

UNIVERSITY OF ENGINEERING & TECHNOLOGY, LAHORE

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MR. SALMAN TASEER

Governor of Punjab

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FACULTY OF ELECTRICAL ENGINEERING

FACULTY OF MECHANICAL ENGINEERING

FACULTY OF CIVIL ENGINEERING

PROF. DR. MUHAMMAD ASHRAF

FACULTY OF CHEMICAL, MINERAL & METALLURGICAL ENGINEERING

FACULTY OF ARCHITECTURE & PLANNING

PROF. DR. SHABIH UL HASSAN ZAIDI

FACULTY OF NATURAL SCIENCES, HUMANITIES & ISLAMIC STUDIES

PROF. DR. FAZEELAT TAHIRA

CHAIRMEN OF TEACHING DEPARTMENTS

Department of Electrical Engineering
PROF. DR. ZUBAIR AHMAD KHAN

Department of Computer Science & Engineering
PROF. DR. MOHAMMAD ALI MAUD

Department of Mechanical Engineering
PROF. DR. MUHAMMAD FIAZ HUSSAIN SHAH
(Looking After)

Department of Industrial & Manufacturing Engineering
PROF. JAVED LATIF PIRACHA

Department of Mechatronics & Control Engineering
PROF. DR. SALIM ABID TABASSUM

Department of Civil Engineering
PROF. DR. ABDUL SATTAR SHAKIR

Institute of Environmental Engineering & Research
PROF. ABDUL JABBAR BARI

Department of Architectural Engineering & Design.
PROF. DR. MUHAMMAD AKRAM TAHIR

Department of Transportation Engineering & Management
PROF. DR. TANVEER IQBAL QAYYUM

Department of Chemical Engineering
PROF. DR. ANWER RASHID SALEEMI

Department of Polymer & Process Engineering
PROF. DR. GHULAM MUSTAFA MAMOOD
(Looking after)

Department of Mining Engineering
PROF. DR. MUHAMMAD AKRAM

Department of Geological Engineering
PROF. DR. TAHIR ALI GILLANI

Department of Petroleum & Gas Engineering
DR. OBED UR REHMAN PIRACHA (Looking After)

Department of Metallurgical & Materials Engineering
PROF. DR. MUHAMMAD AJMAL

Director of School of Architecture & Design
PROF. DR. ABDUL REHMAN

Department of Architecture
PROF. DR. MUHAMMAD YOUSAF AWAN

Department of Design
PROF. DR. ARIF QAYYUM BUTT

Department of City & Regional Planning
PROF. DR. QAMAR-UL-ISLAM

Department of Physics
PROF. DR. MUHAMMAD KHALEEQ-UR-RAHMAN

Department of Chemistry
PROF. DR. INAM UL HAQUE

Department of Mathematics
PROF. DR. MUHAMMAD OZAIR AHMAD

Department of Humanities & Social Sciences
SYED MASOOD HAIDER ZAIDI

Department of Islamic Studies
PROF. DR. HAFIZ MUHAMMAD ISRAIEL FAROOQI

CHAIRMEN OF TEACHING DEPARTMENTS

Director General Research, Extension & Advisory Services

PROF. DR. NOOR MUHAMMAD SHAIKH

Director Studies

PROF. DR. GHULAM ABBAS ANJUM

Director Energy Technology Development Centre

PROF. DR. IJAZ AHMAD CHAUDHRY

Director External Linkages

PROF. DR. SHAHID NAVEED

Convener Admission Committee / Incharge Students Section

PROF. DR. SALIM ABID TABASSUM

Focal Person Higher Education Commission

PROF. DR. MUHAMMAD KHALEEQ-UR-RAHMAN

Director Students Affairs

PROF. ABDUL JABBAR BARI

Chairman Proctorial Board

PROF. DR. MUHAMMAD YOUSAF AWAN

Senior Warden

PROF. DR. FIAZ HUSSAIN SHAH

Chairman Placement Bureau

PROF. DR. AQHLAK AHMAD MALIK

Public Relations Officer

MUHAMMAD IRFAN

Director Repair and Maintenance Centre

PROF. DR. NADEEM AHMAD MUFTI

Chairman Sports Committee

PROF. DR. MUHAMMAD AKRAM

Director Automotive Engineering Centre

PROF. DR. YOUNIS JAMAL

Chairman Transport Committee

Chairman Library Committee

PROF. DR. SYED TOUSEEF AHMAD

Chairman Health Committee

PROF. DR. KHALID MAHMOOD UL HASSAN

Director Planning and Development

PROF. DR. WARIS ALI

Project Director Lahore campus

ENGR. MIAN SHAHID LATIF

Project Director Faisalabad Campus

ENGR. ZAHIR AHMAD QURESHI

Project Director University City (KSK) Campus

ENGR. AWAIS MALIK

Resident Officer

MR. MUHAMMAD ARIF KHAN

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THE UNIVERSITY

Though this institution received its charter as a University in the year 1961, it has a much longer history as a distinguished seat of learning in the engineering sciences. It started its career in 1921 as the Mughalpur Technical College, deriving its name from the famous suburb of the old city of Lahore, richly dotted with architectural heritage of the great Mughals including the magnificent Shalimar Gardens. Its more familiar name of the pre-University era, the Maclagan Engineering College, was given to it in 1923 when Sir Edwards Maclagan, the then Governor of the Punjab, laid the foundation stone of the building, now called the Main Block, which still retains its majesty in spite of the wear and tear of over eight decades. At that stage the institution offered courses of study in two disciplines, namely Electrical and Mechanical Engineering.

The year 1932 is a major milestone in the evolution of this institution when it was affiliated with the University of the Punjab for award of a Bachelor's Degree in Engineering. At the dawn of Independence in 1947, it had well-established B.Sc. Degree courses in civil, electrical and mechanical engineering, and the quality of its scholastic standards won it a place of prestige throughout the British India.

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

Engineering, Architecture and City & Regional Planning.

Later, the University concentrated its energies and resources on developing its postgraduate programmes. By 1970's it had established over a score of Master's Degree Courses in diverse specializations of engineering, architecture, planning and allied disciplines. Ph.D. Degree Programme was also instituted in a number of disciplines. The process of consolidating and strengthening continued to be a major concern of the University, with phenomenal increase in students enrollment in seventies. Consequently the University College of Engineering, Taxila was established in 1975. For three years it functioned at Sahiwal and was shifted to its campus at Taxila in 1978. This college has now been upgraded to University of Engineering and Technology, Taxila.

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

In the recent past there has been a substantial rise in students enrollment and the figure has now gone up to about 6000. Over 1600 students are pursuing postgraduate studies. The number of female students enrolling for different disciplines is ever on the increase, and is 810 at present. The number of foreign students coming from countries, like Iran, Jordan, Kuwait, Kenya,

**Faculty of
ELECTRICAL ENGINEERING**

Dean of Faculty

**Faculty Includes
Department of Electrical Engineering
Department of Computer Science & Engineering**

DEPARTMENT OF ELECTRICAL ENGINEERING

CHAIRMAN

Prof. Dr. Zubair Ahmad Khan

PROFESSORS

Prof. Dr. Suhail A. Qureshi

Prof. Dr. M. Naeem Ayyaz

Prof. Dr. Tahir Izhar

Prof. Dr. K. M. Hassan

Prof. Dr. Mohammad Imran Sh.

Prof. Dr. Haroon A. Babri

Prof. Dr. Asim Loan

Prof. Dr. Muhammad Kamran

Prof. Dr. Noor M. Shaikh

(Sultan Qaboos Chair)

Prof. Dr. M. Saleem Mian

(On contract)

ASSOCIATE PROFESSORS

Mr. Manzar Saeed

Mr. Javed Iqbal

Hafiz Tehzebul Hassan

Mr. Ghulam Murtaza Hashmi (On Leave)

Dr. M. Ashgar Saqib

ASSISTANT PROFESSORS

Syed Ali Mohsin

Mr. Kashif Javed

Mr. Raza Umer

LECTURERS

Mr. Nauman Ahmed

Mr. Farhan Mahmood

Mr. M. Hashim Qureshi

LABORATORY ENGINEERS

Mr. Naveed Nawaz

Miss Sidra Farid

Mr. Asif Rehmat

Syed Abdul Rahman Kashif

Syed Moosa Raza

Ms. Rimla Javaid

Mr. Rizwan Siddique

Mr. M. Fahad Ijaz

Mr. Fahad Ahmed Khan

Mr. Arslan Ahmed Rahim

Mr. M. Farrukh Yaqub

Mr. Ahmed Umair

Mr. Saad Ahmed Khan

Mr. Waseem Abbas

Mr. Umar Rashid

Mr. Ahsan Abbas Ali

Mr. Kausar Abbas

Mr. Zohaib Akhtar

Mr. Omer Lateef

Mr. Ali Mohsin

Mr. Awais Bin Altaf

Mr. Sheheryar Ali Arshad

The department was established in 1923 as a part of the Maclagan Engineering College. Currently it has a total student enrolment of about 1200

Courses of study

The department offers the following programmes:

a) Bachelor's degree in Electrical Engineering with option for:

- i) Power engineering
- ii) Electronic & Communication Engineering

b) The Department offers the following M.Sc. Specialization:

- i) M.Sc. Power Engineering
- ii) M.Sc. Control System Engineering
- iii) M.Sc. Electronics & Communication Engineering
- iv) M.Sc. Computer Engineering

c) Ph.D. Degree in Electrical Engineering

The bachelor's degree curriculum provides exposure to a wide

spectrum of basic knowledge in Physics and Mathematics followed by an intensive coverage of the principles of Electrical Engineering both in classrooms and the laboratories. To stimulate their imagination: the students are assigned projects for independent handling and at an appropriate stage are encouraged to use computers for simulation and solving problems.

Furthermore, curriculum is being revised regularly to cater for the dynamically changing needs of the field of engineering. In order to reinforce the liaison between Industry and academia, a final year

project exhibition is held every year to afford the students with an opportunity to manifest their technical acumen internships are offered in the local industry to the students providing them with hands on experience on industrial equipment. Moreover breadth is added to their technical know how through Industrial tours to the leading association industries in the country. Students are encouraged to Join the Professional Associations widen their exposure of engineering

DEPARTMENT OF ELECTRICAL ENGINEERING

research going on global scale and to yield them an active platform for exchange and expression of their technical ideas.

Laboratories & Other Facilities

The department has the following well equipped laboratories

- Electronics Lab
- Electronic Systems Lab
- Project Lab
- Power System Simulation Lab
- Soupcon Automation Lab
- Postgraduate Research Lab
- New Computer Lab
- Digital Computer Lab
- Computer Communication Lab
- Measurement and Instrument Lab
- Microwave Lab
- Industrial Electronics Lab
- Feedback Control System Lab
- Digital Signal Processing Lab
- System Simulation Lab
- PCB Lab
- Communication System Lab
- ZTE U.E.T, Training Center
- Basic Electrical Lab
- Advanced Machine Lab
- Old Machine Lab
- High Voltage Lab
- Applied Electricity Lab
- New Machine Lab

The department has a faculty of 80 teachers out of whom 13 are PhDs and 31 have a Mater's Degree. Faculty members with higher qualification are engaged in M.Sc/Ph.D teaching and research supervision.

Research work being carried out at the department has direct bearing on the needs of national industry. The department also offers

consultancy services and testing facilities to the local manufacturers of electrical and electronics equipment. A number of research papers are produced every year by the faculty members and postgraduate students. These are normally published in major national and international journals.

The department has Research Laboratories and up-to-date library for the use of faculty members and the postgraduate students. Four labs remain open after classes for students working on various projects. The department also arranges frequent seminars and workshops in various areas of electrical, electronics, computer and control engineering. These seminars are delivered by faculty members, postgraduate students and prominent researchers from home and abroad.

B.Sc. ELECTRICAL ENGINEERING: SEMESTER SYSTEM 2008

Year 1											
Semester 1					Semester 2						
Course					Hrs		Course				
No	Title	Th	Lb	Cat	No	Title	Th	Lb	Cat		
EE110	Electric Circuits	3	1	E	EE101	Semiconductor Devices	3	1	E		
EE130	Computer Fundamentals	3	1	E	EE131	Digital Logic Design	3	1	E		
EE100	Electrical Workshop Practice	0	1	E	MA111	Differential Equations	3	0	M		
PHY114	Physics	3	1	S	IS124	Islamic Stds/ Ethics & Pak. Stds	3	0	H		
MA110	Calculus	4	0	M	HU101	English Composition	3	0	H		
Subtotal					17	Subtotal					17
Year 2											
Semester 3					Semester 4						
Course					Hrs		Course				
No	Title	Th	Lb	Cat	No	Title	Th	Lb	Cat		
EE210	Network Analysis	3	1	E	EE220	Signals and Systems	3	0	E		
EE211	Analog Electronic Circuits	3	1	E	EE212	Digital Electronic Circuits	3	1	E		
EE250	Electrical Machines	3	1	E	MA211	Vector Calculus	3	0	M		
MEaaa	IDE-I*	3	1	E	MA212	PDEs & Complex Analysis	3	0	M		
MA210	Linear Algebra	3	0	M	IS244	Islamic Stds/ Ethics & Pak. Stds	3	0	H		
					HU201	Communication Skills	3	0	H		
Subtotal					19	Subtotal					19
Year 3											
Semester 5					Semester 6						
Course					Hrs		Course				
No	Title	Th	Lb	Cat	No	Title	Th	Lb	Cat		
EE300	Stochastic Processes	3	0	E	EE321	Communication Systems	3	1	E	E	
EE301	Electromagnetic Theory	3	0	E	EE340	Control Systems	3	1	E	E	
EE330	Microprocessor Systems	3	1	E	EE351	Power Trans. & Distribution	3	1	E	M	
MA310	Numerical Methods	3	0	M	CE36X	IDE-II**	3	1	E	M	
HU301	Technical Report Writing	3	0	H	IE301	Eng. Economics & Mgmt.	3			OS	
Subtotal					16	Subtotal					19
Year 4											
Semester 7					Semester 8						
Course					Hrs		Course				
No	Title	Th	Lb	Cat	No	Title	Th	Lb	Cat		
EE408	Project	0	3	E	EE409	Project	0	3	E		
EE440	Digital Signal Processing	3	1	E	EE430	Computer Architecture & Design	3	1	E	E	
EE4aa	Elective I	3	1	E	EE4xx	Elective III	3	1	E	E	
EE4bb	Elective II	3	1	E	EE4yy	Elective IV	3	1	E	E	
EE4cc	Restricted Elective#	3	0	E							
Subtotal					18	Subtotal					15

B.Sc. ELECTRICAL ENGINEERING: SEMESTER SYSTEM 2008

IDE-I*	Mechanics Or Thermodynamics
IDE-II**	Data Structures Or Obj. Oriented Prgm.
EE4cc#	Intro. To Power Sys. Or Digital Comm.

		Hr	%
	Total Hours	140	
Engineering		99	71
Math		19	14
Science		7	5
Humanities/Soc. Sc.		15	11
	Checksum		100

Numberina	
First number	Level
Second number	Area
Third number	Sance
Areas	
General	0
Circuits	1,9
Communications/Waves	2,8
Computer	3,7
Control/DSP	4
Power	5,6

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Chairman

Professor Dr Mohammad Ali Maud

Professor

Dr Abad Ali Shah (HEC Professor)

Sultan Qaboos Chair (Shared with EE Department)

Dr Salim Tariq - Chair

Dr Asim Loan - Co-Chair

Adjunct Professor

Dr Waqar Mahmood (Director KICS)

Associate Professor (TTS)

Dr Irfan Ullah Chaudhary

Assistant Professors (TTS)

Dr Anita Malik

Dr Muhammad Shahbaz

Dr Muhammad Aslam

Dr Muhammad Shoaib

Dr Ali Hammad Akbar

Associate Professors

Mr Khadim Hussain Asif

Dr Syed Muhammad Ahsan

Assistant Professors

Mr Muhammad Afzal

Mr Amjad Farooq

Dr Muhammad Junaid Arshad

Mrs Shazia Shoaib

Mr Tahir Farooq (On Study Leave Abroad)

Mr Faisal Hayat (On Study Leave Abroad)

Mr Yasir Saleem (On Study Leave Abroad)

Mr Talha Waheed (On Study Leave Abroad)

Mr Rashid Kaleem (On Study Leave Abroad)

Mr Shahzad Afzal (On Study Leave Abroad)

Mr Sheikh Faisal Rashid (On Study Leave Abroad)

Lecturers

Mr Syed Khuldoon Khurshid

Mrs Afraz Zahra Syed

Mr Adam Mohyuddin (On Study Leave)

Mr Hafiz Muhammad Shahzad (On Study Leave Abroad)

Mr Usman Ghani Khan (On Study Leave Abroad)

Ms Hina Khalid

Ms Amna Zafar

Ms Ayesha Shafqat

Mr Asim Rehmat

Ms Beenish Ayesha Akram

Mr Syed Auwn Muhammad

Mr Awais Hassan

Mr Hafiz Sohaib (On Study Leave Abroad)

Introduction and History

The Department of Computer Science and Engineering, originally established as department of Computer Science is one of the most prominent and oldest centers of computer education in the country. The department offers the following degree programs:

1. Computer Science: PhD., M.Sc., B.Sc.
2. Computer Engineering: PhD., M.Sc., B.Sc.

Established as department of Computer Science in 1991, its history dates back to the year 1968 when University of Engineering and Technology Lahore established a Computer Center. This center was equipped with a contemporary IBM 1130 third generation computer that batch processed submitted jobs. The computer was equipped with a disk and a monitor. The center was responsible for planning and teaching courses in Computer Science and Numerical Analysis, which formed an integral part of the curricula for all disciplines of B.Sc. Engineering degree in the university. The center also offered short term computer courses for other private and public sector organizations. In 1978, it started offering a Masters degree program in Computer Science, thus becoming the first center in the country to offer Computer Science degree.

