustained hard work. It introduces engineers to modern theories and techniques while taking into account the needs and requirements of the industry in Pakistan. The faculty has completed a number of research projects funded by the HEC through the Directorate of Advanced Studies, Research and Technological Development. Research papers based upon applied research have been published in journals of national and international repute. Degree of MSc Computer Engineering is awarded in the following specializations:

- 1) Master of Science in Computer Engineering
- 2) Master of Science in Software Engineering
- Master of Science in Telecommunication Engineering

## DEPARTMENT OF SOFTWARE ENGINEERING

#### Chairman

### Prof. Dr. Attaullah Sollangi

#### **Professors:**

- 1. Attaullah Sollangi, PhD (USA)
- 2. Muhammad Khawar Islam PhD (Australia)

### Assistant Professors

- 3. Tabassam Nawaz, MSc Engg (CASE)
- 4. Samana Zehra, MSc Engg (Taxila)
- 5. Zeshan Iqbal MSc Engg (Taxila)

6. Muhammad Siraj Rathore MSc Engg Taxila

### Lectures

- 7. Shahid Iqbal Lone, MSc Computer Science (Gomal)
- 8. Muhammad Asjad Saleem , BSc Engg (Taxila)
- 9. Tasawer Iqbal Khan, BSc Engg (Hons) (Taxila)
- 10. Mustansar Ali Ghanzanfer , BSc Engg (Gold Medalist) (Taxila)
- 11. M Naveed BSs Engg (Taxila)
- 12. Ali Ameer Gondal BSc (Bahria University) on higher studies abroad.
- 13. Khalid Bashir Bajwa, Ms Computer Engg (Taxila) on higher studies abroad.
- 14. Syed Abdullah Nauroze, BSc Egg (Hons) (Taxila) on higher studies abroad.
- 15. Shahzad Ahmad Bhati, BSc Engg (Houns) Taxila on higher studies abroad.
- 16. Syeda Samana Naqvi, BSc Engg Taxila on higher studies abroad.
- 17. Mufliha Ashraf BSc Engg (Taxila)

### THE DEPARTMENT

The Department of Software Engineering has been established for four years. The software engineering program involves learning of systematic and quantifiable approach to the design, development, operation and maintenance of software systems from small to higher level of complexities. The program covers not only the technical aspects of design and development of software systems, but also their management and teamwork skills.

The department offers 4 years degree program leading to B.Sc. in Software Engineering. At present, more than 200 students are enrolled in the program.

The Software Engineering courses are built on a strong foundation of mathematical, logical and computing sciences. The introductory year consists of basic subjects in Computer Science, Mathematics, and basic Electrical Engineering. In subsequent years, the emphasis is on deeper understanding of algorithm development, logic design, programming techniques, computer architecture and languages, computer communication networks and software engineering. Both theoretical and practical aspects are covered during the course of studies. Students are required to undertake small projects to learn practically and to enable them to work individually and in groups.

On successful completion of the Software Engineering degree, graduates will possess a broad range of skills and practices in areas of software analysis, design, development and management. Graduates from this programme find lucrative employment in highly demanding software engineering posts in specialist roles as application developers, systems analysts, network designers and management consultants.

24

# LABORATORIES

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

- 1. Elementary Computer Laboratory
- 2. Software Engineering Laboratory

- 3. Electronic System Laboratory
- 4. Video and Image Processing Laboratory

PROFILE OF THE UNIVERSITY FACULTIES

- 5. Computer Communication Laboratory
- 6. Digital System Laboratory
- 7. Information Technology Laboratory

# DEPARTMENT OF TELECOMMUNICATION ENGINEERING

### Associate Professor

1. Dr. Baber Kaleem Minhas

## **Assistant Professors**

- 2. Muhamamd Ali Amir MSc Engg (Lahore)
- 3. Mehboob Iqbal MSc Engg.
- 4. Javed Asad MSc (Taxila)
- 5. Sheheryar Saleem MSc (Australia)

## Lecturers

- 6. Asim Shahzad MSc Engg (ICT)
- 7. Salman Azam (on higher studies abroad)
- 8. **Rashid Saleem** (on higher studies abroad)
- 9. **Usman Masood** (on higher studies abroad)
- 10. Rameez Asif (on higher studies abroad)

# THE DEPARTMENT

Established this year (2007), Department of Telecommunication 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 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 and technologies run on it and how these technologies can be developed.

By successfully completing the Telecommunication Engineering degree, the graduates will gain a broad range of

### PROFILE OF THE UNIVERSITY FACULTIES

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.

#### **Course of Study**

The telecommunication Engineering program involves the integrated study of various communication technologies, telecommunication system designing and integration of various telecom networks. This is accompanied within an engineering context that encompasses aspects of management and design, with study of relevant technologies.

The telecommunication engineering curriculum provides in-depth knowledge of design, communication, and system integration as well as theory and applications. With the rapid developments in the telecommunication systems and technologies, the telecommunication engineering curriculum is revised and improved on regular basis. The instructional and research facilities are continuously upgraded so that the students have the solid background within the filed as well as in depth knoeledge and hands-on experience in relevant areas By properly choosing elective course, students may be specialized in one or more of the following areas:

Telecommunication systems designing,

digital communication, wireless communication, traffic engineering, fiber communication and many more.

### Laboratories

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

- 1. Microwave and Optical Communication. Lab
- 2. Optoelectronics lab.
- 3. Wireless Information Technology. Lab
- 4. Communication System. Lab
- 5. Electromagnetic wave. Lab
- 6. Antenna Radiation. Lab

### Postgraduate studies and research

In order to satisfy the increasing demand for advanced technological education, the department offers MSc degree course in Telecommunication Engineering. The curriculum is designed to develop individuals with outstanding technical and managerial skills, expertise in decision making and capacity for sustained hard work. It introduces engineering to modern theories and techniques while taking into account the needs and requirements of the industry in Pakistan.

# CENTER OF EXCELLENCE FOR ASIC DESIGN AND DSP

The "Center of Excellence for ASIC Design and Digital Signal Processing" was established in December 2005 through a development project funded by HEC (Higher Education Commission). This Centre is equipped with the state-of-the-art facilities, software tools of worth Pak Rs. 400 million and hardware of worth Pak Rs. 30 million. The center provides expertise in the areas of chip designing, simulation, and PCB design. Test and measurement equipments for advanced testing and verifications are also available. With a mission to introduce newest technologies in the field of ASIC (Application Specific Integrated Circuit), FPGA (Field Programmable Gate Arrays), and DSP, the center is providing design, teaching and research facilities to Ph.D, M.Sc. and undergraduate students. More than a dozen research papers have been published in International Conferences based on the work done in this Centre. Seven PhD scholars and more than ten M.Sc. students are registered who are working in this area/Centre. The centre is equipped with the following:

### Hardware:

- 35 Computer Systems: (Dell Optiplex GX280n)
- 06 Sun workstations: (2500 and 1500)
- Xeon Server Machine
- FPGA Boards: (Spartan: XSA100, XSA200, XSA3S100, XSB300E)
- High End FPGA Boards: (Virtex-II Pro ML300, Xilinx Inc)
- Logic Analyzers: (Agilent 16900A, Tektronix TLA 721)
- Oscilloscopes: (Tektronix TDS2022 200 MHz, Agilent 54641D 2+16 CH 350 MHz and 54830D 2+16 CH 600

### MHz)

 Data Pattern Generators: (Agilent AFG 33250A, Tektronix DTG 5274) DSP Kits: (TMS320C6713 DSP Starter Kit, SignalMaster TMS320C6701 Stand-alone Format / Virtex-II)

### Software:

□ Cadence EDA Tools, Front End and Backend: (PCB Design Expert, Cadence NC Verilog simulator, Nano Encounter, Virtuoso Schematic Composer etc.)

- Synopsys Digital Front End Tools: (HDL Compiler Verilog, FPGA Compiler II, Design Compiler, NanoSimetc.)
- Xilinx ISE Synthesis Tools: (Xilinx ISE 6.1i, 7.1i, 8.1i and EDK 7.1i)
- Xilinx Embeded Development kit
- Altera Quartus II
- Texas Instrument Code Composer Studio used for the programming of DSP kits
- Mentor Graphics Simulation Tools for FPGA: (ModelSim 5.4, 5.7, 6.0a, 6.1f)

PROFILE OF THE UNIVERSITY FACULTIES

# 5. TEACHING STAFF OF BASIC SCIENCES AND HUMANITIES

### Professor

1. Muhammad Akram Javaid, PhD Mathematics (UK)

### Associate Professors

- 2. Abdur Rauf, (Gold Medalist), MSc Mathematics(Turkey)
- 3. Hafiz Muhammad Yasin Butt, M Phil Islamic Studies (AIOU)

### Assistant Professors

- 4. Tariq Asghar, MSc Mathematics(Punjab University)
- 5. Muhammad Saeed Akhtar, M Phil Mathematics(QAU)
  - (on higher studies abroad)

The teachers of this supporting setup are placed under the administrative control of Chairman of Engineering Department. These teachers along with visiting teachers assist in teaching Mathematics, Islamic studies and Pak. Studies. 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, numerical analysis and computer sciences.

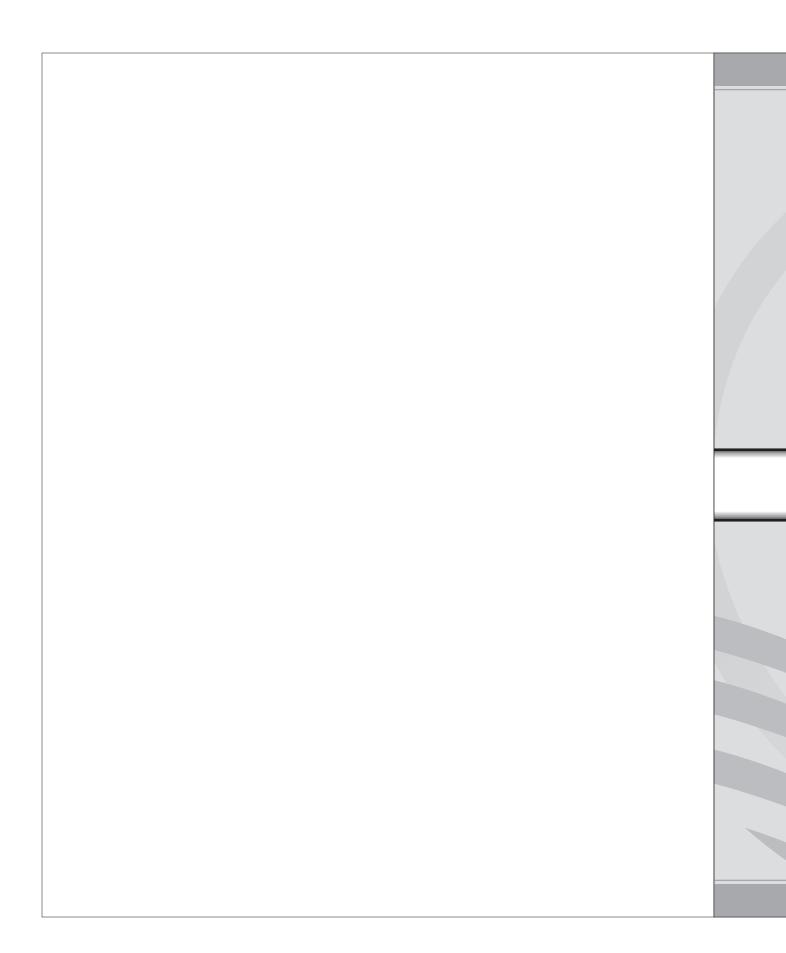
Appropriate courses in Islamic Studies have also been constituted in the department to be taught to the Muslim students of various engineering faculties. The purpose is to enlighten the soul and mind of the students and enable them to get appraisal of tenets of Islam so that they may perform their duties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

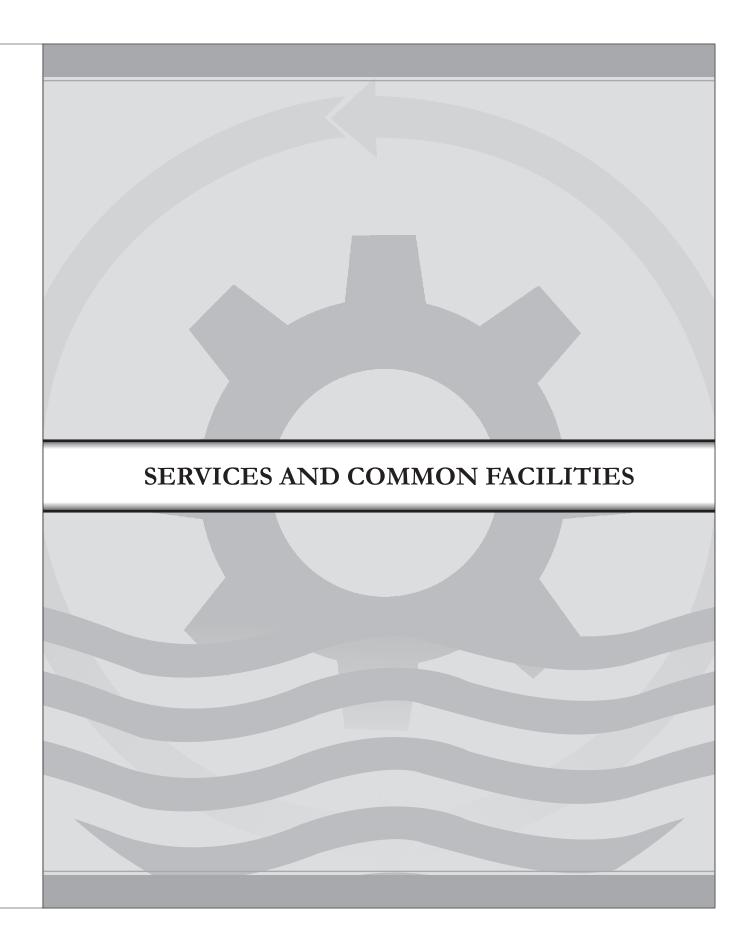
In 1982 the Government of Pakistan also emphasized the need of subject of Pakistan Studies. The main purpose of this subject is to make the students to be acquainted with ideology of Pakistan. The Non-Muslims students are offered courses in the subject of Ethics and Pakistan Studies.

# 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 in the subject of Islamic Studies is being carried out in the field of "Seerat-un-Nabi and Political System of Islam".





# 6. LIBRARY

#### 6-A 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 100 readers at its different halls, which provide congenial conditions for study. The reading halls remain open (2 shifts) from 8:00 am to 7:00 pm on all working days providing break for Jumma prayer 12:00 noon to 2:30 pm. The Library is stocked with encyclopedias, dictionaries, handbooks, standard specifications, yearbooks, almanacs, abstracts, indexes and a big reserve collection of text and general technical books

#### **Stocks and Services**

The Library has more than **40000** volumes of books, 45000 volumes of bound serials, 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. The Library provides photocopy service as well.

#### Book Bank and Co-operative Book Store

The Library houses a Book Bank, which lends textbooks to the undergraduates for long periods on a nominal rent. Books, which are in excess of the requirements of the Book Bank, are sold to the students on a no-profit no-loss basis through its Cooperative Bookstore.

#### 6-B DIGITAL LIBRARY

#### Mission

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

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS http://www.ieee.org/ieeexplore

AMERICAN SOCIETY OF MECHANICAL ENGINEERING http://www.asme.org/

AMERICAN SOCIETY OF CIVIL ENGINEERING http://www.asce.org/

ASSOCIATION OF COMPUTING MACHINERY

http://acm.org/pubs

Emerald http://www.emeraldinsight.com

AMERICAN ASSOCIATION OF PHYSICS TEACHERS http://www.appt.org/ SPRINGERLINK http://www.springerlink.com

BLACKWELLSYNERG http://www.blackwell-synergy.com

EBSCOHOST http://search.epnet.com

OXFORD UNIVERSITIES http://www.oupjournals.org

JSTOR http://www.jstor.org/

SCIENCEDIRECT http://www.sciencedirect.com

SCIENCEONLINE http://www.scienceonline.com

PALGRAVE MACMILLAN http://www.palgrave-journals.com/pal/

ISIWEB OF KNOWLEDGE http://www.isiknowledge.com

ROYAL SOCIETY OF CHEMISTRY http://www.rsc.org/is/journals/pri.htm

BENTHAM SCIENCE http://www.bentham.org

AMERICAN CHEMICAL SOCIETY http://pubs.acs.org/

AMERICAM MATHEMATICAL SOCIETY

http://www.ams.org/journals/

AMERICAN INSTITUTE OF PHYSICS http://journals.aip.org/

AMERICAN PHYSICAL SOCIETY http://publish.aps.org/

NATUREPUBLICATION http://www.nature.com/nature

MARYANNLIEBERT http://www.liebertonline.com

AMERICANSOCIETYOF MICROBOLOGY

http://journals.asm.org/

#### 6-C INFORMATION TECHNOLOGY CENTRE

There has been a major interest in Educational Computing since 1985 when a DEC's VAX-11/730 was installed with six terminals, one line printer and one dot matrix printer at the Data Processing Centre. Later In 1989, a Micro-VAX-3100 was procured with its 20 interactive terminals. High pace changes and alterations in trends, hardware and software, introduction of new and user friendly operating system & environments, built-in packages and world wide communication led the centre to switch over from the outdated VAX to personal computers LAN and WAN. The centre is, thus, equipped with 50 personal computers. The IT Centre is providing services to all the departments of the university. The main objectives of the centre are

The main objectives of the centre are

- To train the students at undergraduate level to develop the programming skills.
- To provide research aid facilities to the postgraduate students.
- To provide advisory services to the teachers and research scholars of the university.
- To computerize different procedures of the university's administrative departments.
- To provide training to the engineers/officials of the surrounding industrial Organizations.

The students are given extensive "Hands on" training on Pentium computers which enhances their experience of working in an on-line environment. Short courses in various programming languages and application packages are also offered in the evening time. The centre is committed for the promotion of Information Technology and its facilities are being upgraded according to the developments in this field.

34

#### 7. NETWORK ADMINISTRATION AND RESEARCH CENTER (NARC)

#### **Director Networks**

Engr. Farhan Ahmed Nadeem, MSc Computer Engg (Taxila)

Senior Network Engineer

Shahbaz Pervez Chattha, MSc Computer Science (UAF)

#### Web Manager

Syed Muhammad Adnan, MSc Statistics (Pub)

#### Database Developer

Muhammad Huzaifa, MCS (BIIT)

#### **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 research facilities for PhD scholars 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

#### SERVICES AND COMMON FACILITIES

the students in their mini 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.

NARC is currently providing support in the following areas:

- Adhoc networks
- Network Routing
- Network Simulation
- Stateful inspection Firewalls
- Optical Fiber
- Secure VoIP communication
- Clusters and Grid Computing
- GPS and GIS

- Advanced Operating Systems
- GSM, GPRS and other Mobile technologies
- PHS and CDMA WLL
- WiFi & WiMAX
- Blade Server
- Students Email Service using Goggle Apps
- Central Storage System for Faculty

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 Cisco certification courses.

# 8. DIRECTORATE OF ADVANCED STUDIES, RESEARCH AND TECHNOLOGICAL DEVELOPMENT (ASRTD)

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

#### SERVICES AND COMMON FACILITIES

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.
- 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 manpower development in the following fields:
- i. Computer/Data communication
  - ii. Image Processing
  - iii. Simulation and Modelling
  - iv. Wireless communication

## 9. DIRECTORATE OF STUDENTS AFFAIRS

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.

# **10. DIRECTORATE OF UNDERGRADUATE STUDIES**

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 departments and function as liaison office between the academic departments for the smooth conduct of courses. It also monitors the progress of teaching and ensures the in time completion of courses by respective department.

The Directorate also takes care of the following matters with the assistance of Students Section.

- i. Registration of fresh entrants
- ii. Scholarships and Stipends

- iii. Migration Cases
- iv. Verification of Documents

#### HEC-Japanese Need Based Scholarships

HEC-Japanese Need Based scholarship program aims at providing equal opportunities to talented students who are unable to enter higher education due to financial constraints. All the students who will secure admission in Entry 2007 at UET Taxila will have equal opportunity to compete for this scholarship according to their financial need.

## **11. DIRECTORATE OF SPORTS**

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 interhostel tournaments are held to provide participation to the maximum number of students. Outstanding sportsmen are encouraged to take part in the interuniversity 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.

# **12. FINANCIAL ASSISTANCE**

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:-

- 1. Donations
- 2. Fund raising campaign.
- 3. Earning from Endowment Fund established for the purpose with an amount of Rs.05.000 Million.

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

## 13. HOSTELS

The University has provisions for hostel accommodation at the Campus. The halls of residence are named as Quaid-e-Azam Hall, Iqbal Hall, Omer Hall and Usman Hall. The management of the halls is in the hands of the University teachers. Each hall is looked after by a Warden and Resident Tutors, being teachers. The students themselves manage many aspects of the life in halls. The halls are provided with common rooms, canteens, mosques and other such places of common utility. 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.

### **14. ESTATE OFFICE**

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.

# **15. HEALTH FACILITIES**

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

- 1. Students will be provided free consultation by the Medical Officer.
- 2. Available medicines will be issued to students through authorized prescription only.
- 3. Night dispensary service will be available in emergency only.
- 4. In acute emergency, where a student cannot move, immediate

# **16. TRANSPORT**

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.

- 5. Boarders will be required to fill in the proforma of previous medical history mentioning the disease he carries.
- 6. Indoor treatment from unauthorized medical attendants is not allowed.

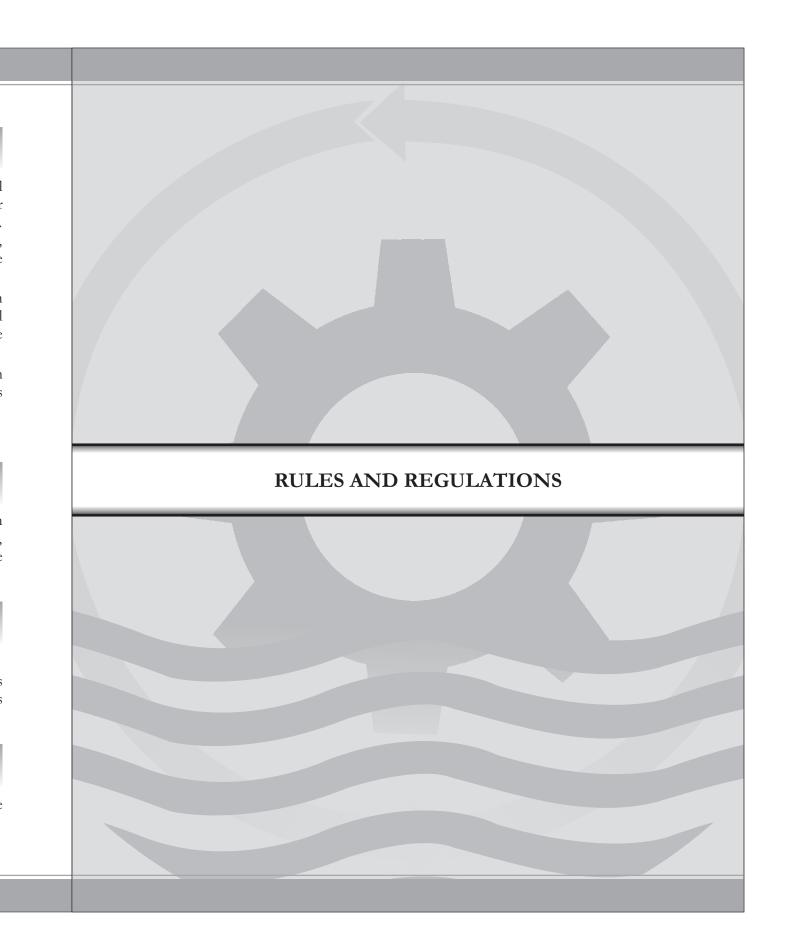
Adequate transport facility is provided for students and the buses are plying between Rawalpindi, Islamabad, Hassan Abdal, Wah Cantt. and the campus. This facility is, however, not obligation of the University and it can be reduced or terminated if the policy and/or the financial conditions so demand.

# 17. ADMISSION/REGISTRATION/PLACEMENT OFFICE

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.

# **18. DUES/SCHOLARSHIP SECTION**

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



# **19. TEACHING AND EXAMINATIONS**

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

# A. Short Title, Commencement and Applicability:

- These Regulations shall be called "The University of Engineering and Technology, Taxila Regulations Relating to Semester System of Teaching and Examinations for Bachelor Degree Programs, 2007".
- 2. These shall come into force with immediate effect from undergraduate degree programs Entry-2007 of the University.

#### **B.** Definitions:

"Academic Council" means Academic Council of the University.

- "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.
- "Board of Undergraduate Studies" means the Board of Undergraduate Studies of the concerned Academic Department of the University.
- "Candidate" means a student who intends to appear in an Examination.