Degree Programs

A four years degree program leading towards a B.Sc. (Hons) Computer Science was introduced by the department in 1999 and another 4 years B.Sc. program in Computer Science and Engineering in 2001. For students enrolling from September 2003 onwards, B.Sc programs have been re-named and modified into four years B.Sc. Computer Science (CS) and four years B.Sc. Computer Engineering (CE) programs. The B.Sc CS program is accredited by National Computing Education Accreditation Council (NCEAC) and B.Sc (CE) program is accredited by Pakistan Engineering Council (PEC) up to Session 2004.

PhD. program in Computer Science was launched in 2002 and two students have completed their Ph.D. degree to date from this department. M.Sc. and PhD programs in Computer Engineering have been launched from 2007.

Facilities

With expansion in academic programs, computer laboratories in the department have risen to nine spread over two buildings. These laboratories are equipped with 350 P-IV computers fully networked with state of the art servers. Computer to student ratio is 1:1. The department is proud of its no-piracy policy. All the operating systems installed are

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

either licensed or open-source operating systems. Department's computing facilities are linked with Research Center, Main Library and other teaching departments through a fiber optic backbone. Multimedia projectors are fitted where required and Internet facility is available. Portion of a third building is available with the department for holding lectures.

In addition, the department has two Electronics Systems Laboratories, one Industrial Automation Laboratory and One Embedded Systems Laboratory.

Endowed Chair

The department holds an endowment chair given by His Majesty Sultan Qaboos Bin Said-Al-Said, Sultan of Oman. Currently, two professors are sharing this chair.

Research

Current topics of research of CSE faculty members include, but are not limited to, the following areas: Estimation Theory, Signal Processing, Modern Control and related areas. Data bases, Semantic Web and related areas. Communications, Wireless Telecommunication and related areas. Software Engineering, Modeling and related areas. Data mining, Data warehousing, Artificial Intelligence and related areas. Artificial Intelligence, Multi-agents expert systems and related areas. Information Retrieval, Web Engineering, data bases and related areas. Computer Networks and related areas.

CURRICULUM FOR B.Sc. COMPUTER ENGINEERING

FROM SESSION 2009

Semester 1			Semester 2		
Course No.	Title	Credit Hours	Course No.	Title	Credit Hours
CS 101	Introduction to Computing	2+1	CS 141	Programming Fundamentals	2+1
PHY 101	Mechanics & Wave Motion	3+1	EE 121	Circuit Analysis I	3+1
MA 101	Calculus	4	MA 103	Multivariate Calculus	3
HU 101	Composition and Writing	3	PHY 103	Electricity and Magnetism	3+1
IS 102	Islamic Studies/Ethics & Pak Studies	4	ME 201	Strength of Materials & Machine Design	3
			HU 202	Communication Skills	2
		18 (18)			19 (37)
Semester 3			Semester 4		
CS 241	Object Oriented Programming	2+1	CS 210	Data Structures and Algorithms	3+1
MA 202	Differential Equations & Transforms	4	CSE 225	Computer Organization and Assembly Language	3+1
CS 200	Discrete Mathematics	3	EE 223	Electronics-I	3+1
EE 222	Circuit Analysis II	3	CSE 371	Signals and Systems	3
CSE 120	Digital Logic Design	3+1	MA 210	Linear Algebra and Complex Analysis	4
IS/HU 301	Language I*	3	IS/HU 302	Language II*	3
		20 (57)			22 (79)
Semester 5			Semester 6		
CS 325	Operating Systems	3	CSE 301	Control Systems	4
CS 390	Software Engineering	3+1	CS 360	Artificial Intelligence	3+1
EE 321	Electronics-II	3	CS 370	Database Systems	3+1
MA 250	Probability and Statistics	3	CS 310	Analysis of Algorithms	3
CSE 311	Numerical Analysis and Computing	3	CSE 320	Embedded Systems Development	3+1
CSE 330	Computer Networks	3+1	EE 322	Electronics Design Lab	1
		20 (99)			20 (119)
Semester 7			Semester 8		
CSE 491	Final Project I	0+3	CSE 492	Final Project II	0+3
CSE 420	Computer Architecture	3	CSE 400	Industrial Automation	3+1
CSE 4XX	CSE Elective	3	CSE 421	Digital Design	3+1
HU 401	Entrepreneurship and Leadership	3	CSE 4XY	CSE Elective	3
		12(131)			14 (145)

CSE Elective Courses: The following is a list of sample elective courses. Additional courses may be added - CSE 471 Communications Systems and Wireless (3); CSE 472 Digital Signal Processing (3); CSE 430 Wireless Networks (3)

- *Choice between: Arabic, Chinese, French or German. Offering is subject to the availability of the Instructor

CURRICULUM FOR B.Sc. COMPUTER SCIENCE

ENTRIES STARTING SEPT 2009

Semester 1			Semester 2		
Course No.	Title	Credit Hours	Course No.	Title	Credit Hours
CS 101	Introduction to Computing	2+1	CS 141	Programming Fundamentals	2+1
PHY 101	Mechanics & Wave Motion	3+1	PHY 103	Electricity and Magnetism	3+1
MA 101	Calculus	4	MA 103	Multivariate Calculus	3
HU 101	Composition and Writing	3	EE121	Circuits Analysis I	3+1
IS 102	Islamic Studies/Ethics & Pak Studies	4	HU 202	Communication Skills	2
18(18)			16(34)		
Semester 3			Semester 4		
CS 241	Object Oriented Programming	2+1	CS 210	Data Structures and Algorithms	3+1
MA 202	Differential Equations & Transforms	4	CSE 225	Computer Organization and Assembly Language	3+1
CS 200	Discrete Mathematics	3	CS 202	Theory of Automata & Formal Languages	3
EE 222	Circuit Analysis II	3	MA 250	Probability and Statistics	3
IS/HU 301	Language I'	3	MA 210	Linear Algebra and Complex Analysis	4
CSE 120	Digital Logic Design	3+1	IS/HU 302	Language II'	3
20(54)			21(75)		
Semester 5			Semester 6		
CS 325	Operating Systems	3	CS 391	Object Oriented Analysis and Design	3+1
CS 390	Software Engineering	3+1	CS 360	Artificial Intelligence	3+1
CSE 330	Computer Networks	3+1	CS 370	Database Systems	3+1
CS 310	Analysis of Algorithms	3		Elective	3
CSE 311	Numerical Analysis and Computing	3		Elective	3
HU 312	Project Management	3			
20(95)			18(113)		
Semester 7			Semester 8		
CS 491	Final Project I	0+3	CS 492	Final Project II	0+3
CSE 445	Programming Languages	3	CS 402	Compiler Construction	3
CSE 450	Computer Graphics	3		Elective	3
	Elective	3		Elective	3
HU 401	Entrepreneurship and Leadership	3			
15(128)			12(140)		
- *Choice between: Arabic, Chinese, French or German. Offering is subject to the availability of the Instructor					

Elective Courses in Computer Science and Engineering

The following is a list of sample elective courses. Additional courses may be added - CS 342 Web Technologies (3); CS 379 Bio-informatics (3); CS 372 Data Warehousing (3); CS 375 Data Mining (3); CS 440 Design Patterns (3); CS 307 Management Information System (3); CS 431 Inter-networking with UNIX TCP/IP (3); CSE 371 Signal and Systems (3); CSE 471 Communications Systems and Wireless (3); CSE 472 Digital Signal Processing (3); CSE 420 Computer Architecture (3); CSE 430 Wireless Networks (3)

**Faculty of
MECHANICAL ENGINEERING**

Dean of Faculty

**Faculty Includes
Department of Mechanical Engineering
Department Industrial & Manufacturing Engineering
Department of Mecharonics & Control Engineering**

DEPARTMENT OF MECHANICAL ENGINEERING

Dean:**Chairman:**

Prof Dr M Fiaz Hussain Shah

Professors

Dr Arshad Hussain Qureshi

Dr Saleem Abid Tabassum

Dr. Ijaz Ahmad Chaudhry

Dr Younis Jamal

Dr. Nasir Hayat

Associate Professors

Mr Abdul Rauf Mirza

Mr Muhammad Asif Aslam

Mr Ejaz Mahmood Shahid

Assistant Professor

Mr. Naseer Ahmad

Mr. Shabbir Hussain

Dr Muhammad Mahmood Aslam Bhutta

Lecturers

Mr Shahid Pervaiz Malik

Ms. Tehseen Kousar

Mr. Rashid Sajid

Mr Saad Nazir

Mr Hafiz Muhammad Nadeem Sharif

Mr Saghir Abbas Ranjha

Lab Engineers / Lecturers

Mr Umair Ashraf Khokhar

Mr Muhammad Kashif Tariq

Mr Muhammad Farhan

Ms Sadaf Jamshed

Mr Zia ul Rehman Tahir

Mr Ishtiaq Ahmad Ch.

Mr Muhammad Ahmad

Ms Hafiza Sana Ijaz

Mr Shuaib Ahmad Idrees

Mr Jawad Arshad Khokhar

Mr Benazeer Abbas

Mr Muhammad Wakil Shahzad

Ms Rabbia Seher

Instructors

Mr Syed Ehsan Ali

Mr Muhammad Akbar

Mr Shahid Mahmood Chughtai

Mr Mashkoo Mirza

Mr Nazir Ahmad

Mr Rana Muhammad Tariq

Mr Ashraf Ali

Note: The Staff on study leave abroad or on E.O.L is not shown.

The Department of Mechanical Engineering is as old as the Institution itself, with present enrollment of about 700 under-graduate students. Having completed their undergraduate study, the Mechanical Engineering Graduates have proved their worth by making invaluable contributions throughout the world, as professional mechanical engineers.

Courses of Study

The Department offers the following under-graduate and post-graduate programmes of study,

- a) Bachelor's degree in Mechanical Engineering
- b) Master's degree in:
 - i) Mechanical Design Engineering
 - ii) Thermal Power Engineering
- c) Ph.D. degree in Mechanical Engineering

The curriculum revision exercise for the four-year bachelor's degree program under semester system has been recently completed under

the guidelines provided by the Higher Education Commission (HEC), Islamabad through its National Curriculum Revision Committee (NCRC) meeting of the year 2006.

The revised curriculum includes courses in Mathematics, Computer applications, and Humanities, which are followed by the courses in Thermodynamics, Fluid Mechanics, Mechanics of Materials, Machine Design, Machine Tools, CAD/CAM (computer-aided design and computer-aided manufacturing), HVAC (heating ventilation and air-conditioning), Renewable Energy Resources, Mechanical Vibration, Internal Combustion Engines and Power Plants, Instrumentation and Control and Engineering Management and Economics. Likewise, latest and modern equipment is being successively inducted to further strengthen the experimental facilities, to impart instructions in various laboratories providing a strong experimental back up to the students throughout their four-year under graduate study program.

Recently an Automotive Engineering Centre has been added in the campus to function under the Department of Mechanical Engineering.

DEPARTMENT OF MECHANICAL ENGINEERING

The new laboratories cover a variety of latest equipment relevant to both Mechanical and Automotive Engineering. Instructional tours to different industries are arranged to acquaint the students with operative projects of national importance in the field of Mechanical Engineering.

The following licensed soft wares provided by the HEC, Islamabad, are being used by the students of Mechanical Engineering throughout the four- year under graduate studies. The training of faculty members from suppliers of these softwares is completed.

a) Pro-E	b) ANSYS	c) Fluent
d) INVENTOR	e) MATLAB	f) Maple
g) CATIA	h) Adams	

These softwares provide a strong backup for illustrating theory and related practical aspects. The softwares include solution of algebraic equations sets, solution of ordinary and partial differential equations, mathematical modeling, design and simulation of machine components and assemblies covering static, dynamic and modal analysis. These softwares are strong supplements to undergraduate and postgraduate study programs of the Department of Mechanical Engineering, including modeling and simulation of fluid flow problems.

Laboratories & other Facilities

During the last ten years, laboratories of the Department of Mechanical Engineering have undergone the process of replacement of old equipment and up gradation. A number of Associate Engineers and B. Tech graduates are employed by the Department to assist the teaching staff members to perform experiments in all different laboratories and facilitate the students to familiarize with the apparatus. Write-ups of experiments are made available to the students well in advance of the date of conduct of the individual experiments. Following are the under graduate laboratories covering full range of the four-years under graduate study program offered by the Department of Mechanical Engineering.

- Thermodynamics
- Fluid Mechanics
- Mechanics of Machines

- Engineering Mechanics
- Mechanics of Materials
- Computer Applications
- Computer aided Design
- Conventional Machine Tools
- CNC Machines
- Renewable Energy Resources
- Heat Transfer
- HVAC
- CFD modeling
- Finite Element Analysis
- I C Engines/ Power Plants
- Instrumentation and Control
- Stress Analysis

University Workshops

The University Mechanical Engineering Workshops were established in 1937 and are designed to provide know-how with hand-on practical training in workshop technology to the engineering students. A package practical course, titled "Workshop Practice" is offered to all first year undergraduate students of the different engineering disciplines. The course has been skillfully planned to impart practical training supported by relevant theoretical knowledge in the field of fabrication and production. As an outcome, the students are enabled to acquire ample expertise by going through practical assignments in handling tools and plants. The students are also assigned small projects for accomplishing their task efficiently and successfully. The course offered inculcates self-confidence in the students, for their success in future career.

Energy Resource Centre

The Department of Mechanical Engineering has an Energy Resource Centre where work is being conducted on power plants using conventional and non-conventional sources of energy. The

Centre has made extensive studies in the past on micro hydel power plants, solar collectors, solar water pumps, solar dryer, solar heating and cooling systems. Apart from this, the Department has set up a database on low Temperature and Stirling cycle Machines for use as heat pumps. Current research encompasses optimization of solar desalination units, solar cookers, solar refrigeration, wind-

DEPARTMENT OF MECHANICAL ENGINEERING

pumps, use of alternative fuels for internal combustion (I.C) engines and Power Plants. **Research**

Extension & Advisory Services

The Department of Mechanical Engineering provides liberal facilities for research to the postgraduate students and to the young faculty members interested to enhance academic qualification. Main areas

of the departmental research include I.C Engines, combined heat and power plants, automotive air-conditioning.

The Department of Mechanical Engineering is technically sound to offer refresher courses to the local industry in various fields related to mechanical engineering. Lectures/seminars on different technical aspects of mechanical engineering are also arranged by the department involving local as well as foreign experts. Advisory services are rendered to a large number of local organizations specifically in the field of thermal power and mechanical design engineering.

DEPARTMENT OF MECHANICAL ENGINEERING

UNDER SEMESTER SYSTEM

Semester 1

Sr	Subjects		Credit hours	
			Theory	Lab
1	MA-101	Applied Mathematics-I	3	0
2	WS-101	Work Shop Technology	0	2
3	IS-101	Islamic/ Pak. Studies	3	0
4	ME-111	Engineering Statics	3	1
5	ME-112	Applied Thermodynamics-I	3	1
Total:			12	4
			=16	

Semester 3

Sr	Subjects		Credit hours	
			Theory	Lab
1	MA-201	Applied Mathematics -II	3	0
2	HU-202	Communication Skills	0	1
3	ME-231	Engineering Dynamics	3	1
4	ME-232	Fluid Mechanics-II	3	1
5	ME-233	Mechanics of Materials-I	3	1
Total:			12	4
			=16	

Semester 5

Sr	Subjects		Credit hours	
			Theory	Lab
1	MA-301	Engineering Statistics	3	1
2	EE-301	Industrial Electronics	3	1
3	ME-351	Mechanics of Machines-II	3	1
4	ME-352	Machine Design-II	3	1
5	ME-345	Machine Tool & Machining	2	1
Total:			14	5
			=19	

Semester 7

Sr	Subjects		Credit hours	
			Theory	Lab
1	ME-471	Measurement and Instrumentation	2	1
2	ME-472	Heat & Mass Transfer	3	1
3	ME-473	Mechanics of Materials-III	3	1
4	ME-474	Mechanical Vibration	3	0
5	ME-375	Fuels and Combustion	2	1
	ME-499	Projects	0	2
Total:			13	6
			=19	

Semester 2

Sr	Subjects		Credit hours	
			Theory	Lab
1	EE-101	Electrical Engineering	3	1
2	ME-121	Computer Systems & Programming	2	1
3	ME-122	Fluid Mechanics-I	3	1
4	ME-123	Industrial Materials	2	0
5	ME-124	Engineering Drawing & Graphics	2	2
Total			12	5
			=17	

Semester 4

Sr	Subjects		Credit hours	
			Theory	Lab
1	IS-201	Islamic & Pak Studies	3	0
	MA-202	Applied Mathematics -III	3	0
3	ME-241	Mechanics of Machines-I	3	1
4	ME-242	Applied Thermodynamics-II	3	1
5	ME-243	Machine Design-I	3	1
Total:			15	3
			=18	

Semester 6

Sr	Subjects		Credit hours	
			Theory	Lab
1	MA-302-	Numerical Methods	3	1
2	ME-361	Renewable Energy Resources	3	1
3	ME-362	HVAC Systems	3	1
4	ME-363	CAD / CAM	2	1
5	ME-364	Mechanics of Materials-II	3	1
Total:			14	5
			=19	

Semester 8

Sr	Subjects		Credit hours	
			Theory	Lab
1	ME-481	Control Engineering	3	1
2	ME-482	I C Engines	3	1
3	ME-483	Engg. Management & Economics	3	0
4	ME-484	Finite Element Methods	3	1
5	ME-485	Power Plants	3	1
	ME-499	Projects	0	2
Total:			15	6
			=21	

Total Credit hours of the 4 year course = 107 (theory) + 38 (Practical) = 145

DEPARTMENT OF INDUSTRIAL & MANUFACTURING ENGINEERING

Chairman

Prof. Javed Latif Piracha

Professors

Dr. Nadeem Ahmad Mufti

Dr. Pervaiz Mughal

Dr. Amjad Pervez Shiekh

Assistant Professor

Mr. Javed Anwar

Mr. Muhammad Asif Mahmood Qureshi*

Mr. Muhammad Qaiser Saleem

Senior Research Officer

Mr. Bilal Javaid Iqbal

Lecturers

Mr. Amjad Hussain

Mr. Sarmad Ali Khan

Mr. Zahid Usman *

Mr. Ali Hassan**

Mr. Salman Pervaiz**

Lecturers/lab Engineers

Ms. Nudrat Fatima

Mr. Syed Farhan Raza

Mr. Abdul Hamid Shahid

Mr. Naveed Ahmad

Ms. Sadaf Zahoor

Ms. Rakhshanda Naveed

*On higher studies abroad

** On leave

The discipline of Industrial & Manufacturing Engineering was introduced by the Department of Mechanical Engineering in 1999. However due to the positive response from industry and the rapid expansion of the Faculty of Mechanical Engineering an independent department titled as Department of Industrial and Manufacturing Engineering was established in 2006. The department offers the following programs of study.