- "Casual Student" means a student who is not on the rolls of the University after passing out his session 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.
- "Chairman" means the Chairman of the concerned Academic Department of the University.
- "Controller of Examinations" means the Controller of Examinations of the University.
- "Contact Hours" means the total number of lectures, tutorials and laboratory hours per week.
- "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.
- "Credit Hour" means 1 hour of theory lecture or 3 hours of practical work per week for the semester.
- "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.
- "Dean" means the Dean of the concerned Faculty.
- "Department" means an Academic Department of the University.

- "End Semester Examination" means the examination to be held at the end of each semester on such dates as the University may determine.
- "Faculty" means the concerned Faculty of the University.
- "Grade" means the letter grade earned by a student in a course depending on his performance in that course.
- "Grade Points" means the points (numerical value) associated with each letter grade.
- "Mid Semester Examination" means the examination to be held after 7-8 weeks of teaching in case of regular semesters and after 4 weeks of teaching in case of optional semester on such dates as the University may determine.
- "Regular Student" means a bonafide student of a degree program of this University who does not maintain admission simultaneously in any other degree/diploma program of this University or any other institution.
- "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.
- "Semester Grade Point Average (SGPA)" means the credit-hour weighted average of the Grade Points earned for all the courses in a semester.
- "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.

- "Syndicate" means the Syndicate of the University.
- "University" means the University of Engineering and Technology Taxila.
- "Vice-Chancellor" means the Vice-Chancellor of the University.

#### C. Explanations:

In these regulations: -

- a) The pronoun "he" and "its" derivatives are used for both male and female persons.
- b) Depending upon the context, the words imparting the singular number include the plural number as well, and vice-versa.

#### D. Academic Programs:

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

- 1) Civil Engineering
- 2) Computer Engineering
- 3) Electrical Engineering
- 4) Mechanical Engineering
- 5) Software Engineering
- 6) Telecommunication Engineering
- 7) Electronics Engineering (at Chakwal Campus)
- 8) Mechatronics Engineering (at Chakwal Campus)
- 9) Any other discipline as approved by the University Authorities
- E. Academic Calendar:

The Bachelor's Degree programme

shall be spread over four academic years. 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 In case of regular semesters i.e. Fall and Spring semesters, there shall be sixteen weeks of teaching. The seventeenth week shall be of preparatory holidays for End Semester Examination which shall be held in the eighteenth week. While in case of summer semester, ninth week shall be for End Semester Examination.

#### Part-I. GENERAL

- a. The minimum duration of the degree program shall be four academic years. 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 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 program 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 student shall be allowed to repeat / improve the courses and /or take the End Semester Examination during the summer semester only. The registration, attendance, conduct of examination and result display policies etc. during the summer semester shall be followed as that in case of regular semester. Letter grade awarded during summer semester shall not be more than a 'B' grade.
- f. The academically deficient causal student shall be allowed to repeat / improve the courses and / or to take the End Semester Examination 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 of a course the student shall have to pay course registration fee as prescribed by the University.

- g. An academically deficient student shall be allowed to get himself registered for 10-12 credit hours at maximum in a summer semester. He shall have to pay registration fee per course as prescribed by the University.
- 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 Director Undergraduate Studies, in consultation with the Deans of Faculties, will notify the schedule of registration for each semester, other than the first semester. The application forms shall be available 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 10 days of the starts of semester.
- b) If a student misses his registration for cogent reasons, and applies for it within 15 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 charged the 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 within the prescribed time, his name shall be deemed to have been struck off the University Rolls and he shall not be allowed to appear in any examination in that semester.

#### Part-III. ATTENDANCE REQUIREMENTS

No candidate shall be admitted to an End Semester Examination unless the following conditions are fulfilled: -

a) He has been on the rolls of the University during the semester for which the examination is being held, unless allowed by these regulations to take examination in

order to repeat/improve a course.

- b) He is not debarred from taking the examination under the University rules and regulations for the time being in force.
- c) He has attended a minimum of 80% 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 examination is held.

The Chairman of the concerned department may, for valid reasons, condone this deficiency on the recommendations of the course teacher concerned.

- d) If a student does not fulfill the condition of attendance, he shall be awarded an Fgrade in that course and will have to re-register for that course in the summer semester in which the course is 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 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 practicals conducted by him together with the number of lectures and practicals 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.

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. Grading shall be usually carried out on the basis of normal distribution curve using statistical methods with 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
2As	A & A <sup>-</sup>
3 Bs	B+, B & B <sup>-</sup>
3Cs	C+, C & C-
1 D	Simple D
F	Fail

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

Letter Grade	Grade Points
А	4.00
A-	3.70
B +	3.30
В	3.00
B-	2.70
C +	2.30
С	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.

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

47

#### 1. 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 registered in that semester.

#### 2. 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 unannounced quizzes per subject in a semester.
- ii) **Mid Semester Examination:** There shall be one mid semester examination of 1.5 to 2.0 hours duration per subject in a semester after seventh or 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 subject 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. The cumulative performance in all the experiments performed, design, drawing, or assignment completed during the semester shall carry 20% weight of the subject.

#### b) End-Semester Examination:

There shall be one End-Semester Examination with two or three hours duration covering the entire course at the end of each semester.

#### 6. Choice of Questions:-

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

#### 7. Absence from Examination:-

Absentees in any of the evaluation components shall be awarded zero marks and no make-up or repeat tests shall be arranged except that of End-Semester Examination, which shall be governed by sections discussed under heads "Failure (F) Grades" and

48

"Incomplete (I) Grades".

#### 8. 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:

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

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%.

#### 9. Maintenance and Display of Sessional Awards:

- a. The marked scripts of each examination component except that of end semester examination shall be shown to the students by the concerned teachers.
- In case a student 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 the Departmental Semester Committee. The decision of the Committee shall be final.
- b. 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. Conduct of End Semester Examination

There shall be one End-Semester Examination with two or three hour's duration covering the entire course at the end of each semester.

#### 11. Place of End Semester Examination

The Examination shall be arranged / conducted by the Controller of Examinations at the respective campuses of the University.

#### 12. Date Sheet

The Controller of Examinations shall issue the date sheet for each end semester examination. Examination shall be held on consecutive days excluding holidays which means that no gap shall be allowed between the two papers.

# 13. Registration for End Semester Examination (for academically deficient students only)

An academically deficient student shall have to submit an application for registration to an End Semester Examination on the prescribed form together with the prescribed examination fee to the Controller of Examinations through the Chairman of the Department and the Dean of the concerned Faculty according to the registration schedule and date sheet notified by the Controller of Examinations in the fifteenth week in case of regular semester and fifth week in case of summer semester. Entry to the Examination Hall shall require appropriately endorsed registration/admit card, issued by the Controller of Examinations.

#### 14. Examination Fees (for academically deficient students only)

- If application for registration to an end semester examination is submitted not later than two weeks before the commencement of the examination, the examination fee, i.e. Rs.600/= shall be charged for each examination, irrespective of the number of papers in which a candidate intends to appear.
- If the application is submitted later than two weeks before the commencement of the examination but not later than one week before the commencement date, a late fee of Rs.150.00 shall be charged in addition to the normal fee.
- If the application is submitted later than one week before the commencement of the examination but not later than four days before the commencement date, double the normal examination fee shall be charged.
- If the application is submitted later than four days before the commencement of the examination, the Dean of Faculty concerned may permit, on the basis of cogent reasons, a candidate to appear in the examination on payment of an urgent fee of Rs.1600/-.
- If the application is submitted on or after the commencement of the examination, the Vice-Chancellor may permit on special grounds, a candidate to appear only in the remaining scheduled papers of such examination on payment of a penal fee of Rs.2000/-.

#### 15. Commencement of End Semester Examination

The examination shall commence one week after the termination of teaching session or completion of courses.

#### 16. Paper Setting and Marking of Scripts

- a) For all examinations, the course teacher or teachers of a subject shall set the question paper of that subject covering the entire syllabus, supervise its examination, mark the answer scripts and prepare the award list.
- b) The course teacher shall mark the scripts for end semester examination and prepare the award list on the prescribed form. He shall send the award list along with the marked scripts to the Controller of Examinations under sealed cover within the specified time limit.
- c) The course teacher shall be responsible to ensure that there is no discrepancy in the marks entered in the award list, 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.
- d) The time limit for marking the scripts shall be seven 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.

#### 17. 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 last semester. A list of available projects shall be notified 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 a hard-bounded form) before the end of the final examination of their last semester. A committee nominated by the Chairman of the Department including the project supervisor as a member and approved by the Vice-Chancellor shall evaluate these projects at the end of seventh and eighth semesters. The eighth semester project evaluation shall be held after the examination week and shall be followed by an open presentation

#### 18. Summer Internship

Every student shall be required to participate in an eight weeks practical training program during the summer of their second or third year and submit a formal report to the Chairman of the Department. Though, non-credited, the summer internship shall appear on the transcript.

#### 19. 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.

#### 20. 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 1<sup>st</sup> semester
- iv) CGPA less than 2.00 at the end of an academic year

#### a) Academic Dismissal

- A student who fails to obtain a minimum GPA of 1.0 at the end of 1<sup>st</sup> semester of a degree program shall be placed on academic probation for the 2<sup>nd</sup> semester. In case, he fails to improve his CGPA to 1.0 at the end of academic year including summer semester opportunity for the failed courses of 1<sup>st</sup> and 2<sup>nd</sup> semesters, his name shall be removed from the rolls of the University.
- Also, the name of student, who fails to obtain a minimum CGPA of 2.0 even after two detentions, 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) Academic Detention

- Detention means that a student shall be asked to recommence his studies from an appropriate lower semester by joining a junior class.
- A student shall be detained if he fails to maintain a minimum CGPA of 2.00 at the end of every academic year including summer semester opportunity for academically deficient students.

In case of repetition of a course, the new grade earned would replace the previous grade, whether high or low.

• A student who is detained shall have the option to repeat all the courses being taught in that academic year or only those in which his grade is less than "C" to improve his CGPA.

#### 21. Failure (F) Grades

If a student obtains "F" grade in any course or courses of a semester, he shall have only one chance to repeat the End-Semester Examination of the course / courses whenever held in the summer semester and / or whenever the examination schedule makes it possible for the student to take the examination. In such cases, the sessional marks obtained by the student earlier shall be retained.

If a student once again obtains "F" grade in the repeat examination of a course, then he must take the course again whenever offered during summer semester and / or when the

schedule of teaching makes it possible for the student to take that course. In such cases, the sessional marks obtained earlier shall be cancelled.

#### 22. Incomplete (I) Grades

A student may be awarded "I" grade in a course, if he is not allowed to take the End Semester Examination, or if cannot take the End Semester Examination due to permissible reasons. The Chairman of the concerned Department shall decide whether the reasons were permissible or not. The appeal may be filed with the Dean of Faculty concerned whose decision shall be final.

A student awarded "I" grade due to reasons other than the attendance requirements in a course may appear in the End Semester Examination of that course whenever held in a summer semester and / or when the examination schedule makes it possible for the student to take the examination after completing the requirements which make him eligible to appear in the examination of the said course.

#### 23. Improving Course Grades

If a student wants to repeat the End Semester Examination of any course to improve the grade obtained in that course, he may do so by registering for that examination in a summer semester and / or when the examination schedule makes it possible for him to take the examination. In this case, the sessional marks obtained by the student earlier shall be retained.

As soon as a student repeats an End-Semester Examination, his previous grade for that course shall be cancelled, and only the latest grade earned by the student shall be considered for the computation of CGPA.

Sessional marks shall not be revised when a student opts to repeat an End-Semester Examination. If a student wants to improve sessional marks too, he must get himself registered in that course in a summer semester and / or when the schedule of teaching and examination makes it possible for him to take that course and to appear in the End Semester Examination. He shall have to pay prescribed registration fee per course.

It shall be noted that a student can only improve a grade lower than "C".

#### 24. Notification of Result

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

#### 25. 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 30 days of the declaration of the result. The Dean of the Faculty concerned may condone the delay up to a maximum period of 15 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.

#### 26. Disposal of Marked Answer Scripts

The marked answer scripts of a particular end semester examinations shall be retained in the office of the Controller of Examinations for a period of two years. After this period, the scripts shall be disposed off accordingly.

#### 27. 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 of the degree programme in the relevant discipline with CGPA 2.00 or more.
- d) 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.

#### 28. 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 fulfilled all the requirements for the award of degree.
- b) He has obtained CGPA of 3.7 or more.
- c) He has not failed in any course of the entire degree program.
- d) He has passed within the minimum duration of the degree program laid down in these regulations.
- e) He has not been granted exemption in any course.
- f) He has not improved any grade in the entire degree programs.

#### 29. 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.

#### 30. 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.

#### 31. Semester Grade Sheet

A grade sheet shall be issued to each student after the declaration of semester result on the payment of prescribed fee. This sheet shall indicate the grades and GPA earned by the student in a semester.

#### 32. 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.

#### 33. Withholding of Final Semester Result

The result of final examination 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 has cleared the courses of the lower semesters. His final semester result will be declared with the session in which he clears his last course of the degree program.

#### 34. 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<sup>"</sup> 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.

#### 35. Issuance of Certificates / Degrees

Subject to fulfillment of the prescribed requirements and submission of the prescribed application form with fee for issuance of a degree, certificate or duplicate copy thereof:

- a) Degree will normally be issued within two months of the receipt of the application, and
- b) Any other certificate or duplicate copy thereof will ordinarily be issued within six days on the receipt of the application form.

Note: A candidate shall deposit double the prescribed fee if he requires a certificate or duplicate copy within 48 hours.

#### 36. Certificate Fees

The fee to be charged for various certificates shall be as under:

a)	Semester Grade Sheet	Rs. 150
b)	Degree in Absentia/Degree Before Convocation/ Duplicate Degree	Rs. 1000
c)	Provisional Certificate	<b>Rs.</b> 500
d)	Rechecking of Answer Scripts	<b>Rs.</b> 300
e)	Any other Certificate	<b>Rs.</b> 150
f)	Duplicate Certificate	Double the normal fee
g)	Transcript of Awards	<b>Rs.</b> 1000
h)	Verification fee of University Degree/Certificates:	
	(i) Degree/ Transcript of Awards	<b>Rs.</b> 100
	(ii) S. G Sheet/ Provisional Certificate/ Any other Certificate	Rs. 50 each

Note : The rate of fee may be revised by the University Authorities from time to time

#### 37. Departmental Semester Committee

#### 1) **Constitution of the Committee**

- Each Department shall have a Departmental Examination 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

- i) Ensure content coverage of courses by comparing test with the course outlines and work plan provided by the teacher.
- a. Monitor classroom activities as reflected in the course outlines.
- b. Examine all problems regarding uniformity before the declaration of results.
- c. Address and decide students complains/appeals regarding sessional / grade awards.

The decision of the Committee shall be final.

#### 38. University Semester Committee

### 1) **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 Undergraduate Studies.
- iv) The Controller of Examinations.

#### 2) 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 implementation 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 amendments in the semester regulations, if needed.

#### 39. Award of Certificate

Subject to fulfillment of the prescribed requirements and submission of the prescribed application form with fee for issuance of a degree, certificate or duplicate copy thereof:

• Degree will normally be issued within two months of the receipt of the application, and

- Any other certificate or duplicate copy thereof will ordinarily be issued within six days on the receipt of the application form.
- Note: A candidate shall deposit double the prescribed fee if he requires a certificate or duplicate copy within 48 hours.

## **20. MIGRATION**

- 20.1. 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.
- **20.2.** No student shall be admitted to first year and final year classes by migration.
- **20.3.** No student other than regular student shall be allowed admission by migration.
- **20.4.** Admission by migration shall not be allowed ordinarily after the expiry of three weeks from the commencement of the session.
- **20.5.** No student shall be admitted by migration unless he produces a "No Objection Certificate" and good moral character certificate to the effect that:
  - He has obtained not less than 2.8 GPA or equivalent in the examination on the basis of which migration is requested.
  - 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.

- No disciplinary action is pending against him.
- **20.6.** 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.
- **20.7.** 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.
- **20.8.** The student will be required to clear all the university dues before he

applies for migration.

- **20.9.** 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.
- **20.10.** The Registrar shall issue No Objection Certificate, which shall be valid **only for sixty days**.
- **20.11.** 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.
- **20.12.** Any changes / additions / modifications, if made in the above regulations, will also be applicable.

## **21. STUDENTS DISCIPLINE RULES**

- 1. These rules shall be called the "University of Engineering and Technology, Taxila (Students General Discipline) Rules, 1998".
- 2. These Rules are in effect from 1998.
- 3. Unless otherwise explained in the context or explicitly expressed, the following terms shall mean as defined in each case:
  - a) "Academic Department" means an academic department of the

University

- b) "Committee" means the Students Discipline Committee of the University constituted by these rules.
- c) "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.
- d) "Examination Hall" means a place declared as examination hall or as such
- e) "Hall of residence" means the hostel of the University or such place as may be declared as residence hall for students.
- f) "Student" means a bonafide student of the University, both native and foreign, in accordance with the respective rules.
- g) "University" means the University of Engineering and Technology, Taxila
- h) "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.
- 4. Every student must observe the following code of honour:
  - a) He must be faithful in his religious duties and respect the conviction of others in matters of religion and

custom.

- b) He must be loyal to his country and refrain from doing things, which might lower its honour and prestige.
- c) He must be truthful and honest in his dealings with all people.
- d) He must respect the elders and be polite to all especially to women, children, old people, the weak and the helpless.
- e) He must respect his teachers and others in authority in the University.
- f) He must keep clean in body and mind, standing for clean speech, clean sport and clean habits.
- g) He must help his fellow beings especially those in distress.
- h) He must devote himself faithfully to his studies.
- i) He must observe thrift and protect property.
- 5. No student shall --
  - a) smoke in his classroom, laboratory, workshop, library, examination hall or convocation hall and during studio work or academic functions;
  - b) 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;
  - c) 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;

- d) 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;
- e) stage, incite, participate in or indulge in any walkout, strike or other form of agitation against the University or its teachers or officers;
- f) interfere in the official proceedings of the examination or other University business;
- g) 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;
- h) Instigate or take part in any boycott of examination or create disturbance in or, around the examination hall.
- 6. Every member of the teaching staff shall have the powers (and it shall be his duty) to check disorderly or improper conduct or any breach of the rules by students occurring in any part of the precincts of the University. Should such misconduct occur in room when

the student is under the charge of an instructor/supervisor, the latter shall report the matter, without delay, to the Chairman of the Department.

- 7. 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.
- 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.
- 9. (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
  - 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.**
- 10. The functions of the Committee shall be -
  - a. to propose regulations to the Academic Council, and other authorities, for the conduct of the University students,
  - b. to maintain discipline and to guard against the breach of discipline,
  - c. to perform such other functions as may be prescribed.
- 11. A student shall be guilty of an act of indiscipline and shall be liable for each act to one or more of the penalties mentioned in Rule 12(2), if he --
  - a) commits a breach of any of the rules of conduct specified in Rule 5; or
  - b) disobeys the lawful order of a teacher or other persons in authority in the University; or
  - c) habitually neglects his work or habitually absents himself from his class without reasonable cause; or
  - d) willfully damages University property or the property of a fellow student or any teacher or any employee of the University; or
  - e) does not pay the fees, fines or other dues leviable under the University Act, Statutes, Rules, Regulations or

Instructions; or

- f) 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
- g) uses indecent language, wears immoderate dress, makes indecent remarks or gestures or behaves in a disorderly manner; or
- h) 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
- humiliates, or causes to humiliate, his fellow student or a teacher or officer or other employees of the University; or
- j) possesses, carries or uses any type of weapons/fire arms or explosive material within the University premises; or
- k) spreads by word, mouth or written material, religious, sectarian, ethnic, regional or linguistic conflicts/hatred; or
- l) uses or takes possession of the University transport unauthorisedly; or
- m) shows immodest/indecent or contra-Islamic behavior with fellow boy/girl student; or
- 12. (1) The e each 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 imposkind 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 In charge
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.
	ii) for any period	Discipline Committee, Dean of the Faculty

Sr. No.	Penalty	Authority Competent to impose the penalty
s)	Expulsion from the University	Discipline Committee
t)	Withholding of result/s, certificate of good moral	Dean of Faculty
	character etc.	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.	

- 13 (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 sub rule 13(1), the Vice-Chancellor shall have the powers to impose any of the penalties mentioned in sub rule 12(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 indiscipline is committed or who obtains knowledge of such act on a report or otherwise, may deal with the case himself or if in his view --
    - (a) the case is one which can be more appropriately dealt with by another authority; or
    - (b) a penalty 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 reasonable chance 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 12(2).
- 14. When a teacher or officer has imposed penalty/penalties on a student under sub rule (2) of rule 12, 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.

- (1) A review petition against the 15 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 15(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 12(2) shall lie with a committee comprising as mentioned below:
    - i) The Vice-Chancellor
    - ii) All Deans of Faculties
    - iii) One member to be nominated by the Syndicate
    - iv) 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 15(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.
- The Vice-Chancellor or any teacher or 16 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.

65

## **22. UNIVERSITY HOSTELS**

- 22.1. Limited hostel accommodation is available at campus for male students only. At present, limited hostel accommodation is arranged in Islamabad for female students. New buildings of hostels are also under construction in the campus for male and female students.
- 22.2. Available hostel accommodation is 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 any political and objectionable activities, shall be i n e l i g i b l e f o r h o s t e l accommodation.

Provided, 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 again.

- 22.3. 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.
- 22.4. 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.

- 22.5 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.
- 22.6. 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.
- 22.7. The residents shall not tamper with the room fittings, nor shall they get the doors fitted with internal locks.
- 22.8. 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 or sectarian body of the students.
- 22.9. The residents shall not leave lights or fans ON when the rooms are not in use.
- 22.10 The residents shall not use heaters without payment of approved charges and prior permission of the Senior Warden.
- 22.11 The residents are not allowed to use air-conditioners, refrigerators, ovens or similar electrical appliances.
- 22.12 The residents are advised in their own interest, not to keep in their

### **RULES AND REGULATIONS**

rooms cash or valuable articles like radios, transistors, tape-recorders, TV sets etc.

- 22.13 Guests may visit the residents in the hostel between 9.00 a.m. to 9.00 p.m. The residents shall not receive female guests in their rooms, but may see them in the common room or the place reserved for the purpose.
- 22.14 Guests are not allowed to stay overnight unless it is permitted by the hostel authorities and accommodation is available in the guestroom.
- 22.15 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.
- 22.16 Every part of the hostel shall be open to the hostel authorities for inspection at any time during day or night.
- 22.17 The residents are not allowed to wear immodest dress in the hostel.
- 22.18 The residents shall not keep in the

hostel any firearms or other weapons, even if licensed. Violation of this rule shall render a resident liable to expulsion from the University.

- 22.19 A resident shall not indulge in any amusement, which is likely to cause nuisance to others.
- 22.20 Any religious ceremony likely to injure the sentiments of other residents shall not be performed in the hostel.
- 22.21 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.
- 22.22 Students will have to vacate the hostel accommodation within a week of the expiry of the final semester regular examination.
- 22.23 The Senior Warden may cancel the allotment of a student who violates the Students Discipline Rules of

## 23. PROCEDURE FOR ALLOTMENT

- 23.1 A student seeking accommodation in a university hostel shall submit an application to the Senior Warden on the prescribed form.
- 23.2 The types of accommodation presently available in the hostels are;

(i) Cubicle (ii) Dormitory

- 23.3 The order of preference for allotment of the accommodation shall be as follows:
  - i. MSc (Full-time students)
  - ii. Final year students
  - iii. Third year students

#### **RULES AND REGULATIONS**

- iv. Second year students.
- v. First year students
- 23.4 Within each of the categories mentioned in sub-rule 22.3 except categories (I) & (V), the order of preference shall be as follows:
  - i) Students who have passed the n e x t b e l o w r e g u l a r examination, taken as a whole
  - Students who have failed in not more than three of the papers of the next below regular examination

iii) Others

## 23.5 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 hostel.

## 24. UNIVERSITY DRESS CODE

The students shall wear dress that insures 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.