- a) Bachelors degree in Industrial & Manufacturing Engineering
- b) Master's degree in:
 - i) Engineering Management
 - ii) Manufacturing Engineering
- c) Ph.D in:
 - i) Engineering Management
 - ii) Manufacturing Engineering

Industrial & Manufacturing Engineering Department offers various courses keeping in view the specific requirements of manufacturing industry and organizations providing engineering services. The main courses include Manufacturing Process, Industrial Materials, Design of Production Tooling, Industrial Electronics, Manufacturing Automation and Robotics, Engineering Economics & Accounting, Total Quality Management, Entrepreneurship, Industrial Relations, Human Resource Management, Production & Operations Management, Industrial Safety and Environmental Management etc.

Laboratory Facilities

In addition to already established laboratories teaching, research & industrial support facilities of Industrial and Manufacturing Engineering

Department have been recently enhanced through an HEC funded project named Manufacturing Technologies Development Center (MTDC) being run under by the Department of Industrial and Manufacturing Engineering. The following laboratories are operating under the department over and above the laboratories of Mechanical

DEPARTMENT OF INDUSTRIAL & MANUFACTURING ENGINEERING

Engg. Deptt. and other departments being available to the students:

- 1-Precision Machining Laboratory
- 2- Machine Tools and Machining Laboratory
- 3- Measurement and Calibration Laboratory
- 4- Non-Conventional Processes Laboratory
- 5- Computer-Aided systems Laboratory
- 6- CAD/CAM Laboratory
- 7- Metrology and Quality Assurance Laboratory

- 8- Electronic Devices Development Laboratory
- 9- Rapid Prototyping Laboratory
- 10-Ergonomics&Work Study Laboratory
- 11- Maintenance Engineering Laboratory
- 12- Precision Machining Laboratory
- 13- Production Management Laboratory
- 14-Welding Technologies Laboratory
- 15-Foundary

The department also provides technical Services to industry in various fields of Industrial and Manufacturing Engineering

REVISED COURSES FOR B.Sc INDUSTRIAL AND MANUFACTURING

First Semester.

Sr.No.	Course No.	Subject	Credit Hours	
			Part-I	Part-II
1	IME-101	Industrial Materials -I	3	0
2	IME-111	Engineering Mechanics-I	3	1
3	IME-113	Workshop Engineering	3	2
4	ME120	Thermodynamics-I	3	1
5	EE-101	Electrical Engineering	3	1
6	MA-101	Applied Math	3	0
Total			15	5

2nd Semester

Sr.No.	Course No.	Subject	Credit Hours	
			Part-I	Part-II
1	IME-121	Engg. Drawing & Graphics	3	2
2	IME-122	Manufacturing Processes I	3	1
3	ME-122	Fluid Mechanics	3	1
4	EE-123	Computer Programming	0	1
5	MA-102	Applied Math-II	3	0
6	IS-101	Islamic & Pak Studies	3	0
Total			15	5

3rd Semester

Sr.No.	Course No.	Subject	Credit Hours	
			Part-I	Part-II
1	IME-231	Numerical Methods	3	1
2	IME-232	Mechanics of Materials-I	3	1
3	IME-233	Engineering Mechanic-II	3	1
4	IME-234	Machining Processes-I	3	2
5	EE-201	Industrial Electronics	3	1
6	HU-201	Communication Skills and Technical Report Writing	0	2
Total			15	8

4th Semester

Sr.No.	Course No.	Subject	Credit Hours	
			Part-I	Part-II
1	IME-241	Machine Design & CAD-I	3	2
2	IME-242	Work study and Methods Engineering	3	1
3	IME-243	Manufacturing Processes-II	3	1
4	ME-212	Mechanic of Machines	3	1
5	IS-201	Islamic & Pak Studies	3	0
Total			15	5

5th Semester

Sr.No.	Course No.	Subject	Credit Hours	
			Part-I	Part-II
1	IME-351	Industrial Materials-II	3	2
2	IME-352	Operations Research	3	2
3	IME-353	Engineering Statistics	3	1
4	IME-354	Machine Design & CAD-II	3	2
5	IME-355	Engineering Economics	3	0
Total			15	7

6th Semester

Sr.No.	Course No.	Subject	Credit Hours	
			Part-I	Part-II
1	IME-361	Metrology & Quality Assurance	3	2
2	IME-362	Mechanics of Materials-II	3	1
3	IME-363	Manufacturing Processes-II	3	2
4	IME-364	Ergonomics	3	1
5	MCT-302	Instrumentation & Control	3	1
Total			15	7

7th Semester

Sr.No.	Course No.	Subject	Credit Hours	
			Part-I	Part-II
1	IME-471	Finite Element Analysis	3	2
2	IME-472	Production Tooling Design	3	2
3	IME-473	Entrepreneurship	3	2
4	IME-474	Production & Operation Management	3	2
5	IME-499	Project	0	2
Total			12	10

8th Semester

Sr.No.	Course No.	Subject	Credit Hours	
			Part-I	Part-II
1	IME-481	Plant Engineering	3	2
2	IME-482	Automation and Robotics	3	2
	IME-483	Computer Integrated Manufacturing	3	2
4	IME-484	Total Quality Management	3	2
5	IME-499	Project	0	2
Total			12	10

DEPARTMENT OF MECHATRONICS & CONTROL ENGINEERING

Chairman:

Prof. Dr. Salim Abid Tabassum

Professors:

Prof. Dr. Tariq Jamal Mian

Assistant Professors:

Mr. Khalid Mahmood Arif *

Mr. Ali Raza*

Mr. Samsoun Inayat*

Mr. Rizwan Arshad

Miss. Ummul Baneen*

Lecturers:

Mr. Muhammad Salman*

Lecturers/Lab Engineers:

Miss. Ayisha Nayyar

Mr. Daud Sana Warraich*

Mr. M. Kamran Akhtar*

Mr. Rizwan Arshad Ashraf

Miss. Aisha Moazzam

Mr. Syed Abbas Zilqurnain Naqvi

Miss. Maria Akram

Miss. Fahira Afzal Makeen

Mr. M. Awais Ashraf

Mr. M. Shoaib Malik

Mr. M. Ahsan Naeem

Miss Maliha Saleem Bakhshi

Mr. M. Ahsan

Mr. Moaaz Rauf Nizami

*on higher studies

The term "mechatronics" has been used for about 35 years. It is derived from the observation of the synergy achieved through the integration of mechanical, electrical and information technologies in the design, manufacture and operation of industrial products and processes. Synergies may be in terms of performance, physical dimension, cost, power efficiency, time for development, dealing with complexity, and so on. Industrial products are becoming more and more sophisticated and complex and industry must respond to the needs of market and society with high-quality products in a timely manner. Thus, mechatronics has made major impacts upon various industries such as automotive, consumer electronics, biomedical and robotics/automation. At the same time, mechatronics has become popular at universities from the viewpoint of research as well as education. Research topics relevant to mechatronics are diverse and include micro-electromechanical systems (MEMS), mechatronics devices/machines, control of mechatronic systems, human-machine interface/haptics, embedded computing and software engineering as well as design/integration methodologies for mechatronic systems.

Department of Mechatronics & Control Engineering (MCE), was established in Dec 2005. The undergraduate and postgraduate programs being run by the department were established in 2001 and 1999 respectively. Present undergraduate enrollment is around 250 students.

The Bachelors Programme in Mechatronics is designed to address

the needs of technology-base-industries. It will provide in-depth knowledge in the fundamentals, design, analysis and operation of mechatronic system. The objective of this programme is to provide a course of study which will enable the student to work effectively.

Programs of Study:

The following programs of study are offered:

- a) Bachelor's degree in Mechatronics & Control Engineering
- b) Master's degree in Mechatronics & Control Engineering
- c) Ph.D. in Mechatronics

The curriculum for the bachelor's degree includes courses in Mathematics, computer techniques and humanities which are followed by the courses in Fundamentals of Mechatronics, Machine Design and CAD, Hydraulics and Pneumatics, instrumentation & Measurements, Microcontrollers and Microprocessors, Mechatronics System Design, Advanced Control Systems, Automation and Robotics, Artificial Intelligence, Machine Vision, Digital Signal Processing, Computer Integrated Manufacturing, and Production Management. Instructional tours are undertaken to acquaint the students with projects of national importance in Mechatronics Engineering.

Laboratories & Other Facilities:

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

DEPARTMENT OF MECHATRONICS & CONTROL ENGINEERING

- AI & Robotics Lab
- Digital Systems Lab
- Automation Lab
- Biomedical Engineering Lab
- Computer Integrated Manufacturing (CIM) Lab
- Embedded Systems Lab
- Instrumentation & Control Lab
- Power Electronics Lab
- Simulation Lab

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

Research:

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

• **AI & Robotics:**

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

• **Industrial Automation:**

Research in this area involves conventional as well as modern approaches for plant automation; starting from use of PLC, Open architecture solutions, embedded solutions, SCADA, DCS and soft PLCs.

• **Biometrics:**

Biometrics deals with identification of individuals based on their biological or behavioral characteristics. As increasing number of biometric based identification systems are being deployed for many civilian & forensic applications, biometrics & its applications have evoked considerable interest. Such accurate identification of a person could deter crime, streamline business processes and save critical resources.

Other facilities:

• **Library:**

The department has a well stocked library with a large number of

books and journals on mechatronics system design, robotics, industrial automation, artificial intelligence, machine vision, biomedical engineering, digital signal processing, control system, electronics, instrumentation and measurements, microprocessor and microcontroller CAD/CAM, engineering mechanics, engineering drawing and graphics, communication systems.

• **Industrial Trainings:**

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

• **Student Advisory Services:**

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

• **Mechatronics Club:**

The department has launched a Mechatronics Club to promote design and development activities in the area. In normal routine students of higher classes use advanced equipment but this club provides opportunity for juniors to mingle with seniors and learn skills right from the start. Club in-charge delivers lectures, designate projects and guide in programming computer interfacing, microcontrollers etc.

• **Biomedical Engineering Center (BMEC):**

BMEC at UET is aimed to pioneer leading research in some of the most important areas of bio medical engineering. Biomechanics will be related to the concepts of mechanics applied to the living organisms. Computational Biomechanics will be focused to predict and simulate the structural and functional behavior of living organisms by developing computer models using advanced numerical techniques. Rehabilitation engineering will be focused to design and develop the devices that will provide solutions for the individuals with disabilities.

B.SC. MECHATRONICS & CONTROL ENGINEERING (SESSION 2006

1st Semester Courses (Session 2007 onwards)

1.	MA-106	Engineering Mathematics – I	3	0
2.	MCT-123	Engineering Graphics & CAD – I	2	2
3.	MCT-122	Fundamentals of Thermal Sciences	3	1
4.	MCT-134	Electric Circuits	3	1
5.	IS/HU-101	Islamic & Pak Studies	3	0
Total			14	4
Semester Credits			18	

3rd Semester Courses

12	MCT-201	Transformation Techniques	3	0
13	MCT-212	Digital Logic Design	3	1
14	MCT-213	Mechanisms	3	1
15	MCT-234	Electrical Machinery	3	1
16	MCT-229	Mechanics of Materials	2	0
17	IS-201	Islamic & Pak Studies	3	0
Total			17	3
Semester Credits			20	

5th Semester Courses

24	MCT-304	Modeling & Simulation	3	1
25	MCT-311	Hydraulics & Pneumatics	3	1
26	MCT-312	Instrumentations & Measurements	3	1
27	MCT-313	Embedded Systems	3	1
28	MCT-315	Computer Interfacing & Networks	3	1
Total			15	5
Semester Credits			20	

7th Semester Courses

34	MCT-411	Artificial Intelligence	3	1
35	MCT-412	Advanced Control Systems	3	1
36	MCT-413	Digital Signal Processing	3	1
37	MCT-414	Robotics	3	1
38	MCT-419	Final Project	0	3*
Total			12	7
Semester Credits			19	

2nd Semester Courses (Session 2007 onwards)

6.	MA-107	Engineering Mathematics – II	3	0
7.	MCT-124	Engineering Mechanics	3	1
8.	MCT-143	Computer Programming – I	0	2
9.	MCT-137	Electronic Devices & Circuits	3	1
10	MCT-121	Fluid Mechanics	2	1
11	MCT-120	Work Shop Technology	1	2
Total			12	7
Semester Credits			19	

4th Semester Courses

18	MA-206	Numerical Methods	3	1
19	MCT-219	Probability & Statistics	3	0
20	MCT-227	Machine Design & CAD – II	2	2
21	MCT-228	Machine Tools & Machining	3	1
22	MCT-246	Computer Programming – II	1	2
23	HU-220	Communication Skills	0	1
Total			12	7
Semester Credits			19	

6th Semester Courses

29	MCT-301	Communication Systems	3	1
30	MCT-317	Precision Machine Design	3	1
31	MCT-318	Control Systems	3	1
32	MCT-319	Industrial Automation	3	1
33	MCT-336	Power Electronics	3	1
Total			15	5
Semester Credits			20	

8th Semester Courses

39	MCT-408	Principles of Management	3	0
40	MCT-415	Machine Vision	3	1
41	MCT-417	Introduction to Biomedical Engineering	3	1
42	MCT-419	Final Project	0	3
43	MCT-436	Mechatronics System Design	3	1
Total			12	6

* To be continued and graded at the end of 8th Semester

**Faculty of
CIVIL ENGINEERING**

**Dean of Faculty
Prof. Dr. Muhammad Ashraf**

**Faculty Includes
Department of Civil Engineering
Department Transportation Engineering & Management
Institute of Environmental Engineering & Research
Department of Architectural Engineering & Design**

DEPARTMENT OF CIVIL ENGINEERING

Chairman

Prof. Dr. Abdul Sattar Shakir

Professors

Dr. Muhammad Ashraf
Dr. Muhammad Ilyas
Dr. Zahid Ahmad Siddiqui
Dr. Aziz Akbar
Dr. Habib ur Rehman
Dr. Zulfiqar Ali
Dr. M. Afzal Javed
Dr. Khalid Farooq

Associate Professors

Engr. Sardar Babar Khan
Dr. Muhammad Aashiq Kharal
Engr. Riaz Ahmad Goraya
Dr. Waseem Mirza***

Assistant Professors

Engr. M. Naeem Akhtar
Engr. Jamal ur Rehman Seddeqi
Engr. Imran Saleem **
Engr. Imtiaz Rashid
Engr. Kafeel Ahmed
Dr. Noor Muhammad Khan

Dr. Asad Ullah Qazi
Engr. Bilal Bakht*
Dr. Sajjad Mubeen
Dr. Anwar ul Haq Muneeb
Engr. M. Burhan Sharif
Dr. Asif Hameed
Engr. Ammad Hassan Khan
Engr. Irfan ul Hassan
Engr. Azhar Saleem*

Lecturers

Engr. Mubashar Aziz*
Engr. S. M. Bilal Waris Ali*
Engr. Muhammad Aun Bashir*
Engr. Mohsin Siddique*
Engr. Rashid Hameed*
Engr. Tauqir Ahmad
Engr. M. Sajjad Nadeem*
Engr. Sarfraz Munir
Engr. Syed Iftikhar Ahmad*
Engr. Bilal Ahmed*
Engr. Aqsa Razzaq Ch.
Engr. Sana Amir*
Engr. Jawad Hussain*
Engr. Usman Akmal

Engr. Hassan Mujtaba Shahzad
Engr. Ahsan Sattar*
Engr. M. Shafqat Ali*
Engr. Arusha Butt
Engr. Rizwan Azam*
Engr. Abeera Batool*
Engr. Ehtesham Mahmood*
Engr. Wasim Abbas
Engr. Muhammad Yousaf
Engr. Shahid Nazir*
Engr. Safeer Abbas*
Engr. Nauman Khurram
Engr. Umbreen us Sahar
Engr. Ali Ahmad
Engr. M. Mazhar Saleem
Engr. Usman Ali
Engr. Irfan Rashid
Engr. Qasim Shaukat Khan
Engr. Bilal Zulkarnain

* On higher studies/Deputation abroad.