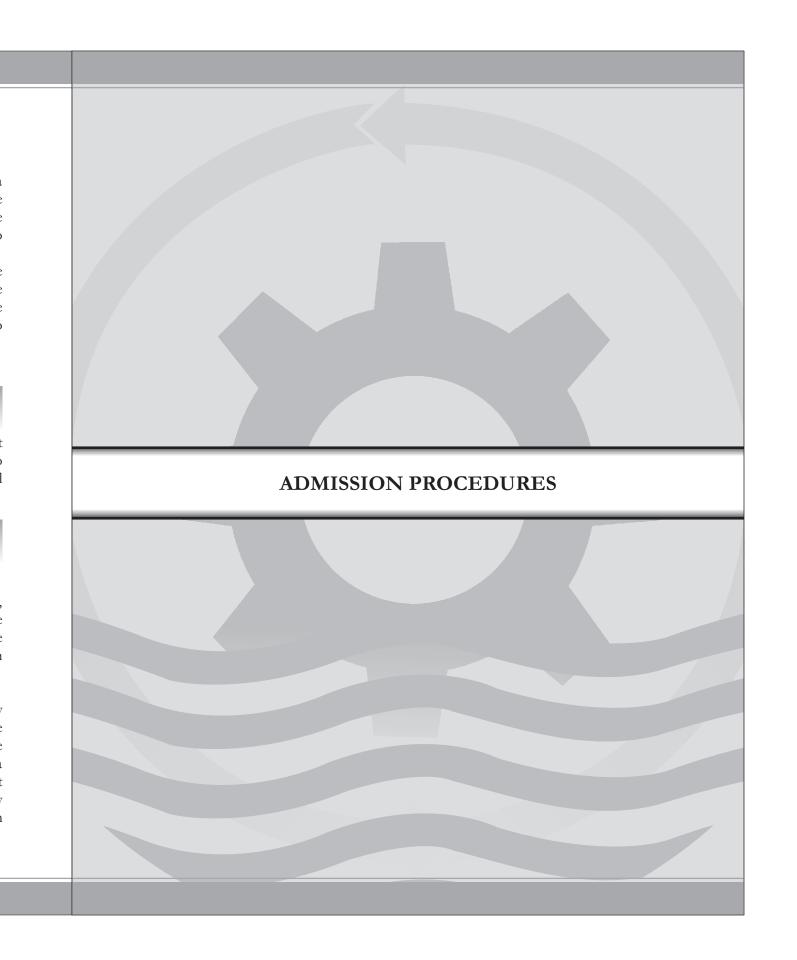
## **25. MISCELLANEOUS**

#### 25.1. 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.

### 25.2. 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.



## **26. GENERAL INSTRUCTIONS**

- 26.1. The application along with the required documents should be submitted as early as possible. Please do not wait for the last date.
- 26.2. 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.
- 26.3. 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.

26.4. Any information regarding admissions can be obtained during working hours by calling Phone Nos: (051)9047412, (051)9047640, (051)9047491, (051)9047692 and (051)9047554

Members of the Admission Committee will also be available for consultation, in person, during admission period.

## 27. ELIGIBILITY FOR ADMISSION

## 27.1. Eligibility Requirements

- (a) An applicant for admission to BSc Degree Course in Civil, Electrical, Mechanical, Computer, Software and Telecommunication Engineering (under any category) must fulfill the following eligibility requirements:
  - 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 Engineering the candidate having passed F.Sc. with Physics, Mathematics and Computer Science as major subjects will also be eligible.

- ii. He should have passed the examination (up to the latest annual examination) on the basis of which he seeks admission.
- iii. 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.

- iv. He should be bonafide resident of the area from where he seeks admission.
- v. He should meet standards of physique and eyesight laid down in the medical certificate F-III.
- vi. He should have appeared in the Entry Test for the respective Session arranged by the University with the following combination

(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:-
  - (i) Intermediate (Preengineering) Examination of the Board of Intermediate & Secondary Education, Azad

Kashmir;

- (ii) Cambridge Overseas Higher School Certificate with Physics, Chemistry and Mathematics;
- (iii) British General Certificate of Education (Advanced Level) with Physics, Chemistry and Mathematics;
- (iv) FSc. (Pre-medical) with Mathematics as an additional subject.
- (v) American High School Graduation Diploma (HSG Diploma)
- (vi) An equivalent certificate or diploma accepted by IBCC (Inter Board Chairmen Committee).
- Note: Such applicants are required to attach an equivalence certificate issued by the IBCC, with the application for admission. The following is the address of the IBCC:

## House No. 342, St. No. 97, Sector G-9/4, Islamabad.

#### 27.2. 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 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

#### **Civil Engineering**

- Diploma in Civil Technology
- 27.3. Provisions about admission on the basis of a BSc Degree
  - a) 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.

- 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 Examination or Pre-Medical Examination.
- 27.4. Scope of Eligibility for BSc with FSc (Pre-Engineering)

For admission to the BSc courses in Civil, Electrical, Mechanical Computer, Software and Telecommunication Engineering, an applicant must have passed the BSc Examination with Physics and Mathematics.

## 27.5. Sex

Both male and female persons are eligible to apply for seats shown in the Seats Allocation Chart in section 28. The general pronoun "he" and its derivatives imply either of the sex.

72

## 28. SEATS ALLOCATION CHART 2007 ENTRY

Number of seats allocated for various categories are tabulated below. Admission is granted in each category on merit, subject to eligibility under relevant Sections.

CATE	CATEGORIES		Elect	Mech	Comp	Soft	Telecom	Total
A.1	Punjab (Subsidized)	85	85	85	30	30	30	345
A.2	Punjab (Non-subsidized)	37	37	37	22	22	22	177
В.	Sind <sup>1</sup>	1	1	1				3
C.	Baluchistan <sup>1</sup>	1	1	1				3
D.	N.W.F.P. <sup>1</sup>	1	1	1				3
E.	A.J.K. and Northern Areas							
	(i) Azad Kashmir	2	1	2				5
	(ii) Kel Area		(OPEN	)				1
	(iii) Northern Area	1	1	1	1			4
Н.	Foreign Nationals							
	(i) Foreign Countries	3	3	3				9
	(ii) Afghan Nominee		(OPEN	)				1
	(iii) Bangladesh Nominee	1	1	2				4
	(iv) Indian held Kashmir			1	1	1		3
I.	Diploma of Associate Engineer	3	2	2				7
J.	Children of Armed Forces personnel		1	1	1		1	
	(i) Army	1	1	2				4
	(ii) Air Force			1				1
	(iii) Navy		1					1
К.	Federally Administered Tribal Areas		(OPEN	)				2
L.	Backward Areas <sup>2</sup>		(OPEN	,				2
М.	Children of University Employees		(	/	seats in a	discipline)	l	
N.	Children of Graduate Engineers/		,					
	Architects/ City & Regional Planners	1	1	1				3
0.	Children of University Alumni	(OPEN)					1	
Q.	Tribal Areas of DG Khan and Rajanpur Districts	(OPEN)				2		
Т	Tehsil Taxila		2 seats w	ith a maximu	m of 1 seat ir	n a discipline	•	2

1 Reciprocal Basis

2 Attock, Bahawalnagar, Bahawalpur, Bhakkar, Chakwal, D.G. Khan, Jhang, Jhelum, Leiah, Muzaffargarh, Mianwali, Rahim Yar Khan and Rajanpur Districts.

## **29. CATEGORIES AND SYMBOLS**

### 29.1. Category A1 (Punjab Province-Subsidized):

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.

## 29.2. 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 also eligible to apply. Nominations and allocation of disciplines are made by the Department of Education, Government of Sind, Karachi.

# 29.3. Category C (Baluchistan Province)

The applicant should be a bonafide resident of the Baluchistan province. Applications are to be submitted to the Secretary, Department of Education, Government of Baluchistan, Quetta. Nominations and allocation of disciplines are made by this Department. Diploma holders are also eligible to apply.

## **29.4.** *Category D* (N.W.F.P. Province) The applicant should be a bonafide

resident of the North-Western Frontier Province. Applications are to be submitted to Registrar, NWFP University of Engineering and Technology, Peshawar. Nominations - and allocation of disciplines - are made by the Department of Education, Government of NWFP, Peshawar. Diploma holders are also eligible to apply.

## 29.5. Category E (AK including KEL Area & Northern Areas)

The applicant for the Azad Kashmir & Kel Area seats should be a national of Azad Kashmir, and the applicant for the Northern area 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 Northern Areas applications are to be submitted to the Director of Education, Northern Areas, and Gilgit.

Nominations and allocation of disciplines are made by the Nomination Board for the Azad Kashmir and Northern Areas. Diploma holders are also eligible to apply.

## **29.6.** *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 also eligible to apply.

### 29.7. 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.

# 29.8. 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 also eligible to apply. Nominations and allocation of disciplines are made by the respective Headquarters.

## 29.9. 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 also eligible to apply.

## 29.10. 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.

# 29.11. 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.

- Real children of those university employees whose services have been transferred to University of Engineering and Technology, Taxila under University of Engineering and Technology, Taxila ordinance 1993.
- 2. Real children of those university employees who have joined UET Taxila after 1993.
- 3. Diploma Holders are also eligible to apply. However, in order to determine relevant merit diploma holders will be placed below the applicants possessing FSc (Preengineering)/BSc.

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).

29.12. 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 application an attested photocopy of their parent's Bachelors Degree in Engineering, renewed PEC Registration and domicile of their father/parent. Other qualifications such as AMIE (Pak) are not recognized for inclusion in this category.

29.13. 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.

## 29.14. Category Q (Tribal Areas of DG Khan and Rajanpur)

The applicant should be a bonafide resident of the area concerned. 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 or Rajanpur verifying that he/she is a bonafide resident of the Tribal Areas of D.G. Khan or Rajanpur Districts.

# 29.15. Category A2 (Punjab Province Non-subsidized)

The applicant should be a bonafide resident of the Punjab province. The eligibility conditions are same as laid down in clause 27.1. Diploma holders are not eligible.

The selected candidates have to pay the dues for Non-subsidized category (A2) as per schedule given in clause 37.1. The selection and allocation of disciplines are made according to merit. The candidate who fails to deposit the said amount his right of admission will be forfeited.

# 29.16. 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. The selected candidates will have to pay the dues for subsidized category as per schedule given in clause 37.1. In order to determine the merit, diploma holders will be placed below the applicant possessing FSc/BSc.

## **30. DETERMINATION OF MERIT**

### 30.1. Examinations Considered for Merit

For admission to all the Bachelors Degree Courses and determination of merit the following examinations are considered:

- a) Higher Secondary School Certificate Examination (HSSC) Pre-Engg or equivalent.
- b) Bachelor of Science (BSc) or BASc.
- c) Diploma of Associate Engineer.
- d) Entry Test.

## 30.2. 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%

77

ii)	Entry Test	30%
	2	

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
- ii) Entry Test

## 30.3. Deduction of Marks for Examinations Passed by Parts

If an applicant has passed an examination by parts, ten (10) marks are deducted for that examination while determining the weighted percentage marks. If the certificate of an applicant does not state whether he has passed the examination as a whole or by parts, he should submit with his application Form F-II duly filled in and signed by the controller of examinations concerned. If these forms are required but not submitted, ten marks will be deducted from the relevant examination marks obtained.

# 30.4. Merit of FSc (Pre-medical) with Mathematics

In determining the merit of an applicant having FSc (Pre-medical) with Mathematics as an additional subject:

a) it is deemed that he has passed the examination by parts; and b) the marks obtained in the subject of Biology are replaced by those obtained in Mathematics.

## 30.5. Credit for NCC

70%

30%

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.

## 30.6. 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, at 9:00 a.m. on 11<sup>th</sup> September 2007. No separate call letters will be issued in this connection.

## 30.7. 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 places of decimal), 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.

## 30.8. 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 29. The details of the distribution of seats are available in the Seats Allocation Chart in Section 28.

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.

## 30.9. 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.

## 30.10. 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.

# 30.11. TYPICAL EXAMPLES FOR THE CALCULATION OF WEIGHTED PERCENTAGE FOR ADMISSION

#### <u>CASE 1:</u>

### Applicants having HSSC (FSc) or Equivalent as the highest qualification

#### Formula

(70((HSSC marks obtained + NCC +HIFZ-E-QURAN)/HSSC total marks))+ (30Entry 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))+ ((35BSc 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%

#### <u>CASE 3:</u>

## Applicants having Diploma of Associate Engineer as the highest qualification

#### Formula

(70((Diploma marks obtained+NCC+HIFZ-E-QURAN)/Diploma total marks))+ (30Entry 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.

### 80

## % Admission Marks

(70((2570+20)/3100)) + (30(240/400)) = 76.483%

## 31. MERITS FOR THE SESSION 2006 (ENTRY 2006)

CATEG	ORIES	Civil	Comp.	Elect.	Mech.	Soft.	Electronics	Mechotronics
A1 or W1	Subsidized (Punjab)	72.180	71.930	78.405	75.818	69.218	67.220	64.718
A2 or W2	Non-Subsidized (Punjab)	69.350	67.611	75.445	72.207	65.157	62.125	54.843
Ι	Diploma of Associate Engineers	61.110	-	69.178	70.834	-	-	-
Ν	Children of Graduate Engineers	71.952	-	77.568	75.607	-	-	-
L	Backward Areas	-	-	78.266	-	-	-	-
0	University Alumni	-	-	75.918	-	-	-	-

Note: The figures given in this table show "weighted percentage" based on all requisite components.

## **32. DOMICILE REQUIREMENTS**

# 32.1. 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.

## 32.2. Applicants Required to Submit Additional Documents

Applicants for categories A, I, N, L, Q and S 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.

#### 32.3. 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-III 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 (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-IV 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-V.

## 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.

## 32.4. 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.

## 33. DOCUMENTS TO BE ATTACHED WITH FORM F-I

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:

## 33.1. 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 c a r d s i s s u e d b y th e 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.
- **33.2. Additional Documents** To whom applicable:

- a) If your certificate, diploma or degree does not show that you have passed the examination by parts or as a whole, you have to submit in original the certificate on Form F-II
- b) If you have passed FSc. (Premedical), you have to submit an attested photocopy of the certificate for Additional Mathematics.
- c) If you are seeking admission on the basis of BSc Degree you have to submit an attested photocopy of the FSc Certificate as well.
- 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 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.
- g) If you are claiming 20 marks for being Hifz-e-Quran, read clause 30.6 of the prospectus carefully.
- h) 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.

i) 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 32.3 carefully to find out the additional documents, you have to submit along with Form F-I.

**Note:** The Form F-VI, Form F-VII and Form F-VIII are not to be submitted along with the application. They are required at the time of admission/registration.

## **34. APPLICATION FEE**

**34.1.** An application fee of Rs. 100/- is charged for each preference in terms of discipline and category.

# 34.2. The Fee is to be Remitted in One of the Following Ways:

a) Through a Bank Challan for the required amount deposited with the Habib Bank Ltd., Engineering University Branch, Taxila and attaching the bank challan with the application Form F-I

#### OR

- b) Through a bank draft or a pay order (from any branch of Habib Bank) of the required amount and attaching it with the application Form F-I.
- **34.3.** For depositing fee in the Habib Bank, Engineering University Branch, the challan form (available in the bank) meant for payment of the university dues should be used. The bank draft or the pay order should be obtained

from any branch of Habib Bank Ltd. and made payable to the Treasurer, University of Engineering and Technology, Taxila.

- **34.4.** The application fee shall not be accepted if remitted in any manner other than those mentioned above. For example, money orders or postal orders will not be accepted.
- **34.5.** The applicants must check up carefully that they are remitting the correct amount of application fee. If the application fee received with the application falls short of the required amount, the application will be entertained to the extent of preferences covered by it. For this purpose, starting with the first preference downwards only those preferences will be accepted which are covered by the fee remitted by the applicant, and the rest will stand canceled.

## **35. HOW TO COMPLETE THE APPLICATION FORM**

While reading the following instructions for completing application form F-I keep referring to F-I specimen. That will make it easy for you to understand the instructions and to complete the Form correctly.

**35.1.** Only one application form is to be submitted for any number of disciplines and categories you apply

for.

- **35.2.** All entries should be in BLOCK LETTERS.
- 35.3. Fill the column for preferences very carefully. The order of preferences once given shall be final and cannot be changed subsequently.

**35.4.** Under column "Discipline" use the following abbreviations (as shown in

F-I specimen):	
Civil Engineering	Civil
Computer Engineering	Comp
Electrical Engineering	Elect
Mechanical Engineering	Mech
Software Engineering,	Soft
Telecommunication Engineering	Tel

- **35.5.** Under the column "Category" use only the symbols (i.e. A1 or I or N, Q etc.).
- **35.6.** Since no erasure or overwriting is allowed in these columns, be very cautious, if you fill it once and you want to change it later, you will have to get another prospectus.
- **35.7.** Write your mailing address on the stickers available in the enclosures and attach it with the application.

# 35.8. Deadline for Receipt of Applications

a) The application form complete in all

respects along with the requisite documents and bank challan, bank draft or pay order should reach the **Convener, Admission Committee, University of Engineering and Technology, Taxila** on or before the last date notified for receipt of applications.

- b) The application may be delivered personally or sent under registered post.
- c) Application received after the closing date shall not be entertained, irrespective of the fact that it was posted before the closing date.

#### **35.9. Incomplete Applications**

Incomplete applications shall not be entertained. Application form, fee and the documents submitted with it shall not be returned on any ground.

## **36. PROCEDURE FOR THE SELECTED CANDIDATES**

### 36.1. Notification of Selection

A list of selectees will be displayed on the university notice boards. The applicants can check the merit lists according to the schedule given in Section 40.

# 36.2. Depositing of Dues and Documents

Within **FIVE** days of the display of the merit list, 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-VII) duly signed and stamped by the District Medical Superintendent or the

Medical Officer of the university or a Commissioned Medical Officer

- c) Ten attested 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-VII) duly completed.
- k) Undertaking (F-VIII) on a Rs.20/- judicial paper duly completed.

### 36.3. Relaxation in Time Limit:

If a selectee is prevented by unavoidable circumstances from timely fulfillment of the requirements laid down in 36.2, he should intimate the Dean of the Faculty about it within the prescribed time limit along with relevant documentary proof. The Dean may, at his discretion, grant relaxation in the time limit, which shall not exceed THREE days.

## 36.4. Forfeiture of Right for Admission

A selected who fails to fulfill the requirements laid down in 36.2 within

the prescribed time limit shall forfeit his right of admission.

#### 36.5. Provisional Admission

On fulfillment of the obligations mentioned in 36.2 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, or fabricated at a later stage, a provisionally admitted student shall be liable to expulsion from the university and to any other disciplinary or legal action the university may deem fit. Moreover, all the fees and charges deposited by him shall stand forfeited in favor of the university.

#### 36.6. Deadlines for Admission

Admission shall be closed from date as given in admission schedule (clause 40).

## 36.7. Notification of Selection of Categories B, C, D, E, H, J, K

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.

## **37. FEES AND OTHER CHARGES**

University Dues received in favour of a student under National Bank of Pakistan/ Pakistan Bait-Ul- Mall scheme or any financial assistance received from agency/organization will be adjusted against his outstanding dues; the amount will not be refunded to the student. In case he has already been granted Half/Full fee concession for the said period it will stand cancelled automatically and he will deposit the fee concession amount in favour of the University. Excess amount will also be forfeited in favour of the university, if any. Student can avail one financial benefit from any agency.

The Competent authority may grant extension in payment of dues to the

needy students on cogent reasons recorded in writing for one month (30 days) finally beyond the schedule of the dues circulated by the Treasurer. However payment of dues in installments, remission of late fee fine or re-admission fee is not allowed in any case.

**37.1.** The following fees and charges are to be paid by the Pakistani and foreign students admitted to the bachelor degree courses. The same are subject to revision/modification by the University authorities at any time without prior notification.

	Subsidized	Non-subsidized	
	(In Pak. Rupees)		
Non-Recurring (Payable at the time of admission)	· · · · · ·		
Admission fee/Re-admission Fee	1000	5000	
Registration Fee	500	2000	
University Security (Refundable)	1000	1000	
Library Security (Refundable)	500	500	
Survey Camp Charges (for Civil Engg. Only)	1500	1500	
Students Bus Card Fee	30	30	
Students Identity Card Fee	30	30	
Verification Fee	500	500	
Recurring Fee (per annum, in two installments)			
Tutorial Fee	100	100	
Inter-University Tournament Fee	100	100	
Magazine Fee	80	80	
Medical Fee	300	300	

Library	Fund	150	150		
Instruc	tional Tour Fee	300	300		
Recurr	ing Fee (per month)				
Tuition	Fee	600	5600		
Recrea	ation Fee	80	80		
Bus Fa	are for Resident	100	100		
Bus Fa	are for Non-Resident	250	250		
Notes"1	For Examination Fees, see Section	18.			
2	2 The University also grants fee remission and fee concession as per rules to subsidized students.				
3 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.					

### **37.2. HOSTEL CHARGES**

	(In Pak.
	Rupees)
Hostel Security (Refundable) Payable at the time of admission	1000
Mess Security (Refundable) Payable at the time of admission	1000
Service and Contingency Charges (Payable at the time of admission)	500
Room Rent (Per month)	
Cubicle	250
Dormitory	200
Electricity Charges (Per month)	
Room (Cubicle)	300
Room (Dormitory)	200
Room Heater	300
Sui Gas Charges (Per month)	100

## 37.3. Periods of Fees and Other Charges:

Tuition, recreation, union, Sui gas charges and medical fees are charged for twelve months. The hostel charges are payable for the period of occupation, a part of a month being counted as a full month. Electricity charges for fans are payable for six months. Electricity charges for room heaters are payable for the winter season for four months.

## 37.4. 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.

### 37.5. 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 dedication 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.

## 37.6. Use of Room Heater and Refrigerators

Prior permission of the resident tutor has to be obtained for use of a room heater or refrigerator, which shall be granted only after payment of the prescribed charges i.e. Rs.200 per month for each. The use of a room heater is restricted to 1000W. Any violation of these rules shall be dealt with under the university rules of discipline.

## 37.7. Air-conditioners

In the hostel the use of airconditioners is disallowed. 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 Director Student Affairs.

## 37.8. Non-payment of Fee and Charges:

A fine of Rs.10.00 per day will be charged for a period of 30 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 will have to pay the re-admission fee along with the fees and fine before he is readmitted. 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 fee and charges without fine within a week of receipt of the scholarship for the corresponding period.

## 38. COURSES UNDER SEMESTER SYSTEM

## 38.1 B.Sc. CIVIL ENGINEERING

## **COURSES FOR FIRST YEAR**

#### **1st Semester**

Course No.	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	Hydrology & Water Resources	2	1
MA-105	Mathematics-I	3	0
Total:		10	5
	Term Total for Part -I & II		

## 2nd Semester

CE-106	Surveying-I	2	4
CE-107	Civil Engineering Materials	2	1
CE-108	Communication Skills & Technical Report Writing	1	1
MA-109	Mathematics-II	3	0
HU-110	Pakistan studies	2	0
	Total:		
Term Total for Part -I & II			16
	Total for 1 <sup>st</sup> Year		

## **COURSES FOR SECOND YEAR**

#### **3rd Semester**

Course No.	Course Title	Credi	Credit Hours	
		Part I	Part II	
CE-201	Fluid Mechanics-I	2	1	
CE-202	Surveying-II	2	4	
CE-203	Properties of Concrete	2	1	
CE-204	Civil Engineering Practice	2	1	
MA-205	Mathematics and Computer Programming	2	1	
	Total	10	08	
	Term Total for Part -I & II		18	

### 4th Semester

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	Pakistan Studies	2	0			
Total			6			
		16				
		34				

## **COURSES FOR THIRD YEAR**

#### 5th Semester

Course No.	Course Title	Credit Hours	
		Part I	Part II
CE-301	Theory of Structures II	3	1
CE-302	Strength of MaterialsII	3	1
CE-303	Soil Mechanics-II	2	2
CE-304	Construction Planning & Management	2	1
	Total	10	5
	Term Total for Part -I & II		15

## 6th Semester

CE-305	Computer Application	2	2
CE-306	Reinforced Concrete-I	3	1
CE-307	Design of Steel Structures.	2	1
CE-308	Fluid Mechanics-II	2	1
CE-309	Transportation Engineering-I	2	2
Total		11	7
Term Total for Part -I & II			18
Total for 3 <sup>rd</sup> Year			33

## COURSES FOR FINAL YEAR

#### 7th Semester

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

92

#### 8th Semester

CE-407	Structural Engineering	2	1
CE-408	Irrigation Engineering	2	1
CE-409	Design of Structures	1	3
CE-410	Environmental Engineering-II	1	2
CE-411	Computer Aided Analysis & Design	1	2
CE-406(B)	Project	0	2
	Total	08	10
	Term Total for Part -I & II		18
Total 4 <sup>th</sup> Year			36
Grand Total for Four Years			134

### 38.2 B.Sc. ELECTRICAL ENGINEERING

## **COURSES FOR FIRST YEAR**

## **1ST Semester**

Course No.	Course Title	Credit hours		
		Part-I	Part-II	
EE-101	Electricity and Magnetism	2	1	
EE-102	Digital Logic Design	2	1	
MA-103	Engg. Mathematics-I	3	-	
EE-104	Electric Shop	1	1	
ME-105	Mechanical Technology	2	1	
HU-106	Islamic Studies	1	-	
Total		11	4	
	Term Total for part-I & part-II		15	

### 2nd Semester

EE-107	Electronic Devices	2	1
EE-108	Circuit Analysis-I	2	1
EE-109	Object Oriented Programming	2	2
EE-110	Electrical Machines	2	1
MA-111	Engg. Math-II	3	-
HU-112	Pak. Studies	1	-
Total 12		5	
Term Total for part-I & part-II		1	7
Total for First Year		3	2