** On Extra Ordinary Leave.

*** On foreign Faculty Hiring.

Civil engineering is a professional engineering discipline that deals with the planning, design, construction, operation and maintenance of the physical and naturally built environment, including works such as buildings, bridges, flyovers, under passes, roads, railway tracks, airports, docks & harbors, factories, dams, barrages, canals, water supply schemes and sewerage systems etc.

Civil Engineering is considered as the mother of all engineering as it is the process of directing and controlling natural resources for the use and benefit of man kind through construction of various structures.

The Department of Civil Engineering was established in 1939 as a part of the Maclagan Engineering College, Lahore. Currently it has an enrolment of over 1000 students.

The Department has the following divisions to conduct its teaching and research programmes:

- i) Hydraulics and Irrigation Engineering
- ii) Geotechnical Engineering
- iii) Structural Engineering

DEPARTMENT OF CIVIL ENGINEERING

The Department offers B.Sc. Civil Engineering programme at undergraduate level.

The Department offers the following programmes of studies at postgraduate level:

- a) M.Sc. Hydraulics and Irrigation Engineering
- b) M.Sc. Geotechnical Engineering
- c) M.Sc. Structural Engineering
- d) Ph.D. Degree in Civil Engineering

In the Bachelor Degree Courses, emphasis is laid on the development of 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 investigations. Theory classes of different subjects are complemented by tutorials and laboratory work. The classroom and laboratory work is supplemented with instructional tours to acquaint students with the civil engineering projects of national importance and with survey camp where they plan and execute survey of large areas independently.

Laboratories and other facilities

The Department has the following well-equipped laboratories, which meet the academic needs of students and teachers as well as the professional demands of the government and private organizations:

- Computer Centre
 - Concrete Laboratories
 - Transportation Engineering Laboratories
 - Hydraulics & Irrigation Engineering Laboratories
 - Geotechnical Engineering Laboratories
 - Foundation Engineering Laboratory
 - Strength of Materials Laboratory
 - Surveying Laboratory
 - Test Floor Laboratory
 - Engineering Mechanics Laboratory
- Civil Engineering Department in collaboration with National

Engineering Services of Pakistan (NESPAK) has established a standard base line at the University Campus, which is used for calibration of surveying equipment/instruments for various surveying organizations.

The Department has adequate research facilities for the postgraduate students and the faculty. Priority of the department has been towards solution of different problems faced by the public/private sectors in the field of civil engineering. The faculty members are engaged in a variety of research programmes such as Low Cost Housing, Use of Indigenous Materials, Composite Space Structures, Towers, Soil Stability of Slopes, Soil Improvement Techniques, Determination of B.C, Pneumatic Techniques, Seepage, Control of Water Logging, Salinity Control, Sedimentation in Channels and Reservoirs, River Flood Hydraulics, Application of Geographical Information Systems in various fields of Civil Engineering, Hydrological Modelling, Soil Erosion and Sediment Transport Modelling, Flood Modelling for Coastal Areas due to Climate Change, Offshore Hydraulics, Bond Strength of Ultra High Strength Concrete, Development and Use of FRP Materials, High Performance Concrete, Earthquake Risk Assessment & Retrofitting Techniques, Reliability Based Design and Development of Computer Softwares for Civil Engineering Problems.

The Department frequently organizes seminars, workshops, national and international conferences on the topics of national importance related with civil engineering, where the faculty and the students actively participate.

Due to civil engineering expertise that the faculty provides, various public and private sector organizations frequently approach the department for consultancy and advisory services. The Department has rendered services in completion of several mega projects such as design of Gomal University, Punjab Medical College and Islamabad Highway Bridges of CDA and retrofitting & risk assessment of earthquake affected buildings etc. Further, the Department offers testing services both in laboratory and in field for Civil Engineering projects for quality assurance.

OUTLINES OF CREDIT HOURS FOR B.Sc CIVIL ENGINEERING (Effective for Sessions 2006 Onward)

<u>1st Semester</u>					<u>2nd Semester</u>				
Sr	Course No	Title	Credit Hrs		Sr	Course No	Title	Credit Hrs	
			Th	Pr				Th	Pr
1	CE-103	Construction Materials	3	1	6	CE-101	Surveying-I	3	2
2	CE-105	Civil Engineering Drawing	1	2	7	CE-102	Engineering Mechanics	4	1
3	CE-150	Computer Programming	3	1	8	EE-102	Applied Electricity	3	1
4	MA-104	Mathematics-I	4	0	9	HU-120	English Communication Skills	0	1
5	IS/Hu-101	Islamic & Pak Studies	3	0	10	MA-105	Mathematics-II	4	0
Total			14	04	Total			14	05
G. Total			18		G. Total			19	
<u>3rd Semester</u>					<u>4th Semester</u>				
11	CE-201	Surveying-II	3	2	16	CE-205	Civil Engineering Construction & Graphics	2	1
12	CE-212	Mechanics of Solids	3	1	17	CE-221	Geotechnical Engineering-I	3	1
13	CE-231	Fluid Mechanics-I	3	1	18	CE-211	Elementary Structural Analysis	3	0
14	MinE-270	Engineering Geology	2	1	19	MA-230	Numerical Analysis	3	0
15	MA-220	Mathematics-III	3	0	20	IS/HU-202	Islamic & Pak Studies	3	0
					21	CE-342	Civil Engineering Practice	3	1
Total			14	05	Total			17	03
G. Total			19		G. Total			20	
<u>5th Semester</u>					<u>6th Semester</u>				
22	CE-306	Construction Management & Planning	3	1	27	CE-312	Structural Mechanics	4	1
23	CE-311	Structural Analysis	3	1	28	CE-314	Plain & Reinforced Concrete-I	3	1
24	CE-313	Steel Structures	3	1	29	CE-331	Fluid Mechanics-II	3	1
25	CE-321	Geotechnical Engineering-II	3	1	30	CE-341	Environmental Engineering-I	3	1
26	CE-332	Engineering Hydrology	3	1					
Total			15	05	Total			13	04
G. Total			20		G. Total			17	
<u>7th Semester</u>					<u>8th Semester</u>				
31	CE-411	Plain & Reinforced Concrete-II	3	1	36	CE-401	Structural Engineering	3	1
32	CE-421	Transportation Engineering	3	1	37	CE-431	Irrigation Engineering	3	1
33	CE-441	Environmental Engineering-II	3	1	38	CE-422	Design of Structures	3	1
34	CE-424	Hydraulic Engineering	3	1	39	CE-423	Pavement and Foundation Engineering	3	1
35	CE-499	Project	0	3	40	CE-499	Project	0	3
Total			12	7	Total			12	7
G. Total			19		G. Total			19	

DEPARTMENT OF TRANSPORTATION ENGINEERING AND MANAGEMENT

Chairman

Prof. Dr. Tanvir Iqbal Qayyum

Professor

Dr. Muhammad Waseem Mirza*

Associate Professor

Dr. Sajjad Maqbool

Assistant Professor

Engr. Farhan Haider

Lecturers

Engr. Bilal Zia Malik**

Engr. Miss Amna Chaudhry**

Engr. Zahra Batool**

Engr. Irum Sanaullah**

Engr. Izza Anwar Minhas

Engr. Abdur Rahim

Engr. Muhammad Arslan Asim**

Engr. Hina Saleemi

Engr. Muhammad Ayyaz Khan**

Engr. Sajid Ghaffar

Engr. Muhammad Ashraf Javid

Engr. Miss Saadia Tabassum

* Foreign Faculty

** On Higher Studies Abroad

The Department of Transportation Engineering and Management (DTEM) is newly established under the Faculty of Civil Engineering. The department has distinction of being the first in the nation to offer a formal B.Sc. degree course in Transportation Engineering. At present the total enrollment of students is 109. Four sessions 2002-04 has already been graduated.

The establishment of this department is to improve existing transportation infrastructure and to develop human resource. This can be achieved by the application and development of advance technologies, and developing/producing transportation professionals capable of planning, designing, constructing, managing, operating, and maintaining of various modes of transportations as airways, seaways, highways, railways and pipeways.

Courses of Study

The department offers the following courses of studies:

- Bachelor's degree course in Transportation Engineering,
- Master's degree course in Transportation Engineering.

The bachelor's degree course emphasis on the understanding of the

fundamental concepts and principles those constitute the basis of transportation engineering. The course consists of lectures, design/practical work, laboratory/field investigations, presentations and final year research project. Field survey camp is also a part of the B.Sc. degree program. The general areas include: Mathematics, Technical Drawing, Computer Programming, Probability and Statistics, Basic Civil and Environmental Engineering. The major core courses offered are: Construction Materials and Machinery, Geotechnical Engineering, Transportation Planning, Transportation Engineering, Management and Practice, Transportation Economics, Multi-Modal Logistics, Transportation Modal Engineering, Highway Engineering, Traffic Engineering and Safety, Railway Engineering, Airport Engineering, Harbour and Dock Engineering, Pavement Design and Construction, Construction Management and Planning, Transportation Asset Management, GIS in Transportation Engineering.

The Master's degree course is offered on part-time basis/evening classes. The emphasis is laid on introducing the modern trends/techniques and advanced knowledge in the field of transportation engineering.

Laboratories and Other Facilities

The department has various dedicated laboratories those include

DEPARTMENT OF TRANSPORTATION ENGINEERING AND MANAGEMENT

Geo-materials, Transportation Materials Improvement, Transportation Computer Aided Design, Asphalt and Concrete Mix Design, Transportation Engineering Basic, Traffic Engineering, Motor Vehicle Examination, and is in a process of establishing Railway Engineering, and Geomatics Engineering Labs. In addition, the other relevant laboratories required for teaching are shared with the Civil, Electrical, Mechanical, Environmental and Geological Engineering Departments. The department is using latest state of the art software and tools for teaching and training purposes. The department has a well-stocked library with a large number of latest relevant books, journals and research publications.

Training Courses and Seminars

The department organizes training courses/workshops and national seminars on regular basis. These activities are demand driven and are carried out for the students, faculty, private and governmental or

Research, Consultancy and Collaboration

Due to expertise of transportation engineering faculty, various public and private sector organizations frequently approach the department for consultancy services. The faculty members are actively engaged in research and regularly present/publish their papers in national and international conferences/seminars/journals. Some of the major organizations that the department works in collaboration with includes: National Highway Authority (NHA), Saadullah Khan and Brothers (SKB), National Transport Research Centre (NTRC), Pakistan Railways, Punjab Traffic Police, National Highway and Motorway Police (NH&MP), Lahore Chamber of Commerce and Industries (LCCI), Civil Aviation Authority and Chartered Institute of Logistic Transport Pakistan (CILT), All Pakistan Road User Association (ARUP) etc. The industry also offers scholarships, internships and practical training to the students.

B.Sc. TRANSPORTATION ENGINEERING COURSES

1st SEMESTER

Course No.	Subject	Credit Hours	
		Theory	Practical
TEM-101	Introduction to Transportation Engineering and Management	4	0
EE-102	Applied Electricity	3	1
CE-107	Technical Drawing	2	2
MA-104	Mathematics-I	4	0
IS/Hu-101	Islamic/Ethics & Pak Studies	3	0
	Tutorial	0	0
	Total	16	3
	G.Total	19	

3rd SEMESTER

Course No.	Subject	Credit Hours	
		Theory	Practical
CE-202	Surveying-II	3	2
CE-212	Mechanics of Solids	3	1
CE-203	Fluid Mechanics	3	1
GEOE-310	Engineering Geology	2	1
IS/Hu-202	Islamic/Ethics & Pak Studies	3	0
	Tutorial	0	0
	Total	14	5
	G.Total	19	

5th SEMESTER

Course No.	Subject	Credit Hours	
		Theory	Practical
TEM-301	Construction Materials and Machinery	3	1
TEM-302	Highway Engineering	3	1
TEM-303	Soil Improvement Techniques	3	1
CE-342	Geotechnical Engineering-II	3	1
CE-343	Engineering Hydrology	3	1
	Tutorial	0	0
	Total	15	5
	G.Total	20	

7th SEMESTER

Course No.	Subject	Credit Hours	
		Theory	Practical
TEM-401	Airport Engineering	3	0
TEM-402	Harbour and Dock Engineering	3	0
TEM-403	Transportation Planning and Management	4	1
TEM-404	Transportation Economics	4	0
TEM-499	Project	0	3
	Tutorial	0	0
	Total	14	4
	G.Total	18	

2nd SEMESTER

Course No.	Subject	Credit Hours	
		Theory	Practical
CE-101	Surveying-I	3	2
CE-102	Engineering Mechanics	4	1
TEM-102	Probability and Statistical Methods	4	1
Hu-120	English Communication Skills	0	1
MA-105	Mathematics-II	4	0
	Tutorial	0	0
	Total	15	5
	G.Total	20	

4th SEMESTER

Course No.	Subject	Credit Hours	
		Theory	Practical
TEM-201	Transportation Modal Engineering	2	1
TEM-202	Multi-Modal Logistics	2	0
TEM-203	Transportation Engineering Practice	2	1
CE-213	Structural Analysis	3	1
CE-221	Geotechnical Engineering-I	3	1
TE-204	Computer Programming	3	1
	Tutorial	0	0
	Total	15	5
	G.Total	20	

6th SEMESTER

Course No.	Subject	Credit Hours	
		Theory	Practical
TEM-304	Traffic Engineering and Safety	3	1
TEM-305	Railway Engineering	3	0
TEM-306	Environmental Engineering	3	1
CE-314A	Plain and Reinforced Concrete	3	1
CE-344	Hydraulic Engineering	3	1
	Tutorial	0	0
	Total	15	4
	G.Total	19	

8th SEMESTER

Course No.	Subject	Credit Hours	
		Theory	Practical
TEM-405	Pavement Design and Construction	4	0
TEM-406	GIS in Transportation Engineering	3	1
TEM-407	Construction Management and Planning	3	1
TEM-408	Transportation Asset Management	3	0
TEM-499	Project	0	3
	Tutorial	0	0
	Total	13	5
	G.Total	18	
TOTAL For Duration of 8 Semesters		153	

INSTITUTE OF ENVIRONMENTAL ENGINEERING AND RESEARCH

Director

Prof. Abdul Jabbar Bari

Professors

Dr. Tauseef Ahmad Quraishi
Dr. Javed Anwar Aziz
Dr. Waris Ali

Associate Professor

Dr. Sajjad Hayder

Assistant Professor

Mr. Husnain Haider

Lecturers

Mr. Amir Akhlaq*
Miss. Amna Bari*
Miss Amara Rahim
Miss Mehwish Anis
Mr. Irfan Jalees*
*** On Study Leave**

The Institute was established as Institute of Public Health Engineering and Research in the year 1972 as a consequence of the ever increasing awareness of the importance of environmental/public health engineering. However, a beginning in public health engineering studies was made earlier in 1961 when a post-graduate diploma course in the discipline was initiated in 1961, and was up-graded to the Master's level in 1962. The Institute has been renamed as Institute of Environmental Engineering and Research in 1996.

Courses of Study

The following courses of study are offered at different levels:

- a) Bachelors Degree in Environmental Engineering.
- b) Master's Degree Course in Environmental Engineering.

The Masters Degree course is offered both for full-time, and part – time students.

- c) Ph.D. degree in Environmental Engineering

This degree is earned by course work and research on topics relating to Environmental Engineering.

Laboratories & Other facilities

The Institute has laboratory facilities in the following areas:

- Water Quality Testing
- Unit Processes
- Water Pollution Control
- Air Pollution Monitoring
- Sanitary Microbiology

The Institute has a well-stocked library with a large number of books and journals on Environmental, and Public Health Engineering.

Research Extension and Advisory Services

In addition to the teaching programmes, the Institute is engaged in the multifaceted activities for advancement of environmental engineering in the country. Some of the research areas are as follows.

Research & Investigation

Research and investigations in the area of Environmental and Public

INSTITUTE OF ENVIRONMENTAL ENGINEERING AND RESEARCH

Health Engineering are conducted by M.Sc. and Ph.D. students and faculty members. Some of the research projects and studies have been sponsored by international agencies, public sector agencies and industries. These projects have played a vital role in the finding of practical solutions leading to the development of design criteria and guidelines particularly in the area of water quality management. Currently these design guidelines are being effectively utilized by the public works departments in the implementation of environmental engineering systems.

Training Programme & Refresher Courses.

The Institute offers numerous training programmes, and refresher courses for the in service personnel, and field engineers from various organizations, It also organizes national and international seminars, and symposia on issues of environmental engineering in the context or local requirements.

Consultancy & Advisory Services.

The institute offers advisory and consultancy services to industries, municipalities, and private organizations on a variety of environmental engineering issues such as:

- Water & wastewater testing, air pollution control, solid waste management, environmental impact assessment.
- Investigations of rural, and urban water supply, and sanitation systems.
- Planning and design of water & wastewater treatment facilities and reinvestment studies of environmental engineering projects.

OUTLINE OF COURSES OF READING FOR B.Sc. ENVIRONMENTAL ENGINEERING (semester system)

First Term

Ref. No.	Subject	Contact Hours	
		Theory	Practical
EnE-101	Environmental Issues and Environmental Engineering	3	0
IS/HU-101	I&P Studies/E&P Studies-I	3	0
EE-102	Applied Electricity	2	2
MA-104	Mathematics-I	3	0
CE-105	Civil Engineering Drawing	1	6
CE-150	Computer Programming	3	3
	Total:	15	11
	Grand Total	26	

Third Term

Ref. No.	Subject	Contact Hours	
		Theory	Practical
EnE-201	Environmental Microbiology	2	3
IS/HU-202	I&P Studies/E&P Studies-II	3	0
CE-212	Mechanics of Solids	3	3
CE-221	Soil Mechanics	3	3
CE-231	Fluid Mechanics	3	3
MA-220	Mathematics-III	3	0
	Total:	17	12
	Grand Total	29	

Fifth Term

Ref. No.	Subject	Contact Hours	
		Theory	Practical
EnE-303	Water and Wastewater Engineering	3	3
EnE-304	Environmental Ecology	3	0
CE-315	Structural Analysis and Design	3	3
CE-332	Engineering Hydrology	3	3
ChE-320	Cleaner Production Techniques	3	3
	Tutorial	2	
	Total:	17	12
	Grand Total	29	

Seventh Term

Ref. No.	Subject	Contact Hours	
		Theory	Practical
EnE-402	Environmental Modeling and Optimization	3	3
EnE-403	Air Pollution Control Engineering	3	3
ChE-421	Toxicology, Occupational Health and Safety	3	3
CE-432	Water resources and Irrigation Engineering	3	3
EnE-499	Project		6
	Total:	12	18
	Grand Total	30	
	Grand Total	29	
	Third Year – 5 th & 6 th Terms Total Credit Hours:	37	

Total Credit Hours for the Program = 153

Total contact hours for the program = 266

Second Term

Ref. No.	Subject	Contact Hours	
		Theory	Practical
CE-102	Engineering mechanics	4	3
CE-101	Surveying	3	6
EnE-102	Environmental Chemistry	3	3
MA-105	Mathematics-II	4	0
HU 120	English Communication Skills	0	3
	Total:	14	15
	Grand Total	29	
	First Year – 1 st & 2 nd Terms Total Credit Hours:	38	

Fourth Term

Ref. No.	Subject	Contact Hours	
		Theory	Practical
EnE-202	Environmental Engg Lab Technique-I	1	6
EnE-203	Environmental Engineering Processes	3	3
CE-225	Transportation Engineering	3	3
MA-230	Numerical Analysis	3	0
ME-238	Engineering Thermodynamics	3	3
	Tutorial	1	
	Total:	14	15
	Grand Total	29	
	Second Year – 3 rd & 4 th term Total Credit Hours:	39	

Sixth Term

Ref. No.	Subject	Contact Hours	
		Theory	Practical
ME-304	Vehicular and Industrial Combustion Emission	3	3
EnE-305	Environmental Engineering Economics	3	0
EnE-307	Principles of Construction Management	3	3
EnE-308	Environmental Engg. Lab. Techniques-II	1	6
EnE-309	Industrial Wastewater Management	3	3
	Tutorial	1	
	Total:	14	15

Eights Term

Ref. No.	Subject	Contact Hours	
		Theory	Practical
EnE-405	Water and Wastewater Treatment Plant Design	3	3
EnE-406	Environmental Impact Assessment and Management	3	3
EnE-407	Solid and Hazardous Waste Management	3	3
EnE-408	Wastewater Disposal and Reuse	3	3
EnE-499	Project		6
	Total:	12	18
	Grand Total	30	
	Final Year – 7 th & 8 th Terms Total Credit Hours:	38	

DEPARTMENT OF ARCHITECTURAL ENGINEERING & DESIGN

Chairman

Prof. Dr. M. Akram Tahir

Professors

Prof. Dr. Syed Tauseef Ahmad

Prof. Ahmed Saeed Sheikh

Prof. Faiz Ahmed Chishti

Prof. Zia Ud Din Mian

Associate Professor

M. Arif Khan

Assistant Professors

Dr. Khizar Hayat

Sabahat Alamgir

M. Faisal Chaudhary*

Lecturers

Muhammad Yousaf

Asim Rauf

Misbah jamil

Imran Ahmed Saeed

Humera Ahmad

Amad Anwar

Adeeba Abdul Raheem*

Khuram Rashid

Wasim Abbas

* On leave for higher studies

BACKGROUND

During the last decade of the 20th century it was realized by the University that Pakistan will face tremendous challenges with regard to the provision of housing and other buildings for rapidly growing population in urban areas. It was also realized that the traditional Civil, Mechanical & Electrical Engineering will not be able to produce professional engineers dedicated to the needs of the building industry. Furthermore, modern buildings have become very complex facilities housing several systems that ensure comfort and safety for the users. It was realized that it is necessary to produce architectural engineers who understand the Architecture, Engineering & Construction and the future trends. To fulfill these objectives the Department of Architectural Engineering & Design was created. The department offers the following programmes

- B.Sc. in Building & Architectural Engineering
- M.Sc. in Building Engineering
- Ph.D. in Architectural Engineering

OBJECTIVES OF THE PROGRAMME

The goal of the Building & Architectural Engineering is to provide graduates with multi disciplinary inputs for careers in the Construction industry. The multi-disciplinary education will give graduates a fundamental understanding

of all building systems with an in-depth capability in a chosen option area. The breadth of technical knowledge includes:

- Architectural Studies :
- Structural Engineering Studies
- Mechanical Systems Studies
- Lighting Systems Studies
- Electrical Systems Studies
- Acoustics Systems Studies
- Project Management
- Construction Methods
- Building Operations

Facilities :

The department possesses the following well equipped laboratories for students.

• Structural Engineering Laboratory

Structural laboratory is equipped with latest experimental equipments relating to structural engineering & mechanics. This laboratory contains latest machines and equipments for steel testing, concrete testing and engineering mechanics

DEPARTMENT OF ARCHITECTURAL ENGINEERING & DESIGN

- **.Construction Materials Laboratory**

The Construction Materials Laboratory is equipped with state-of-the-art facilities. The laboratory provides a good environment for both teaching and research. The undergraduate students conduct experiments on cement, aggregate, normal strength concrete, high strength concrete, and fiber reinforced concrete. The research programmes conducted in the laboratory include: application of AE techniques in early detection of reinforcing steel corrosion, bond properties between smooth surface rebar and cement, tensile behaviour of short fiber reinforced cementitious composite, high performance concrete, investigation of bond failure for ceramic tile system, fly ash concrete, rubber particle concrete, impedance measurement of cementitious composites, and composite reinforced concrete.

- **Survey Laboratory**

The laboratory provides essential surveying equipments for the bachelor degree students to familiarize with the practical surveying technique in the construction field. The Surveying Laboratory established with the purpose of enabling students to practice land surveying techniques using a wide spectrum of surveying equipment ranging from traditional levels, transits, and theodolites to the latest electronic total stations with data collectors and digital GPS equipment.

- **Foundation Engineering Laboratory**

This laboratory facility is equipped with equipment for testing of soil properties for their subsequent use in engineering projects and other related engineering areas. The following tests can be performed in this laboratory: water content, specific gravity, grain size distribution analysis (mechanical sieve analysis and hydrometer analysis), Atterberg Limits, standard and modified Proctor, constant head permeability, variable head permeability, direct shear, consolidation, unconfined compression, triaxial, vane shear and CBR.

- **Basic Electricity Laboratory**

The basic purpose of the laboratory is to demonstrate the use of basic electric equipment such as Voltmeter, Ammeter, Powermeter, Lux meter, distribution panel, etc. Experiments related to the lighting and illumination are also performed. The laboratory provides opportunity to learn about fault analysis of cable using Murry loop test, Varly loop test. Distribution panels can be used to evaluate voltage drop in DC & AC distributor with single end and double end configurations. Effect of variation of load over the system voltage configuration power factor can be observed and techniques may be applied to improve power factor of the system.

- **Environmental Control Systems Laboratory**

The goal of the Environmental Systems Laboratory is to advance sustainable design through research, education, and community outreach, with the aim of improving the dynamic interaction among the built, natural, and human environments. The Laboratory is equipped with latest experimental equipments as Digital Lux meters, Sound meters, Anemometers etc. Environmental control systems softwares are also available in order to facilitate general and simulation studies.

- **Digital Studios**

The department has set up three digital studios to provide the digital/drawing facilities. Each studio is equipped with 50 Pentium IV computers and printing accessories. The studios are also equipped with modern teaching aids including audio visual aids such as multimedia projectors, the state of the art dorm scanners and plotters have also been provided in the studio.

- **Library**

The department has a well stocked library with a large number of books and journals on architectural design, structural design, building construction, heating, ventilation and air conditioning (HVAC), lighting design, plumbing design, environmental control systems and mathematics. More volumes of books and journals are being added day by day in order to provide adequate research facilities for students & faculty members.

DEPARTMENT OF ARCHITECTURAL ENGINEERING & DESIGN

The four years degree programme in B. Sc. Building and Architectural Engineering emphasises the scientific engineering aspects of buildings. It is focused to produce professional engineers specializing in analysis, and operation of engineering sub-systems for buildings. These include structural, electrical and lighting, acoustical, plumbing, fire protection, heating, ventilation and Air-conditioning systems and other mechanical services.

The goal of the programme is to provide an education in fundamentals of engineering and their application, which will help give each graduate the ability to practice as registered professional engineer in a variety of areas, both public and private, related to the planning, construction and operation of buildings.

As important members of building design teams, they must be able to create engineering designs that will fulfill the economic, safety, stability, strength and aesthetic requirements of a project.

Included in the academic programme are exercises in many of the basic courses beginning in the first year and continuing through the fourth year to develop skills in the engineering design process. The last course in this sequence is a comprehensive Architectural Engineering Project, a culmination of all the previous design experiences from

Outline of courses of reading for B.Sc. in Building & Architectural Engineering

SESSION – 2009 on ward, 4 year Program

First Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
AED: 101	Basic Design	-	3
AED: 121	Building Materials & Construction-I	3	1
AED: 122	Surveying	3	1
MA: 131	Applied Mathematics-I	4	-
HU/IS:101	Islamic and Pakistan Studies	3	-
	Total:	13	5
	Grand Total	18	

Third Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
AED: 301	Architectural Design-II	0	3
AED: 321	Building Materials & Construction-III	3	1
AED: 351	Environmental Control Systems-I	3	1
MA: 331	Applied Mathematics-II	4	-
IS/HU:201	Islamic & Pakistan Studies	3	-
	Total:	13	5
	Grand Total	18	

Fifth Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
AED: 501	Architectural Design-IV	-	3
AED: 511	Mechanics of Structures-III	3	1
AED: 513	Design of Steel Structures	3	1
AED: 551	Environmental Control Systems-II	3	1
EE : 500	Electrical Systems in Buildings	3	1
	Total:	12	7
	Grand Total	19	

Seventh Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
AED: 711	Computer Aided Structural Analysis	3	1
AED: 714	Reinforced & Prestressed Concrete	3	1
AED: 721	Estimation & Quantity Surveying	3	1
AED: 724	Foundation Engineering	3	1
AED: 899	Project	-	-
	Total:	11	5
	Grand Total	16	

* The project will be examined at the end of eighth semester. Total Contact Hours: 231

Second Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
AED: 201	Architectural Design-I	-	3
AED: 211	Mechanics of Structures-I	3	1
AED: 221	Building Materials & Construction-II	3	1
AED: 225	History of Building Technology	3	1
HU: 120	Communication Skills	-	1
	Total:	9	7
	Grand Total	16	

Fourth Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
AED: 401	Architectural Design-III	-	3
AED: 411	Mechanics of Structures-II	3	1
AED: 423	Hydraulics for Building Engineers	3	1
MA : 431	Applied Mathematics-III	4	0
CSE: 450	Computer Programming & Numerical Analysis	3	1
	Total:	13	6
	Grand Total	19	

Sixth Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
AED: 614	Plain & Reinforced Concrete	3	1
AED: 624	Geotechnical Engineering	3	1
AED: 644	Water Supply & Sanitation Engg	3	1
AED: 651	Environmental Control Systems-III	3	1
EE: 600	Lighting & Illumination	3	1
	Total:	15	5
	Grand Total	20	

Eighth Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
AED: 801	Integrated Building Design	-	3
AED: 812	Structural Dynamics & EQ Engg	3	1
AED: 821	Construction Management	3	1
AED: 899	Project	-	3
	Total:	6	8
	Grand Total	14	

**Faculty of
CHEMICAL, MINERAL & METALLURGICAL ENGINEERING**

Dean of Faculty

Faculty Includes

**Department of Chemical Engineering
Department of Polymer & Process Engineering
Department of Metallurgical & Materials Engineering
Department of Mining Engineering
Department of Geological Engineering
Department of Petroleum & Gas Engineering**

DEPARTMENT OF CHEMICAL ENGINEERING

Dean

Chairman

Prof. Dr. A. R. Saleemi

Professors

Prof. Dr. Shahid Naveed
Prof. Dr. Nadeem Feroze
Prof. Dr. Shaukat Rasool
Prof. Dr. Muhammad Zafar Noon
Prof. Dr. Anwar-ul-Haq

SNGPL CHAIR ON GAS ENGG.

Associate Professors

Dr. Shahid Bashir*
Mr. Mazhar Hussain
Syed H.Javed Naqvi
Mr. Shah Muhammad

Assistant Professors

Dr. Tariq Mumtaz Jafri*
Dr.-Ing.Naveed Ramzan
Mr. Zaka ur Rehman Qazi
Mr. Humayun Wali

Lecturers

Ms. Massoma Rustam*

Ms. Saima Yaseen*
Mr. Muneeb Nawaz*
Hafiz Muhammad Zaheer Aslam
Ms. Humaira Siddique*
Ms.Nubla Latif

Mr. Muhammad Faheem
Sayyed Mohsin Ali Kazmi
Ms. Masooma Sundus
Ms. Asma Khan
Mr. Tajammal Munir
Mr. Muhammad Nazim
Ms. Tajwar Sultana
Ms. Shafaq Muzammil

RESEARCH ASSISTANT

The Department was established in 1962 and is the first in the country to institute Bachelor's, Master's and Doctoral degree courses in Chemical Engineering. At present the total enrollment for B.Sc. Chemical Engineering is 450. In postgraduate study programme for M.Sc. Chemical Engineering, the enrollment is 60, and for Ph.D Chemical Engineering, there are 10 students.

COURSES OF STUDY

The Department offers courses of study leading to the following degrees:

- a) Bachelor of Science in Chemical Engineering
- b) Master of Science in Chemical Engineering with specialization in:
 - (i) Process Engineering
 - (ii) Industrial Pollution Control Engineering
 - (iii) Biochemical Engineering
 - (iv) Computer Aided Design

- c) Ph.D. in Chemical Engineering

The curriculum for the bachelor's degree course has been evolved over a number of years and is designed to prepare the students for design, operation and supervision of chemical, biochemical and polymer plants. The courses are updated regularly to incorporate the outcome of local and global research in the fields of Chemical and Polymer Engineering. Aspects that are changing in industry like environment, quality management and safety are given emphasis. Industrial training and study tours are arranged regularly for field inspection and hands-on training in the projects of national importance in Chemical Engineering. Students are encouraged to work independently and are assigned projects involving design and other aspects of Chemical Engineering. Emphasis is given to the use of computers by students in problem solving and design of equipment and plants.

The Master's course is offered both on full-time and part-time basis. The full time course is of one year duration comprising three terms of four months each. One term is devoted to advanced

DEPARTMENT OF CHEMICAL ENGINEERING

chemical engineering subjects and one term focuses on specialization courses, e.g., Environmental Engineering, Biochemical Engineering, Computer aided Design and Process Engineering. In the third term, students undertake research projects and prepare their dissertation/thesis. The part-time Master degree course is of two years duration and is meant for in-service chemical engineers.

For Ph.D. degree, students undertake supervised research work for a minimum period of three years. Original research contributions are expected for the successful completion of this degree. On completion of research work, a thesis has to be submitted. Ph.D degree is awarded after approval of thesis by board of examiners.

LABORATORIES & OTHER FACILITIES

The Department has well-equipped and well-maintained laboratories in the following fields:

- Mass Transfer
- Fluid Flow
- Process Heat Transfer
- Fuels & Combustion
- Computer Applications
- Instrumentation & Control
- Chemical Reaction Engineering
- Chemical Engineering Thermodynamics
- Wet Analysis (Analytical Chemistry)
- Instrumental Analysis
- Environmental Engineering
- Biochemical Engineering
- Energy Engineering
- Postgraduate Students Laboratory

Most of the laboratories have been recently modernized and upgraded. The newly established Instrumental Analysis Laboratory houses sophisticated equipments like Atomic Absorption Spectrophotometer, Differential Thermal Analyzer, Gas Calorimeter, Automatic Titrators, etc. These facilities not only offer excellent

earning opportunities but also extend material testing and analysis services to the industry and other users. The Department has a Computer Centre equipped with latest computing facilities. Apart from teaching computer languages and application of computers in various courses of Chemical Engineering, the students are encouraged to use this laboratory for their design projects, research dissertations, and class assignments.