## COURSES FOR SECOND YEAR

## 3rd Semester

Course	Course Title	Credit hours	
No.		Part-I	Part-II
EE-201	Circuit Analysis-II	2	1
EE-202	Power Systems	2	1
EE-203	Electronic Circuits-I	2	1
EE-204	Computer Aided Design	1	1
EE-205	Discrete Math & Numerical Techniques	2	1
HU-206	Communication Skills	2	1
Total		11	6
Term Total for part-I & part-II			7

### 4th Semester

till bellies			
EE-206	Electrical Measurement & Instruments	2	1
EE-207	Digital Systems	2	1
EE-208	Signals and Systems	2	1
EE-209	Operating Systems	2	1
EE-210	Probabilistic Methods in Elect. Engg.	2	1
EE-212	Engg. Management	2	-
Total		12	5
Term Total for part-I & part-II		1	7
Total for 2nd Year		3	4

## COURSES FOR THIRD YEAR

## **5th Semester**

Course	Course Course Title	Credit hours	
No.	Course Thie	Part-I	Part-II
EE-301	Electromagnetic Field Theory	2	1
EE-302	Electronic Circuit-II	2	1
EE-303	Microprocessor: Architecture & Programming	2	1
EE-304	Linear Control System	2	1
	Elective-I	2	1
Total		10	5
Term Total for part-I & part-II		1	5

## **6thSemester**

0000000000				
EE-305	Power Electronics	2	1	
EE-306	Micro-Computer Systems	2	1	
EE-307	Antenna & Wave Propagation	2	1	
EE-308	Communication Systems	2	1	
	Elective-II	2	1	
Total		10	5	
Term Total for part-I & part-II		1	5	
Total for Third Year		3	0	

## COURSES FOR FINAL YEAR

## 7th Semester

Course	Course Title	Credit hours	
No.	Course The	Part-I	Part-II
EE-401	TV & Telecom Engineering	2	1
EE-402	Digital Signal Processing	3	1
EE-403	Computer Networks	2	1
EE-404	Preliminary Project Studies	-	2
	Elective-III	2	1
	Elective-IV	2	1
Total		11	7
Term Total for part-I & part-II		1	8

## 8th Semester

EE-405	VLSI System Design	3	1
EE-406	Power Distribution & Utilization	3	1
EE-407	Project	-	4
	Elective-V	2	1
	Elective-VI	2	1
Total		10	8
Term Total for part-I & part-II		1	8
Total for Final Year		36	
Grand Total for Four Years		13	32

Course No.	Course Title	Credit hours	
Course INO.	Course Thie	Part-I	Part-II
EE-309	Advance Programming Language	2	1
EE-310	Industrial Automation	2	1
EE-311	Power Plants	2	1
EE-312	Power Transmission	2	1
EE-313	Software Engineering	2	1
EE-314	Operation Research	2	1
EE-315	E-Commerce	2	1
EE-316	Embedded System Design	2	1
EE-317	Operating System	2	1

#### **\*ELECTIVE COURSES FOR 3RD YEAR**

## **\*ELECTIVE COURSES FOR FINAL YEAR**

Course No.	Course Title	Credit hours	
Course No.	Course The	Part-I	Part-II
EE-408	Microelectronics	2	1
EE-409	Microwave Theory & Techniques	2	1
EE-410	Adv. Digital Design	2	1
EE-411	Digital Control System	2	1
EE-412	Digital Communication	2	1
EE-413	Digital Image Processing	2	1
EE-414	Mobile Communication	2	1
EE-415	Optical Communication	2	1
EE-416	Database Management	2	1
EE-417	Advance Operating Systems	2	1
EE-418	Management Information System	2	1
EE-419	Parallel & Distributed Computing	2	1
EE-420	Power System Analysis	2	1
EE-421	Power System Protection	2	1
EE-422	Electrical M/c Design	2	1
EE-423	High Voltage Engineering	2	1
EE-424	Artificial Intelligence	2	1
EE-425	Electrical Estimation, Installations and Planning	2	1

#### \*Note:

1. The courses offered by the department in a term can be changed depending on the availability of teachers and related facilities and will be notified one weak before the start of the semester.

2. The department will offer Elective Courses depending on the available facilities.

## 38.3 B.Sc. COMPUTER ENGINEERING

## **COURSES FOR FIRST YEAR**

## 1st Semester

Course No.	COURSE NAME	CREDIT HOURS	
Course 140.		Part I	Part II
CP-101	Introduction to Computing	2	1
CP-102	Electronic Devices	2	1
CP-103	Programming Fundamentals	2	1
CP-104	Calculus and Analytical Geometry	3	0
CP-105	Pakistan Studies	2	0
CP-106	Islamic Studies	2	0
	Total Credit Hours	13	3
	Term Total for Part -I & Part-II	16	

## 2nd Semester

Course No.	COURSE NAME	CREDIT HOURS	
Course 140.	COURSE NAME	Part I	Part II
CP-107	Data Structures & Algorithms	3	1
CP-108	Engineering Drawing for Computer Engineering	0	2
CP-109	Electric Circuits	3	1
CP-110	Linear Algebra	3	0
CP-111	Communications Skills	2	1
	Total Credit Hours	11	5
	Term Total for Part -I & Part-II	16	
	Total Credit Hours for 1st Year	32	

## COURSES FOR SECOND YEAR

## 3rd Semester

Course No.	COURSE NAME	CREDIT	CREDIT HOURS	
Course INO.		Part I	Part II	
CP-201	Object Oriented Programming	3	1	
CP-202	Digital Logic Design	3	1	
CP-203	Numerical Computing	3	1	
CP-204	Discrete Structures	3	0	
CP-205	Engineering Economics	2	0	
	Total Credit Hours	14	3	
	Term Total for Part-I & Part-II	17		

97

## 4th Semester

Course No.	COURSE NAME	CREDIT HOURS	
	COURSE INAME	Part I	Part II
CP-206	Comp. Architecture & Organization	3	0
CP-207	Software Engineering	3	0
CP-208	Digital Electronics	3	1
CP-209	Signals & Systems	3	1
CP-210	Probability & Statistics	3	0
	Total Credit Hours	15	2
	Term Total for Part-I & Part-II	17	
	Total Credit Hours for 2 <sup>nd</sup> Year	34	

## COURSES FOR THIRD YEAR

## 5th Semester

Course No.	COURSE NAME	CREDIT HOURS	
Course INO.		Part I	Part II
CP-301	Database Management System	3	1
CP-302	Communication Systems	3	1
CP-303	Instrumentation and Measurements	2	1
CP-304	Technical Report Writing	3	0
	Elective-I	3	0
	Total Credit Hours	14	3
	Term Total for Part-I & Part-II	17	

## 6th Semester

Course No.	COURSE NAME	CREDIT HOURS	
	COURSE IVAME	Part I	Part II
CP-305	Computer Communication and Networks	3	1
CP-306	Operating Systems	3	0
CP-307	Microprocessor Systems	3	0
CP-308	Control Engineering	3	0
	Elective-II	3	0
	Total Credit Hours	15	1
	Term Total for Part-I & Part-II	16	
	Total Credit Hours for Third Year	33	

## COURSES FOR FINAL YEAR

## 7th Semester

Course No.	COURSE NAME	CREDIT HOURS	
		Part I	Part II
CP-401	Advance Digital Design	3	1
CP-402	Digital Signal Processing	3	1
CP-403	Preliminary Project Studies	0	2
	Elective-III	3	1
	Elective-IV	3	1
	Total Credit Hours	12	6
	Term Total for Part-I & Part-II	18	

98

## 8th Semester

Course No.	COURSE NAME	CREDIT HOURS	
	COURSE NAME	Part I	Part II
CP-404	Project	0	4
	Elective V	3	1
	Elective VI	3	1
	Elective VII	3	0
	Elective VIII	3	0
	Total Credit Hours	12	6
	Term Total for Part-I & II	18	
	Total Credit Hours for Final Year	36	
	Degree Credit Hours	Hours 135	

## ELECTIVE COURSES FOR THIRD YEAR

Course No.	COURSE TITLE	CREDIT HOURS	
Course INO.	COURSE ITTLE	Part I	Part II
CP-309	Embedded System Design	3	0
CP-310	Parallel Processing	3	0
CP-311	Computer System Engineering	3	0
CP-312	Information Theory & Coding	3	0
CP-313	Advance Operating Systems	3	0
CP-314	Antenna and Wave Propagation	3	0
CP-315	Electric Machines	3	0

## ELECTIVE COURSES FOR FINAL YEAR

Course No.	COURSE NAME	CREDIT	CREDIT HOURS	
Course No.	COURSE NAME	Part I	Part II	
CP-405	Digital Image Processing	3	1	
CP-406	VLSI System design	3	1	
CP-407	Microprocessor & Microcontroller Applications	3	1	
CP-408	Wireless Communications	3	1	
CP-409	System Programming	3	1	
CP-410	Computer Graphics	3	1	
CP-411	Multithreaded Systems	3	1	
CP-412	Compiler Design	3	0	
CP-413	Stochastic Processes	3	0	
CP-414	Modeling & Simulation	3	0	
CP-415	Artificial Intelligence	3	0	
CP-416	Management Information Systems	3	0	
CP-417	Digital Control Systems	3	0	
CP-418	Optical Communications	3	0	
CP-419	Artificial Neural Networks	3	0	
CP-420	Automata Theory	3	0	
CP-421	Object Oriented Design	3	0	
CP-422	Advance Topics	3	0	

## 38.4 COURSE OUTLINE FOR B.Sc. SOFTWARE ENGINEERING

## **COURSES FOR FIRST YEAR**

#### 1st Semester

Course No.	COURSE NAME	CREDIT HOURS	
		Part I	Part II
SE-101	Introduction to Computing	2	1
SE-102	Electronic Devices	2	1
SE-103	Programming Fundamentals	3	2
SE-104	Calculus and Analytical Geometry	3	0
SE-105	Communications Skills	2	0
	Total Credit Hours	12	4
	Term Total for Part-I & II	16	

#### 2nd Semester

Course No.	COURSE NAME	CREDIT HOURS	
SE-106	Data Structures & Algorithms	3	1
SE-107	Engineering Drawing for Software Engineers	0	2
SE-108	Introduction to software Development	2	1
SE-109	Linear Algebra	3	0
SE-110	Engineering Economics	2	0
SE-111	Pakistan Studies	2	0
	Total Credit Hours	12	4
	Term Total for Part -I & II	16	
	Total Credit Hours for 1st Year	32	

## COURSES FOR SECOND YEAR

## 3rd Semester

Course No.	COURSE NAME	CREDIT HOURS	
	COURSE MAME	Part I	Part II
SE-201	Discrete Structures	3	0
SE-202	Object Oriented Programming	3	1
SE-203	Technical Report Writing	2	0
SE-204	Digital Logic Design	3	1
SE-205	Islamic Studies	2	0
	Total Credit Hours	13	2
	Term Total for Part-I & II	15	

100

## 4th Semester

Course No.	COURSE NAME	CREDIT HOURS	
	COURSE NAME	Part I	Part II
SE-206	Software Construction	3	0
SE-207	Human Computer Interaction (An SE Approach)	3	0
SE-208	Numerical Computing	3	1
SE-209	Operating Systems	3	0
SE-210	Software Requirement Engineering	3	0
	Total Credit Hours	15	1
	Term Total for Part -I & II	16	
	Total Credit Hours for 2 <sup>nd</sup> Year	31	

## **COURSES FOR THIRD YEAR**

## 5th Semester

Course No.	COURSE NAME	CREDIT	CREDIT HOURS	
	COURSE NAME	Part I	Part II	
SE -301	Computer Architecture & Organization	3	1	
SE-302	Database Management System	3	1	
SE-303	Software Design & Architecture	3	0	
SE -304	Probability & Statistics	3	0	
SE -305	Internet Application Development	2	1	
	Total Credit Hours	14	3	
	Term Total for Part -I & II	1	17	

## 6th Semester

Course No.	COURSE NAME	CREDIT HOURS	
	COURSE NAME	Part I	Part II
SE-306	Computer Communication And Networks	3	1
SE-307	Computer Graphics	3	1
SE-408	Compiler Theory	3	0
SE-309	Software Quality Assurance & Management	3	0
	Elective-I	3	0
	Total Credit Hours	15	2
	Term Total for Part -I & II	17 17 34	
	Total Credit Hours for 3 <sup>rd</sup> Year		

## COURSES FOR FINAL YEAR

## 7th Semester

Course No.	COURSE NAME	CREDIT HOURS	
Course INO.	COURSE NAME	Part I	Part II
SE-401	Software project Management	3	0
SE-402	Preliminary Project Studies	0	2
SE-403	System Programming	2	1
	Elective-II*	2	1
	Principles of Management	3	0
	Data security and Encryption	3	0
	Total Credit Hours	13	4
	Term Total for Part -I & II	17	