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

LIAISON WITH CHEMICAL INDUSTRY

The Department gives great importance to a close interaction with the Chemical Industry. As a result the Department has developed constructive links with some major organizations like Dawood Hercules Chemicals, National Fertilizer Corporation of Pakistan, Petroleum & Petrochemical Corporation, Rupali Polyester, DESCON (Pvt.) Ltd., Environmental Protection Agency, and a number of other important industrial organizations. A number of scholarships for undergraduates, fellowships for postgraduate students, facilities for practical training of students, and exchange of senior staff members for mutual benefit are some of the features of such cooperation.

RESEARCH EXTENSION & ADVISORY SERVICES

The Department is engaged in a number of research projects of industrial and theoretical significance under its postgraduate and faculty research programmes in areas such as pollution control, energy management, process development, unit operations and process simulation, etc. The outcome of research is regularly published in journals of repute and receives recognition from the international community of chemical engineers. The Department also offers a variety of advisory and consultancy services to the local industry and entrepreneurs. Some of the areas where the Department can render assistance are:

- Feasibility studies of chemical projects

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- Ergonomics of Engineering Projects and waste minimization
- Industrial pollution monitoring, management & control and recycling
- Industrial testing and chemical analysis
- Process Safety and Risk Analysis
- Alternative Energy Technology Development.

In addition to above mentioned areas the SNGPL chair on Gas Engineering is working on following research and development projects in the area of energy engineering:

-
- Gas conservation in locally available Water Heater (Geysers).
- Solar system designing for heating and desalination of water.
- Biogas Generation using kitchen Waste.
- Use of Drag-Reducing Agents to increase throughput of existing gas pipelines.
- Study of Sources and Preventive Treatment of Condensation, hydrates Formation and Black Powder Formation in natural gas pipelines.

OUTLINE OF COURSES FOR B.Sc. CHEMICAL ENGINEERING

(1st Semester)

S.No.	Course No.	Subject	Credit Hrs.	
			Th.	Pr.
1.	CH-101	Applied Chemistry-I	3	1
2.	MA-102	Applied Mechanics-I	-	1
3.	ME-115	Engineering Drawing	2	1
4.	Ch.E-102	Particle Technology	3	1
5.	Ch.E-104	Computers and Computation	3	1
6.	HU-120	Communication Skills	0	2
Total			11	7
G. Total			18	

(2nd Semester)

S.No.	Course No.	Course Title	Credit Hrs.	
			Th.	Pr.
1.	MA-103	Applied Mathematics-I	4	-
2.	Ch.E-101	Industrial Stoichiometry-I	3	1
3.	PHY-101	Applied Physics	3	1
4.	ME-105	Mechanical Technology	-	2
5.	Ch.E-103	Engineering Materials	3	-
6.	IS/HU-101	Islamic and Pakistan Studies-I	3	-
Total			16	4
G. Total			20	

(3rd Semester)

S.No.	Course No.	Subject	Credit Hrs.	
			Th.	Pr.
1.	CH-202	Applied Chemistry II	3	1
2.	Ch.E-202	Chemical Engineering Thermodynamics-I	3	1
3.	Ch.E-203	Chemical Process Industries	3	1
4.	Ch.E-204	Fundamentals of Fluid Mechanics	2	1
5.	Ch.E-207	Mechanical Separations	2	0
6.	IS/HU-201	Islamic and Pakistan Studies-II	3	-
Total			16	4
G. Total			20	

(4th Semester)

S.No.	Course No.	Course Title	Credit Hrs.	
			Th.	Pr.
1.	EE-201	Electrical Technology	3	1
2.	Ch.E-201	Industrial Stoichiometry-II	3	1
3.	MA-203	Applied Mathematics II	4	-
4.	Ch.E-205	Energy Engineering	3	1
5.	Ch.E-206	Chemical Engineering Fluid Dynamics	3	1
Total			16	4
G. Total			20	

(5th Semester)

S.No.	Course No.	Subject	Credit Hrs.	
			Th.	Pr.
1.	MA-320	Computer Science and Numerical Analysis	3	1
2.	Ch.E-302	Heat Transfer Fundamentals	3	1
3.	Ch.E-303	Chemical Reaction Engineering	3	1
4.	Ch.E-305	Unit Processes	3	1
5.	Ch.E-306	Mass Transfer Fundamentals	3	1
Total			15	5
G. Total			20	

(6th Semester)

S.No.	Course No.	Course Title	Credit Hrs.	
			Th.	Pr.
1.	Ch.E-304	Chemical Engg. Mathematics	3	1
2.	Ch.E-307	Chemical Engineering Thermodynamics-II	3	1
3.	Ch.E-308	Chemical Reactor Design	2	1
4.	Ch.E-309	Process Heat Transfer	3	1
5.	Ch.E-310	Separation Processes	3	1
Total			14	5
G. Total			19	

(7th Semester)

S.No.	Course No.	Course Title	Credit Hrs.	
			Th.	Pr.
1.	Ch.E-401	Industrial Instrumentation	3	1
2.	Ch.E-402	Simultaneous Heat and Mass Transfer	4	-
3.	Ch.E-403	Chemical Engg. Plant Design	3	1
4.	Ch.E-405	Maintenance Engineering	3	-
5.	Ch.E-409	Plant Design Project	-	2
6.	Ch.E-410	Chemical Engineering Economics	3	0
Total			16	4
G. Total			20	

(8th Semester)

S.No.	Course No.	Course Title	Credit Hrs.	
			Th.	Pr.
1.	Ch.E-404	Engineering Management	3	-
2.	Ch.E-406	Environmental Engineering	3	1
3.	Ch.E-407	Transport Phenomena	3	1
4.	Ch.E-408	Optional	3	0
		1. Gas Engineering		
		2. Biochemical Engineering		
		3. Nuclear Engineering		
		4. Polymer Engineering		
		5. Computer Aided Design		
	6. Process Analysis and Optimization			
5.	Ch.E-409	Plant Design Project	-	2
6.	Ch.E-411	Process Dynamics & Control	3	-
Total			15	4
G. Total			19	

DEPARTMENT OF POLYMER & PROCESS ENGINEERING

Chairman

Dr. Ghulam Mustafa Mamoor
(Looking after)

Professors

Dr. Syed Mughees Asghar
Dr. M. A. Tindyala

Associate Professors

Dr. Shahid Bashir**
Engr. Asif Ali Qaisar*

Assistant Professors

Lecturers

Engr. Tanveer Iqbal*
Engr. Miss. Sheema Riaz*
Engr. Atif Javaid*
Engr. Tariq Bashir*
Engr. M. Shafiq Irfan*
Engr. Yasir Qayyum*
Engr. Rehman Rafiq*
Engr. M. Zafar Iqbal
Engr. Farhan Saeed*
Engr. M. Bilal Manzoor

Engr. M. Naveed Khan
Engr. Salman Shahid
Engr. Aamer Ali
Engr. Miss Nida Qamar
Engr. Shehzad Kamal

** On post-doctorial fellowship

* Abroad for PhD

Introduction

The Department of Polymer and Process Engineering was initiated, in 2002, as a division in the Department of Chemical Engineering with intake of 30 students. As a result of a far-reaching ambition, and keen vision which led to the realization of the increasing important role that polymer and process engineering plays in the world today, the University rightly decided to upgrade the division into an independent degree award in department of Polymer and Process engineering. The department is recent addition to the University and was established on January 2006. It has already gained considerable prestige and standing in the academic and industrial world due to a motivated and outstanding faculty, hard working and dedicated administration and state of the art laboratories costing more than 40 million rupees.

Courses of Study

The department offers the following degree programs
a) Bachelor of Science in Polymer & Process Engineering
b) Master of Science in Polymer & Process Engineering
c) Short Courses of Certificate and Diploma Level

Program Design

The Department of Polymer & Process engineering was designed to build on current activities and to provide a nucleus for the University's rapidly expanding industrially orientated research training and consultancy in polymer science and Engineering. The key role will be to utilize the University's initiative in areas of multi-disciplinary polymer related research. In order to assure that the highest quality education in Polymer and Process engineering is available to undergraduates, and in keeping with the mission of the university, the following core values have been the main focus in the design of courses.

1. Graduates will be able to analyze structure-property relationships in all forms of polymers and composite materials and understand how these properties are affected by manufacturing methods.
2. Graduates will have the necessary foundation in mathematics, the physical sciences, and engineering to pursue advanced degrees in polymers, and related disciplines.

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3. Graduates will acquire through, research projects, and general studies the required skills for problem solving, critical thinking, and communication that will make them successful in their chosen careers.
4. Graduates will have developed the skills necessary to learn throughout their careers.

In addition to the above, the department has recently started short courses in selected areas of polymer and process engineering. In this revolutionary era of technology, it has become obligatory for industries to enhance the professional skills of their employers. Likewise, every individual 'who intends to serve an industry' must be equipped with the basic but sound knowledge of the relevant field. To accomplish these demands of industry, the department's administration decided to start new short courses in following fields.

1. PGD in Plastic Technology
2. PGD in Rubber Technology
3. Certificate in Plastic Technology
4. Certificate in Rubber Technology
5. Professional Development Course on Project Management
6. Professional Development Course on Process Design

Laboratories and other facilities

The Department does not only stress theoretical education in its program but also tries to incorporate research and practical experience. Our research aims to be fundamental and strategic. The Polymer process engineering laboratory forms an academic technical center, dedicated to internationally recognized fundamental research on:

- Polymer processing
- Polymer rheology
- Process analysis and control
- Process analysis and computer modeling

All of which have application and relevance to manufacturing industry. Our goals are to advance scientific and engineering knowledge in

these areas, to disseminate the information, and to transfer this knowledge to industry. Many aspects of our research are interdisciplinary by nature, involving fruitful collaboration with other academic areas across traditional academic boundaries.

Categories of Laboratories

Our laboratories fall into four main categories:

1. Undergraduate Teaching Labs
2. Research Labs
3. Industrial Testing and Product Development Labs
4. Shared Labs

1. Undergraduate Teaching Labs

- i. Polymer Testing Lab
- ii. Polymer Characterization Lab
- iii. Polymer Processing Lab
- iv. Polymer Pilot Plant Lab
- v. Properties Estimation Lab
- vi. Polymer Composite Lab
- vii. Polymer Structure & Synthesis Lab
- viii. Computational and Process Lab
- ix. Polymer Reaction Engineering*
- x. Polymer & Rubber Compounding Lab
- xi. Polymer Process Industries Lab

1. Research Labs.

- i. Polymer Characterization Lab
- ii. Polymer Composite Lab
- iii. Polymer & Rubber Compounding Lab

* Proposed Labs

2. Industrial Testing & Product Development

- i. PVC pipe testing and quality assurance Lab*
- ii. Automobile Parts testing and quality assurance Lab*

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3. Shared Laboratories

- i. Process Heat Transfer Lab.
- ii. Fluid Flow Lab.
- iii. Mass Transfer Lab.
- iv. Instrumentation & Control Lab.
- v. Thermodynamics Lab.
- vi. Environmental Engineering Lab.
- vii. Particle Technology Lab.

These laboratories are most modern and employ state of the art technology to gain insight to the complex process and facilitate precise measurements.

Learning Resource Centre

Department of Polymer & Process engineering has established the Learning resource centre. It is based upon the concept of providing integrated resources at one place.

Learning resource centre has large number of text books, reference materials, handbooks, data books, research journals, design projects, electronic books, animations of complex engineering phenomenon and lectures of eminent professors from reputed universities like MIT.

Centre also provides topic search facilities for research purposes.

Internet Access & Network Facilities

Department of Polymer & Process engineering has fully operative Computer lab with networking and its own data server.

The Management information system (MIS) in the department provides data base for student records, quiz records, attendance records, class lectures, electronic notice board, course progress files and examination results.

Our website is going through continuous improvement.

Every faculty member as well as students has twenty four hours access to our server.

University- Industry Linkage

At the department we believe that universities were always the centres of scholarship. Today, they have to extend their function and fully integrate research, education and innovation, and attract other centres of knowledge into cooperation. Research and thus postgraduate studies, have to be more focused on industrial problems. The department is working relentlessly to establish a meaningful and productive link with prominent polymer related industries. The broad framework of cooperation is as follows:

1. Area of interest at the department:

- Process Equipment Design & Simulation
- Process Optimization.
- Development and complete characterization regarding:
 - a) Thermoplastic & Thermosets Compounding
 - b) Elastomers Masterbatches
 - c) Polymeric Composites
 - d) Reverse Engineering & Identification
 - e) Seminars at various Levels

2. Industry Contribution

- a) Industrial Training & Internships
- b) Enhancement of Laboratory facilities
- c) Scholarships for students
- d) Research projects leading to M.Sc. engineering
- e) Funded Industrial Research

3. Modes of Interactions

- a) Direct Liaison on Specific Project Basis.
- b) Collaboration through HEC-Industry Linkage Program

Collaborating Industries

Department has signed Memorandum of understandings (MOUs) with some of the leading industries. We provide industrial research and testing facilities to these industries. Industries provide practical knowledge to our graduates. Some of the major industries entering

DEPARTMENT OF POLYMER & PROCESS ENGINEERING

into agreement with department include but not limited to:

- Engro Polymer
- Packages (Pvt.) Ltd
- SPELL Group of Industries
- Lucky Plastics
- Fiber craft composites
- Popular Pipes
- Forward Sports

Many linkages are expected in next year.

Strong Internship Program

The productive collaboration with industry has resulted in ample opportunities for internship to our students. Department provided 100 % Internships to our 4th year, 3rd year and 2nd year students in the years 2005, 2006, 2007 and 2008.

Careers in Polymer & Process Engineering

Polymers have numerous possibilities in structural, electrical, mechanical, and medical applications due to their unique physical properties and ability to be tailored through chemistry, cross-linking, and surface modifications. Polymers are the most rapidly growing sector of the materials industry. As polymer production has grown, so has the number of people who work in this field. Today, it's estimated that:

- 50 percent of the chemical engineers and chemists in the world work in the polymer industry

- Polymer engineers need to apply the traditional skills of chemical engineers, such as plant design, process design, thermodynamics, and transport phenomena, to various problems involving the production and use of polymers.
- Many of the engineers currently working in industry trying to solve the problems; have background in either chemical engineering or polymers.

Our graduates find jobs in:

- ✓ Process engineering in polymer-producing chemical companies
- ✓ Petroleum Refineries
- ✓ Fertilizer and Cement industries
- ✓ Process engineering in polymer processing or fabrication
- ✓ Scale-up of new synthetic chemistry from laboratory development to pilot plant and large-scale production
- ✓ Research and product development in polymer synthesis (current hot topics include biodegradable polymers and compatibilizers for recycling polymers).
- ✓ Research and process development in polymer processing

The reception, by industry, to our first batch of graduates has even surprised us. All of graduate batches (2002, 2003, 2003(F),2004) are employed within the span of few months.

Packages (pvt) Limited, Engro Asahi Polymer Karachi, JGC-Descon Engineering (pvt) Limited, Attok Oil Refinery, Pakistan Petroleum, National Refinery, FFC, Fatima Fertilizer and Engro Fertilizers are some of the employers and the demand is growing.

CURRICULUM OF B.SC. POLYMER ENGINEERING

(Semester System)

First Year									
First Semester						Second Semester			
Sr	Course No	Title	Credit Hrs		Sr	Course No	Title	Credit Hrs	
			Th	Pr				Th	Pr
1	PolyE-101	Industrial Stoichiometry-I	4	0	7	PolyE-103	Particle Technology	3	1
2	PolyE-102	Computer & Computation	2	1	8	PolyE-104	Engineering & Polymer Materials	3	0
3	CH-101P	Applied Chemistry-I	3	1	9	PolyE-105	Industrial Stoichiometry-II	3	1
4	MA-103	Applied Mathematics-I	4	0	10	PHY-101	Applied Physics	2	1
5	HU-120	Communication Skills	0	2	11	ME- 105	Mechanical Technology	0	2
6	ME-115	Engineering Drawing	0	2	12	IS/HU-101	i) Islamic and Pakistan Studies-I (Compulsory for Muslim Students) ii) Ethics and Pakistan Studies-I (for non Muslim Students)	3	0
Total			13	6	Total			14	5
Grand Total			19		Grand Total			19	
Second Year									
Third Semester						Fourth Semester			
13	PolyE-201	Introduction to Polymer Science and Engineering	3	1	19	PolyE-205	Physical Properties of Polymers	4	0
14	EE-202	Electricity Technology	2	1	20	PolyE-206	Polymer Structures & Synthesis	2	2
15	PolyE-203	Fluid Flow	3	1	21	PolyE-207	Polymer & Process Industries	3	1
16	PolyE-204	Technical Computing	0	1	22	PolyE-208	Thermodynamics	3	1
17	CH-202P	Applied Chemistry-II	3	1	23	MA-203	Applied Mathematics-II	4	0
18	IS/HU-201	i) Islamic and Pakistan Studies-II (Compulsory for Muslim Students) ii) Ethics and Pakistan Studies-II (for non Muslim Students)	3	0	Total			16	4
Total			14	5	Grand Total			20	
Grand Total			19		Grand Total			20	
Third Year									
Fifth Semester						Sixth Semester			
24	PolyE-301	Mechanical Properties of Polymers	4	0	30	PolyE-306	Polymer Process Simulation	2	2
25	PolyE-302	Fundamentals of Polymer Engineering	3	1	31	PolyE-307	Polymer Thermodynamics	3	0
26	PolyE-303	Process Heat Transfer	3	1	32	PolyE-308	Process Engineering Economics	2	0
27	PolyE-304	Polymer Reaction Engineering	3	1	33	PolyE-309	Mass Transfer	3	1
28	PolyE-305	Process Engineering Mathematics	2	0	34	PolyE-310	Polymer & Rubber Compounding	2	2
29	MA-320	Computer Science and Numerical Analysis	2	1	35	PolyE-311	Transport Phenomena	3	0
Total			17	4	Total			15	5
Grand Total			20		Grand Total			20	
Fourth Year									
Seventh Semester						Eighth Semester			
36	PolyE-401	Advanced Machine & Product Design	3	0	41	PolyE-407	Instrumentation and Control	3	1
37	PolyE-402	Polymer Processing and Rheology	4	0	42	PolyE-408	Petroleum Refining and Petrochemical Engineering Polymer Product Design and Engineering	4	0
38	PolyE-403	Process Plant Design	3	1	43	PolyE-409	Engineering Management and Laws	3	0
39	PolyE-404	Environmental and Safety Engineering	3	1	44	PolyE-410	Optional Polymer Composites Bio-polymers Liquid-crystalline polymers	4	0
40	PolyE-405	Engineering Entrepreneurship	2	1	45	PolyE-411	Plant Design Project	0	4
41	PolyE-406	Polymer Development & Characterization	0	2	Total			14	5
Total			15	5	Grand Total			19	
Grand Total			20		Grand Total			19	

DEPARTMENT OF METALLURGICAL & MATERIALS ENGINEERING

Chairman:

Prof. Dr. Muhammad Ajmal

Professors:

Dr. Javed Iqbal

Dr. Liaqat Ali

Dr. Muhammad Yousaf Anwar

Dr. Akhlaq Ahmed Malik

Dr. Khalid Mahmood Ghauri

Dr. Gul Hameed Awan

Dr. Masood Ahmed Tindyala*

Assistant Professor:

Dr. Fareed Akhtar

Lecturers

Mr. Furqan Ahmed**

Mr. Jawad Ali Shah

Mr. Muhammad Asif Rafiq**

Mr. Abdul Khaliq**

Mr. Amjad Ali

Ms. Sumbal Salim

* Through HEC

**On higher studies abroad

Ever since its institution in 1965, the Department of Metallurgical & Materials Engineering has aimed at providing students with the highest quality of education & training in metallurgy & material science. A well-trained, dedicated faculty together with well-equipped laboratories makes this department one of the most accomplished departments. The total enrollment of students at present is about 250. It is worth mentioning here, that a reasonable number of students & graduates from this department today are females who are working in prestigious organizations & serving the nation.

COURSES OF STUDY

The educational objectives of the Bachelor's Degree program are to produce graduates with a sound understanding of the science & engineering concepts of both metals & modern materials. Keeping this in mind, the curriculum designed for the Metallurgy courses being offered in this program include a range of subjects varying from extractive metallurgy, industrial & physical metallurgy to the science & design of different metals used in engineering applications.

In the Materials Science courses being offered, focus is laid on material properties & processing techniques. Students are taught fundamentals of refinement, selection, processing & design of modern materials including polymers, ceramics & composites.

In order to produce graduates of professional standards for the industry, exposure to an integrated knowledge based on mathematics, chemistry, physics & management is also emphasized. Instructional tours to metallurgical industries, research organizations & educational seminars are also frequently arranged to help students relate their

theoretical knowledge with industrial & international practices.

Students are also engaged in internship programs with different metallurgical organizations every year for practical training. This helps polish their academic concepts & prepares them to handle the practical problems of the industry.

A master's degree program is also being run in this department. The curriculum includes courses on extraction processes, Phase Transformation, Heat Treatment, Characterization Techniques, Metal Working Processes, Solidification Processes, Corrosion & its Prevention, Powder Metallurgy & Materials Science & Industrial Management. It is designed primarily for those graduates in metallurgy who are working in industries or in research organizations & are aiming at further improving their skill & knowledge in the field. Special emphasis is laid on enhancing students' ability to meet the actual challenges faced in industrial organizations.

The department also offers a Ph.D. program in Metallurgical & Materials Engineering. At present a number of researchers are engaged in their Ph.D. research while the research proposals of some other research scholars from other organizations are in progress.

LABS & OTHER FACILITIES:

The departmental academic activity is based on the following disciplines:

- Physical Metallurgy
- Industrial Metallurgy
- Extraction & Process Metallurgy
- Mechanical Metallurgy

DEPARTMENT OF METALLURGICAL & MATERIALS ENGINEERING

The department is equipped with the following labs:

- Materials Science
- Metallography
- Inspection & Testing of Materials
- Melting & Casting
- Welding & Joining of Metals
- Polymer technology
- Corrosion & Protection
- Computer
- Workshop
- Ceramics Lab
- Heat Treatment
- Process Control & Instrumentation

A major breakthrough adding strength to the laboratory facilities is the addition of a Scanning Electron Microscope & an X-ray Diffractometer. In addition, the department has developed an "Advanced Materials Laboratory". This laboratory holds promise in providing superior consultancy services & supporting several research programs. Located in the research centre of the University, this laboratory is equipped with a Vicker's Micro-hardness Testing apparatus, a Spark Emission Spectrometer, Projection Optical Microscope & various other equipments.

For the benefit of the students & faculty members, the department is furnished with a library that holds a collection of over one thousand text books, hand books & reference books. The library not only facilitates students but also encourages them to enhance their knowledge through reading & research. Internet facility is also provided in the library.

CAREERS IN METALLURGICAL & MATERIALS ENGINEERING

Career opportunities in Metallurgical & Materials Engineering both at home & abroad are excellent. Since Metallurgical & Materials Engineering involves working with various engineering materials-their extraction, processing, design, manufacture, properties & applications, the field is immensely broad, & materials engineers can find job opportunities in industries like nuclear, chemical, electrical & microelectronics, construction, defense as well as steel plants & foundries. Hence they can easily choose to make a career in fields

including iron & steel, non-ferrous alloys, polymeric materials, ceramics, composites, electronic & magnetic materials, corrosion & its prevention.

Recent graduates of our program are working as engineers in various parts of the country & abroad in the following areas:

- Design & Manufacturing in automobile industries
- Failure analysis
- Steel production
- Foundries
- Materials testing & inspection
- Defence organizations including KRL, NDC, PMO, PAEC, PINSTECH, HMC, HIT, POF WAH, PAF, etc.
- Aerospace industry
- Quality Control at PCSIR & PSQCA
- Semiconductor (computer chip) processing in computer hardware industries
- Surgical equipment & instruments manufacturing
- Ceramics & Composites Manufacturing
- Polymer industry
- Marketing business & management

RESEARCH & ADVISORY SERVICES

The faculty members are actively engaged in research & regularly present their papers in national & international conferences. Seminars & symposia on metallurgical issues are held regularly. The faculty members maintain interaction with the industries which avail their advisory services in inspection & testing, alloy development, melting & casting, heat treatment, metallographic studies & extraction of ferrous, non-ferrous metals & corrosion protection.

LIASION WITH INDUSTRY

The department is engaged in providing technical advice, testing services & consultancy to the various major industries in the country including:

• Sui-Northern Gas Pipelines	• Millat Tractors
• Steel making units in Lahore	• Pipe manufacturing Industry
• Vendors of Defense industry	• Swings & Rides industry
• Vendors of auto-industry	•

UNDERGRADUATE COURSES FOR METALLURGICAL & MATERIALS ENGINEERING

First Semester				
Sr	Course No	Title	Credit Hrs	
			Th	Pr
1	EE 101	Applied Electricity	3	1
2	ME 115	Engineering Drawing	-	3
3	Met E 101	Basic Metallurgy	3	1
4	Min E 103	Geology & Mineral Dressing	3	1
5	IS/Hu 101	Islamic & Pak Studies	3	-
Total			12	6
Grand Total			18	
Third Semester				
11	Met E301	Casting & Working of Metals	3	1
12	Met E302	Physical Metallurgy-I	3	1
13	Met E303	Fuels & Furnaces	3	1
14	Met E304	Ceramic Materials	3	1
15	Met E305	Metallurgical Thermodynamics	3	-
Total			15	4
Grand Total			19	
Fifth Semester				
22	Met E 501	Inspection and Testing	3	1
23	Met E 502	Powder Metallurgy	3	
24	Met E 503	Electrical & Magnetic Materials	3	1
25	Met E 504	Ferrous Production Metallurgy-II	3	
26	Met E 505	Computer Applications in Materials Engineering	-	2
27	Math 506	Engineering Mathematics-II	3	
Total			15	4
Grand Total			19	
Seventh Semester				
33	Met E701	Foundry Engineering	3	1
34	Met E702	Physical Metallurgy-II	3	1
35	Met E703	Nuclear Metallurgy	3	
36	Met E704	Mechanical Metallurgy	3	1
37	Met E705	Surface Engineering	3	
38	(Proj.)	Projects		1
Total			15	4
Grand Total			19	

Second Semester				
Sr	Course No	Title	Credit Hrs	
			Th	Pr
6	Phy 201	Applied Physics	3	1
7	Ch 203	Applied Chemistry	3	1
8	Math 201	Engineering Mathematics-I	4	-
9	Met E 201	Mechanics of Materials	3	1
10	WS 205	Workshop Practice	-	2
Total			13	5
Grand Total			18	
Fourth Semester				
16	Met E 401	Ferrous Production Metallurgy-I	3	-
17	Met E 402	Non-Ferrous Extraction Metallurgy	3	1
18	Met E 403	Polymeric Materials	3	1
19	IS/Hu 401	Islamic & Pak Studies	3	-
20	CS 401	Computer Science & Numerical Analysis	3	1
21	Hum 401	Communication Skills	-	1
Total			15	4
Grand Total			19	
Sixth Semester				
28	Met E601	Process Control & Instrumentation	3	1
29	Met E602	Heat Treatment of Metals	3	1
30	Met E603	Welding Engineering	3	1
31	Met E604	Plastic Deformation of Materials	3	
32	Met E605	Industrial Management & Quality Control	3	1
Total			15	4
Grand Total			19	
Eighth Semester				
39	Met E801	Advance Ceramics	3	
40	Met E802	Composites	3	
41	Met E803	Corrosion & Corrosion Control	3	1
42	Met E804	Structural Metallurgy	3	
43	Met E805	Fracture & Failure Analysis	3	
44	(Proj.)	Projects		3
Total			15	4
Grand Total			19	

DEPARTMENT OF MINING ENGINEERING

Chairman

Prof. Dr. Muhammad Akram

Professor

Prof. Dr. Syed Muhammad Tariq

Assistant Professors

Dr. Yaqub

Mr. Muhammad Mansoor Iqbal

Mr. Shahab Saqib

Mr. Muhammad Azeem Raza*

Lecturers

Mr. Zeshan Hyder*

Mr. Yasir Majeed

Mr. Zulfiqar Ali*

Mr. Syed Alley Hassan

Mr. Saqib Ahmad Saki

* On higher studies abroad

The department was established in 1954 and has the distinction of being the first in the country to offer a formal degree course in Mining Engineering. Since its inception the Department of Mining Engineering has produced highly skilled engineers who have contributed towards the economy of the country.

Courses of Study

It offers the following courses of study:

- Bachelor's degree in Mining Engineering
- Master's degree in Mining Engineering
- Ph.D. degree in Mining Engineering

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

A degree in Mining Engineering offers attractive careers both in private and public sectors. The private sector jobs are mostly in coal mining and cement industry.

The government sector, where the mining engineers are employed, includes the Directorate of Mines and Minerals, the Inspectorate of Mines, Pakistan Mineral Development Corporation (PMDC), Punjab Mineral Development

Corporation (PUNJMIN), Pakistan Atomic Energy Commission, NDC, etc.

Laboratory & Other Facilities

The department has the following major laboratories

- Mineral Dressing
- Mine Surveying
- Rock Mechanics
- Mine Ventilation
- Mineralogy & Petrology
- Structural Geology
- Mine Rescue & Safety
- Drilling & Blasting

Other facilities include a good departmental library, a computer centre, atomic absorption spectrophotometer and XRF for chemical analysis, a modern Total Survey Station and a 200-ton Universal Testing Machine.

CURRICULUM OF B.Sc. MINING ENGINEERING PROGRAM

(Semester System)

1st Semester

Course No.	Course Title	Contact Hours	
		Th	Pr
MA-101	Applied Mathematics-I	3	0
EE-101	Applied Electricity	3	1
CH-102	Applied Chemistry	3	1
MINE-110	Applied Geology	3	1
ME-115	Engineering Drawing	1	2
Total		13	5
Grand Total		13 + 5 = 18	

3rd Semester

Course No.	Course Title	Contact Hours	
		Th	Pr
MA-201	Applied Mathematics-III	3	0
MINE-210	Ground Water Aspects in Mining	3	1
MINE-220	Engineering Economy	3	0
HU-220	Communication Skills	0	1
ME-220	Applied Thermodynamics	3	1
CE-240	Fluid Mechanics-I	3	1
Total		15	4
Grand Total		15+4=19	

5th Semester

Course No.	Course Title	Contact Hours	
		Th	Pr
MINE-310	Mineral Exploration	3	1
MINE-320	Material Handling & Power Systems	3	1
MINE-330	Ventilation Engineering	3	1
MINE-335	Engineering Management	3	0
METE-360	Basic Metallurgy	3	1
Total		15	4
Grand Total		15+4=19	

7th Semester

Course No.	Course Title	Contact Hours	
		Th	Pr
MINE-410	Finite Element Analysis	3	1
MINE-415	Strata Control	3	1
MINE-430	Excavation Engineering	3	1
MINE-440	Surface Hard Rock Mine Design	3	1
MINE-450	Environmental Controls in Mining	2	0
MINE-490	Projects	0	0
Total		14	4
Grand Total		14+4=18	

2nd Semester

Course No.	Course Title	Contact Hours	
		Th	Pr
PHY-101	Applied Physics	3	1
MA-102	Applied Mathematics-II	3	1
MINE-130	Introduction to Mining Engineering	3	1
MINE-140	Stratigraphy & Structural Geology	3	0
IS/HU-101	Islamic Studies & Pak Studies- I (Compulsory for Muslim Students)--Ethics & Pak Studies (Compulsory for non-Muslim Students)	3	1
Total		15	4
Grand Total		15+4=19	

4th Semester

Course No.	Course Title	Contact Hours	
		Th	Pr
CS-220	Computer Science & Numerical Analysis	3	1
MINE-230	Statistics	3	0
MINE-240	Surveying	3	2
ME-240	Mechanics of Materials	3	1
IS/HU-201	Islamic Studies & Pak Studies- I (Compulsory for Muslim Students)-Ethics & Pak Studies (Compulsory for non-Muslim Students)	3	0
Total		15	4
Grand Total		15+4=19	

6th Semester

Course No.	Course Title	Contact Hours	
		Th	Pr
MINE-350	Coal Mining	3	0
MINE-360	Rock Mechanics	3	1
MINE-370	Underground Hard Rock Mine Design	3	1
MINE-380	Explosives Engineering	3	1
MINE-390	Mineral Processing	3	1
Total		15	4
Grand Total		15+4=19	

8th Semester

Course No.	Course Title	Contact Hours	
		Th	Pr
GEOE-450	Drilling Engineering	3	1
MINE-460	Operations Research	3	0
MINE-470	Mining Law	2	0
MINE-480	Mine Safety & Rescue	3	1
MINE-485	Computer Application in Mining	2	1
MINE-490	Projects	0	4
Total		13	7
Grand Total		13+7=20	

* Course Tutorial

DEPARTMENT OF GEOLOGICAL ENGINEERING

Chairman

Prof. Dr. Syed Tahir Ali Gillani

Professor

Dr. Farooq Ahmad Khan Kirmani

Dr. Nazir Ahmad Butt

Mr. Ali Ahmad Khokher

Dr. Naseem Aadil (FFHP) **

Associate Professor

Dr. Mohammad Saleem Khan

Assistant Professor

Engr. Zubair Abu Bakar*

Lecturers / Lab Engineers

Mr. Shahid Ur Rehman*

Engr. Khurram Shahzad

Engr. Mrs. Sadia Ismail

Mr. Abid Ali*

Engr. Muhammad Farooq Ahmed

Engr. Muhammad Arshad

Engr. Nayyar Islam

Engr. Miss Huma Irfan

Engr. Sheikh Ahmad Ali

Engr. Muhammad Zaka Emad

Engr. Miss Arusha Butt

Engr. Ehtesham Mahmood

* Abroad on higher study leave

** Foreign Faculty Hiring Programme under Higher Education Commission, Islamabad

Geological Engineering degree programme was introduced in University of Engineering and Technology Lahore first time in Pakistan in collaboration with the Mining Engineering Department in 2001. In view of the national demand and popularity of the degree programme, an independent Department of Geological Engineering has been established since January 2006 in its own new building.