## 8th Semester

Course No.	COUDCE NAME	CREDIT HOURS	
	COURSE NAME	Part I	Part II
SE-404	Professional Practices	3	0
SE-405	Project	0	4
	Elective-III	3	0
	Elective-IV	3	0
	Elective-V	3	0
	Total Credit Hours	12	4
	Term Total for Part-I & II	16	
	Total Credit Hours for Final Year	33	
	Degree Credit Hours	1	30

## ELECTIVE COURSES FOR SOFTWARE ENGINEERING

Course No.	COURSE TITLE	CREDIT HOURS	
Course No.		Part I	Part II
SE-406	Software Development Technologies	3	1
SE-407	Advance Database Management Systems	3	1
SE-408	Distributed Computing	3	0
SE-409	Artificial Intelligence	3	0
SE-410	Advance Operating Systems	3	0
SE-411	Automata Theory and Formal Languages	3	0
SE-412	Analysis of Algorithms	3	0
SE-413	Artificial Neural Networks	3	0
SE-414	Stochastic Processes	3	0
SE-415	Real-time Systems	3	0
SE-416	Data Warehousing and Data Mining	3	0
SE-417	Financial Information System	3	0
SE-418	Embedded and Real time Systems	3	0
SE-419	Multimedia Systems	3	0
SE-420	Game Engine Design	3	0
SE-421	System for Small & Mobile Platforms	3	0

## 38.5 COURSE OUTLINE FOR B.Sc. TELECOMMUNICATION ENGINEERING

## **COURSES FOR FIRST YEAR**

## 1st Semester

Course No.	COURSE NAME	CREDIT HOURS	
Course INO.	COURSE NAME	Part I	Part II
TE -101	Calculus –I	3	0
TE -102	Circuit Analysis	3	0
TE -103	Electronic Devices	3	1
TE -104	Computer Fundamentals	2	1
TE -105	Communication Skills	2	0
TE-106	Islamic Studies/Ethics	2	0
	Total Credit Hours	15	3
	Term Total for Part -I & II	18	

102

## 2nd Semester

Course No.	COURSE NAME	CREDIT HOURS	
TE-107	Calculus-II	3	0
TE-108	Electronic Circuits	3	1
TE-109	Computer Programming	2	1
TE-110	Digital Logic Design	3	1
TE-111	Engineering Economics	2	0
TE-112	Pakistan Studies	2	0
	Total Credit Hours	15	3
	Term Total for Part -I & II	18	8
	Total Credit Hours for 1st Year	36	

## COURSES FOR SECOND YEAR

## 3rd Semester

Course No.	COURSE NAME	CREDIT HOURS	
		Part I	Part II
TE-201	Data Structures & Algorithms	3	1
TE-202	Electromagnetic Theory	3	1
TE-203	Digital Electronics	3	1
TE-204	Complex Variables and Transforms	3	0
TE-205	Technical Report Writing	2	0
	Total Credit Hours	14	3
	Term Total for Part -I & II	17	

## 4th Semester

Course No.	COURSE NAME	CREDIT	HOURS
Course INO.	COURSE NAME	Part I	Part II
TE-206	Analog Communication	3	1
TE-207	Computer Architecture	3	0
TE-208	Linear Algebra & Differentials Equations	3	0
TE-209	Engineering Management	2	0
TE-210	Advanced Computer Programming	3	1
	Total Credit Hours	14	2
	Term Total for Part-I & II	16	
		33	
	Total Credit Hours for 2 <sup>nd</sup> Year		

## **COURSES FOR THIRD YEAR**

## **5th Semester**

Course No.	COURSE NAME	CREDIT HOURS	
Course 140.	COURSE NAME	Part I	Part II
TE -301	Digital Communication	3	1
TE-302	Signals & Systems	3	1
TE-303	Control Systems	3	0
TE -304	Probability & Random Variables	3	0
	Elective-I	3	0
	Total Credit Hours	15	2
	Term Total for Part -I & II	17	

## 6th Semester

Course No.	COURSE NAME	CREDIT	HOURS
Course INO.	COURSE NAME	Part I	Part II
TE-305	Antenna & Wave Propagation	3	1
TE-306	Digital Signal Processing	3	1
TE-407	Data Communication & Networks	3	1
TE-308	Telecommunication Systems	3	0
	Elective-II	3	0
	Total Credit Hours	15	3
	Term Total for Part -I & II	1	8
	Total Credit Hours for 3rd Year	3	5

## COURSES FOR FINAL YEAR

## 7th Semester

Course No.	COURSE NAME	CREDI	Г HOURS
Course INO.		Part I	Part II
TE-401	Telecommunication Transmission & Swathing	3	0
TE-402	Routing & Switching Principles	3	1
	Elective-III	3	0
	Elective-IV	3	0
	Preliminary Project Studies	0	2
	Total Credit Hours	12	3
	Term Total for Part -I & II		15

## 8th Semester

Course No.	COURSE NAME	CREDI	ſ HOURS
Course INO.	COURSE INAME	Part I 3 0 3 12	Part II
TE-403	Mobile & Wireless Communication	3	0
TE-404	Microwave Engineering	3	1
TE-405	Project	0	4
	Elective-V	3	0
	Elective-VI	3	0
	Total Credit Hours	12	5
	Term Total for Part -I & II		17
	Total Credit Hours for Final Year		32

Degree Credit Hours	136

## ELECTIVE COURSES FOR TELECOMMUNICATION ENGINEERING

Course No.	COURSE TITLE	CREDI	T HOURS
Course INO.	COURSE IIILE	Part I	Part II
TE-309	Stochastic Process	3	0
TE-310	Operating Systems	3	1
TE-311	Telecommunication Management Networks	3	0
TE-312	Radar Systems	3	1
TE-313	Compression Techniques	3	1
TE-314	Satellite Communications	3	1
TE-406	Network Security	3	1
TE-407	Quality Control in Telecommunication Systems	3	1
TE-408	Telecom Traffic Engineering	3	1
TE-409	Communication Protocols	3	0
TE-410	Optical Fiber Communication	3	0
TE-411	Advanced Filter Theory	3	0
TE-412	Telecommunication Policies & Regulations	3	0

## 38.56 B.Sc. MECHANICAL ENGINEERING

### COURSES FOR FIRST YEAR MECHANICAL ENGINEERING

#### **COURSES FOR FIRST YEAR**

Ist Semester	1st	Semester
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Course	Course Title		Credit hours	
No.			Part I	Part II
ME-101	Computer Programming & Applications		2	1
ME-102	Engineering Statics		2	1
ME-103	Applied Thermodynamics-I		3	1
ME-104	Workshop Technology		1	2
MA-105	Applied Mathematics-I		4	0
	Total		12	5
	Term Total for Part -I & II		1	7

## 2nd Semester

EE-106	Electrical Engineering	2	1
ME-107	Engineering Drawing & Graphics	2	2
ME-108	Mechanics of Materials-I	3	1
ME-109	Engineering Dynamics	2	1
ME-110	Fluid Mechanics	2	1
Total			6
Term Total for Part -I & II		2	1
Total for 1 <sup>st</sup> Year		3	4

## COURSES FOR SECOND YEAR

## 3rd Semester

Course	Course Title	Credit hours	
No.		Part I	Part II
ME-201	Machine Design & CAD-I	2	2
ME-202	Applied Thermodynamics-II	2	1
ME-203	Hydraulic Machinery	2	1
ME-204	Machine Tools & Machining	3	1
HU-205	Islamic Studies	2	0
	Total		5
	Term Total for Part-I & II	1	6

## 4th Semester

Tur ocine			
ME-206	Mechanics of Materials-II	3	1
EE-207	Modern Electronics	2	1
MA-208	Applied Mathematics-II	4	0
ME-209	Mechanics of Machines-I	2	1
ME-210	Industrial Engineering-I	2	1
Total		13	4
Term Total for Part -I & II		1	7
Total for 2 <sup>ND</sup> Year		3	3

## **COURSES FOR THIRD YEAR**

#### 5th Semester

Course	Course Title	Ci	Credit hours	
No.		Par	τI	Part II
ME-301	Mechanics of Machines-II	2		1
ME-302	Machine Design & CAD-II	2		2
ME-303	Engineering Economics & Optimization	3		1
ME-304	Engineering Materials	2		1
HU-305	Pakistan Studies	2		0
Total		11	1	5
Term Total for Part-I & II			16	

## 6th Semester

ME-306	Heat and Mass Transfer	3	1
ME-307	Energy Resources & Utilization	2	1
ME-308	Production Engineering	2	1
ME-309	Power Plants	2	1
ME-310	Finite Element Methods	3	1
Total		12	5
Term Total for Part -I & II		17	
Total for 3 <sup>rd</sup> Year		33	

#### **COURSES FOR FINAL YEAR**

#### 7th Semester

Course	Course Title	Credit hours	
No.		Part I	Part II
ME-401	Internal Combustion Engines	2	1
ME-402	Mechanical Vibration	3	1
ME-403	Refrigeration & Air-conditioning	3	1
ME-404	Industrial Engineering-II	2	1
ME-405	Advanced Manufacturing System	2	1
Total		12	5
Term Total for Part -I & II		17	

#### 8th Semester

ME-406	Stress Analysis	2	1
ME-407	Engineering Management	2	1
ME-408	Gas Dynamics	2	1
ME-409	Mechatronics & Robotics/	2	1
ME-412	Instrumentation & Control	2	1
ME-410	Communication Skills	1	0
ME-411	Projects	0	6
Total		9	10
Term Total for Part -I & II		19	
Total for Final Year		36	
Grand Total for Four Year s		136	

## **39. CHAKWAL CAMPUS**

#### Campus Director/ Professor

## Prof. Umar Farooq MSc (Japan)

#### The City of Chakwal

The city of Chakwal was first known during the Mughal's Period. Situated in a hilly area it is surrounded by mines of salt, coal and other valuable minerals. Presently industrial zone is being developed around the periphery of Chakwal.

#### Academic Programs

The UET Taxila has established its first Sub-Campus at Chakwal. This year, admissions for Chakwal Campus will not be held.

## **Rules and Regulations**

In general, all rules and regulations mentioned for main campus in this prospectus will also be applicable for Chakwal Campus.

## 40. ADMISSION SCHEDULE FOR 2007-ENTRY

Entry Test Forms will be available	1 <sup>st</sup> August to 20 <sup>th</sup> August, 2007
Last Date of Receipt of Entry Test Forms	20 <sup>th</sup> August, 2007
Entry Test	26 <sup>th</sup> August, 2007
Prospectus will be available	26 <sup>th</sup> August to 10 <sup>th</sup> Sep. 2007
Application Receipt	28 <sup>th</sup> August to 10 <sup>th</sup> Sep. 2007
Hifz-e-Quran Test	11 <sup>st</sup> September 2007 (Tuesday) 9 am
1 <sup>st</sup> Merit List on the Notice Board	14 <sup>th</sup> September 2007
2 <sup>nd</sup> Merit List on the Notice Board	18 <sup>th</sup> September 2007
3 <sup>rd</sup> Merit List on the Notice Board	22 <sup>nd</sup> September 2007
Registration of Admitted Students	24 <sup>th</sup> September 2007
Start for 1 <sup>st</sup> Year Classes	25 <sup>th</sup> September 2007
Admission Closed	27 <sup>th</sup> October 2007

- 1. NB: Regardless of the date & time of dispatch, no application shall be entertained after the last date.
- 2. NB: The selected candidate in a merit list must joint the university within specified time limit as per requirements laid down under clause 35, failing which his name shall be dropped from the particular category and no claim, on whatever grounds, shall be entertained thereafter.
- **3.** NB: No call letters shall be posted to the selected candidates. The detailed lists can be viewed at the official web site of the university at <u>www.uettaxila.edu.pk</u>.
- 4. **NB**: The display of merit lists shall continue till the date of admission closed subject to availability of seats.

## 41. ADMISSION COMMITTEE UNDERGRADUATE ENTRY 2007

#### Chairman: Prof. Dr. Muhammad Zafrullah 051 9047567 Convener Prof. Dr. Qaiser uz Zaman Khan 051 9047640 Members The Registrar 051 9047405 The Treasurer 051 9047413 Mr. Abdul Rauf, Associate Professor 0519047491 Engr. Ilyas Ahmad, Asstt. Professor 051 9047548 Engr. Nazir Ahmad Anjum, Lecturer 051 9047692 Engr. Irfan Arshad, Lecturer 051 9047554 Engr. Muhammad Rizwan, Lecturer 051 9047589 Engr. Asim Malik, Lecturer 051 9047590 **Admission Office** 051 9047412