A bachelor degree in Geological Engineering is the basis of careers concentrating on the interaction of humans & the earth. Geological Engineers deal with a wide variety of the resource and geotechnical problems that come with accommodating more and more people on a finite planet. Foundations for surface structures such as dams, buildings, roads, under-ground structures i.e. tunnels, shafts and caverns must be properly evaluated, stabilized & monitored. Groundwater and water supplies not only properly located but also developed and contaminated sites are characterized before cleanup. New energy resources must be located and developed in an environmentally sound manner. Geological Engineers are the professionals trained to meet these challenges.

Courses of Study

The curriculum of Geological Engineering programme has been designed keeping in view the local needs and international trends. In the first two years the essential concepts of basic sciences and

engineering are taught to give students the required breadth. The last two years of the programme are designed to give the students the necessary skills in the following three main areas.

- **Rock Engineering and Geo-mechanics** (Engineering Geology, Rocks Mechanics, Geotechnical Engineering, Excavation Engineering, Slope Stability, Earthquake Seismology and Risk Assessment)
- **Ground Water & Environmental Science** (Groundwater System, Environmental Geology, Hydrogeology Geological Aspects of Hazardous Waste Management)
- **Exploration of Natural Resources** (Geological Exploration, Petroleum Geology, Well Logging, Drilling Engineering, Seismic Data Processing & Interpretation.)

Field/Practical Training

The students of Geological Engineers get field and practical training during different stages of the course. Survey and field geology camp are compulsory components of this new discipline. It is worth mentioning that first two batches of this new discipline are already contributing with their knowledge and skills in both private and public sectors.

Liaison with Industry

The department has established continuing links with

DEPARTMENT OF GEOLOGICAL ENGINEERING

Geotechnical and Petroleum industries. As a result, many national

and multinational organizations are providing internships for practical training.

Laboratories

- Engineering Geology
- Rock Mechanics
- Soil Mechanics
- Hydrogeology Lab
- Environmental Geology
- Geophysics
- Mineralogy and Petrology

- Structural Geology
- Computer

Key Research Areas

- Characterization of water quality.
- Mechanical Excavation and Non-explosive rock fragmentation.
- Acid Mine Drainage of Coal Mining areas.
- Water flooding protection in underground mining.
- Geotechnical Instrumentation.
- Clay Mineralogy.

COURSE CONTENTS FOR GEOLOGICAL ENGINEERING

1st Semester

REF. NO.	SUBJECT	CREDIT HOURS	
		Th.	Pr.
MA-101	Applied Mathematics-I	3	0
CH-102	Applied Chemistry	3	1
EE-101	Applied Electricity	3	1
ME-115	Engineering Drawing	1	2
MIN-E-110	Applied Geology	3	1
Total		13	5
Grand Total		18	

3rd Semester

REF. NO.	SUBJECT	CREDIT HOURS	
		Th.	Pr.
MA-201	Applied Mathematics-III	3	0
GEO-E-210	Mineralogy & Petrology	3	1
CE-240	Fluid Mechanics-I	3	1
MIN-E-220	Engineering Economy	3	0
HU-220	Communication Skills	0	1
ME-220	Applied Thermodynamics	3	1
Total		15	4
Grand Total		19	

5th Semester

REF. NO.	SUBJECT	CREDIT HOURS	
		Th.	Pr.
GEO-E-310	Engineering Geology	3	1
GEO-E-320	Geophysical Exploration	3	1
GEO-E-330	Geotechnical Engineering I	3	1
GEO-E-340	Hydrogeology	3	1
MIN-E-335	Engineering Management	3	0
Total		15	4
Grand Total		19	

7th Semester

REF. NO.	SUBJECT	CREDIT HOURS	
		Th.	Pr.
GEO-E-410	Pavement & Foundation Engineering	3	1
MIN-E-430	Excavation Engineering	3	1
GEO-E-420	Well Logging	3	1
GEO-E-430	Environmental Geology	3	1
GEO-E-470	Field Surveying	0	2
Total		12	6
Grand Total		18	

*indicates course tutorial

2nd Semester

REF. NO.	SUBJECT	CREDIT HOURS	
		Th.	Pr.
MA-102	Applied Mathematics-II	3	1
PHY-101	Applied Physics	3	1
MIN-E-140	Stratigraphy & Structural Geology	3	1
GEO-E-110	Introduction to Geo-Engineering	3	1
IS/HU-101	Islamic Studies & Pak Studies- I (Compulsory for Muslim Students)--Ethics & Pak Studies (Compulsory for non-Muslim Students)	3	0
Total		15	4
Grand Total		19	

4th Semester

REF. NO.	SUBJECT	CREDIT HOURS	
		Th.	Pr.
CS-220	Computer Science & Numerical Analysis	3	1
ME-240	Mechanics of Materials	3	1
MIN-E-230	Statistics	3	0
MIN-E-240	Surveying	3	2
IS/HU-201	Islamic Studies & Pak Studies- I (Compulsory for Muslim Students)--Ethics & Pak Studies (Compulsory for non-Muslim Students)	3	0
Total		15	4
Grand Total		19	

6th Semester

REF. NO.	SUBJECT	CREDIT HOURS	
		Th.	Pr.
GEO-E-350	Petroleum Geology	3	1
MIN-E-360	Rock Mechanics	3	1
GEO-E-360	Earthquake Seismology & Risk Assessment	3	1
MIN-E-380	Explosives Engineering	3	1
GEO-E-370	Geotechnical Engineering II	3	1
Total		15	5
Grand Total		20	

8th Semester

REF. NO.	SUBJECT	CREDIT HOURS	
		Th.	Pr.
GEO-E-440	Geological Aspects of Hazardous Waste Management	3	1
MIN-E-460	Operations Research	3	0
GEO-E-450	Drilling Engineering	3	1
GEO-E-460	Seismic Data Processing & Interpretation	4	1
GEO-E-470	Projects	0	3
Total		13	6
Grand Total		19	

DEPARTMENT OF PETROLEUM & GAS ENGINEERING

Chairman

Prof. Dr. Obed-ur-Rahman Paracha
(Looking after)

Professors

Engr. Ahmed Saeed Khan**
Engr. Syed Muhammad Mahmood

* On study leave

** Visiting faculty

The Department of Petroleum and Gas Engineering has the distinction of being the pioneer in the country to offer degree program in Petroleum Engineering. It was first instituted in 1969 as a division of Mining Engineering Department. Realizing the importance of the discipline and the department by the national petroleum sector, a full-fledge department of Petroleum and Gas Engineering was established in 1975. The department is also a member of institute of Mining, Metallurgy and Mechanical Engineers (AIME), USA.

The department has been the major contributor towards endowing and establishing the profession of Petroleum and Gas Engineering in Pakistan. The department has always maintained a leading role in petroleum engineering education. Few years back department has also started the post – graduate study program. This department is on one of the top positions of the merit list of the University of Engineering and Technology, Lahore. Future plans include induction of world renowned research scholars to start Ph.D. program, and to establish a strong base for research and development to face the modern day technological challenges indigenously.

1. Degrees Offered

List of Undergraduate Degrees:

B. Sc. in Petroleum & Gas Engineering

List of Graduate Degrees:

1. M. Sc. in Petroleum & Gas Engineering
2. Ph. D. in Petroleum & Gas Engineering

The curriculum includes the courses in Production Engineering, artificial

Associate Professors

Engr. Murawwat Ali
Engr. Javaid Afzal

Assistant Professors

Engr. Amanat Ali Bhatti
Engr. Azam Khan
Engr. Muhammad Khurram Zahoor*

Lecturers

Engr. Furqan Hussain*
Engr. Muhammad Rehan Hashmat
Engr. Ali Raza Kazmi
Engr. Ali Suleman
Engr. Muhammad Fahad
Engr. Sultan Sikandar Khan

lift methods, reservoir studies, fluid properties, enhanced oil recovery techniques, well testing, well logging, natural gas transmission, and distribution, rock properties, corrosion control in petroleum industry, petroleum economics, storage problems and many other related subjects. In addition o these strong supports of basic sciences courses at different levels are also offered. Actual field data and related problems are included in the courses to develop field oriented approach to the students. The spread of the course contents is broad enough to groom the graduates for any major area of the petroleum and gas engineering profession. Students are provided opportunities to visit oil and gas fields, transmission and storage stations, and refineries, to familiarize them with the tasks and operations they have to undertake in their professional career.

Laboratories & other Facilites

The department has the following well equipped laboratores which meet the academic needs of the students and teachers.

Reservoir Fluid Properties Laboratory

Petrophysics Laboratory

Drilling Engineering Laboratory

Reservoir Simulation Laboratory

Gas Engineering Laboratory

The department has the facility of well equipped labs and a well stocked library. The library is stuffed with over 2500 volumes of books (The recently introduced features include Japanese aid through JICA program of Rs. 20 million for lab equipment that resulted in upgraded laboratories). Apart from merit scholarships, the department is offered with numerous scholarships from

DEPARTMENT OF PETROLEUM & GAS ENGINEERING

the Local Industry, District Government and Zakat Fund. Majority of students get support from these scholarships.

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

Besides other disciplines at the University of Engineering and Technology, Lahore, Department of Petroleum and Gas Engineering has the smart intake of 40 – 50 students every year. This intake volume has been optimized keeping in view the supply and demand balance for the industry. Hence the job recruitment rate of its graduates is 100 %.The graduates of this Department are offered well paid positions in operator as well as service companies of petroleum sector including national and expatriate companies. Doors of jobs are open for the graduates of this department worldwide as well. A large number of graduates from this department are serving worldwide including Middle East, Europe, North America, Africa, etc.

Liaison with the Industry

Key to the modern day success in any profession rests with the integrated working environment between different components of that profession. In this regard it is very important that institution must have a live coordination with relevant industry so is true for the Department of Petroleum and Gas Engineering (Besides the fact that petroleum industry of Pakistan is based in Karachi and Islamabad, the Department of Petroleum and Gas Engineering has successfully managed to establish such coordination).

Summer internships are also available to all the students of this Department once during their degree program. Internship program is supported by the local industry including national as well as expatriate companies.

Oil and Gas Development Training Institute, Islamabad, which is the only institute of its kind in the country, has entered into a contract with the department for a special program. According to this program, students of this department after the completion of their degree program will go through a six months mandatory training. It will provide them with the opportunity to have on job training and earn regular jobs with the industry.

OUTLINE OF COURSES FOR THE B.Sc. DEGREE IN PETROLEUM & GAS ENGINEERING FOR THE ENTRY-2006 AND ONWARDS

First Semester				
Sr.	Course No	Title	Credit Hrs	
			Th	Pr
1	Pet-E-101	Elements of Petroleum Engineering	3	1
2	E.E-101	Applied Electricity	3	1
3	Min.E-103	Applied Geology	3	1
4	Chem-101	Applied Chemistry	3	1
5	M.E-111	Engineering Drawing & Graphics	1	2
TOTAL			13	06
GRAND TOTAL			19	

Third Semester				
Sr.	Course No	Title	Credit Hrs	
			Th	Pr
12	Pet-E-202	Petrophysics	3	1
13	Pet-E-205	Petroleum Geology & Exploration	3	1
14	MA-107	Applied Mathematics-II	4	0
15	C.E-210	Strength of Materials	3	1
16	IS/HU-201	Islamic/Pakistan Studies-II	3	0
TOTAL			16	03
GRAND TOTAL			19	

Fifth Semester				
Sr.	Course No	Title	Credit Hrs	
			Th	Pr
22	Pet-E-306	Drilling Engineering-II	3	1
23	Pet-E-307	Well Logging	3	1
24	Pet-E-308	Reservoir Engineering-I	3	1
25	CS-301	Applied Numerical Methods	3	1
26	MA-330	Applied Statistics	3	0
TOTAL			15	04
GRAND TOTAL			19	

Seventh Semester				
Sr.	Course No	Title	Credit Hrs	
			Th	Pr
32	Pet-E-411	Corrosion Principles & Control in Petroleum Industry	3	1
33	Pet-E-413	Petroleum Economics	3	0
34	Pet-E-417	Principles of Enhanced Oil Recovery	3	1
35	Pet-E-418	Well Testing	3	1
36	Ch.E-431	Environment & Safety	3	1
37	Pet-E-419	Project	0	0
TOTAL			15	04
GRAND TOTAL			19	

Second Semester				
Sr.	Course No	Title	Credit Hrs	
			Th	Pr
6	MA-107	Applied Mathematics-I	4	0
7	Phy-103	Applied Physics	3	1
8	Min.E-115	Stratigraphy & Structural Geology	3	1
9	WS-105	Workshop Practices	0	2
10	IS/HU-101	Islamic/Pakistan Studies-I	3	0
11	HU-120	Communication Skills	0	2
TOTAL			13	06
GRAND TOTAL			19	

Fourth Semester				
Sr.	Course No	Title	Credit Hrs	
			Th	Pr
17	Pet.E-203	Reservoir Fluids	3	1
18	Pet.E-204	Drilling Engineering-I	3	1
19	Ch.E-221	Applied Thermodynamics	3	1
20	C.E-240	Fluid Mechanics	3	1
21	CS-201	Computer Programming & Application Software	3	1
TOTAL			15	05
GRAND TOTAL			20	

Sixth Semester				
Sr.	Course No	Title	Credit Hrs	
			Th	Pr
27	Pet.E-309	Production Engineering-I	3	1
28	Pet.E-310	Natural Gas Engineering	3	1
29	MA-307	Applied Mathematics-III	3	0
30	Ch.E-315	Instrumentation & Control	3	1
31	Ch.E-330	Chemical Technology of Petroleum	3	1
TOTAL			15	04
GRAND TOTAL			19	

Eighth Semester				
Sr.	Course No	Title	Credit Hrs	
			Th	Pr
38	Pet.E-412	Reservoir Engineering-II	3	1
39	Pet.E-414	Principles of Reservoir Simulation	3	1
40	Pet.E-415	Gas Reservoir Engineering	3	1
41	Pet.E-416	Production Engineering-II	3	1
42	Pet.E-419	Project	0	3
TOTAL			12	07
GRAND TOTAL			19	

**Faculty of
ARCITETURE & PLANNING**

**Dean of Faculty
Prof. Dr. Shaih ul Hassan Zaidi**

**Faculty Includes
School of Architecture & Design
Department of City and Regional Planning**

SCHOOL OF ARCHITECTURE AND DESIGN (SOAAD)

Director, School of Architecture and Design

Prof. Dr. Abdul Rehman

The UET School of Architecture and Design (SoAAD) is an academic entity of the UET, recently set up under the patronage of the Chancellor, Governor of Punjab, Lt. Gen. (Retd). Khalid Maqbool. The school has been given the mandate for offering the full arrays of creative disciplines that help delineate our built environment. Presently under the School there are two degree awarding departments:

- (a) Department of Architecture
- (b) Department of Design

The academic disciplines include Bachelor programs in:

- i. Architecture (B. ARCH)
- ii. Product and Industrial design (B. PID)

The School also intends to introduce various Specializations and academic programmes in the following fields of study:

- i. Housing and Urban Design
- ii. Landscape Architecture
- iii. Interior Design

- iv. Building Conservation
- v. Urban Revitalization
- vi. Building Construction Management and
- vii. Architectural Studies

OBJECTIVES AND ACADEMIC SYSTEM

SoAAD strongly believes that the purpose of university education, above and beyond professional training, is to produce enlightened and progressive members of society. It is for these purposes that opening up of intellectual horizons and development of a balanced personality are primary objectives of SoAAD learning environment. SoAAD attempts to achieve these objectives through a winding of knowledgebase in the formal curriculum, and exposure to a social and intellectual environment developed and maintained through informal and co-curricular activities.

A comprehensive introduction of two departments of the School now follows:

DEPARTMENT OF ARCHITECTURE

Chairman

Prof. Dr. Muhammad Yusuf Awan

Professors:

Dr. Abdul Rehman

Dr. Siddiq-a-Akbar

Dr. Neelum Naz

Associate Professors

Mr. M. Naeem Mir

Mr. Muhammad Arshad

Assistant Professors

Mr. Shahid Jamal

Lecturers

Ms. Shama Anbrine

Ms. Munazza Akhtar

Ms. Maryam Fayyaz

Mr. Muhammad Saad Khan

Mr. Jawaad Ahmed Tahir

Ms. Amna Rafi Ch.

Ms. Nadia Naveed

The SoAAD Department of Architecture has a history approaching half a century. Established in 1962, it has the distinction of offering the first-degree program of Architecture in the Country. Thus, the Department has been a fundamental contributor towards the founding and establishment of the profession of Architecture in Pakistan. By now it has a large body of alumni, and through them, it has the honor and credit of shaping a significant part of the current built environment in urban Pakistan.

Over the decades, the Department has developed unmatched expertise in various facets of the profession of Architecture. At present, in terms of qualifications, as well as width and breadth of relevant knowledge base, its faculty far surpasses any other school/department of architecture in the country. The Department,

thus has not only maintained its leading role in architectural education, it is set to expand its frontiers even further through its flowering in the form of School of Architecture and Design (SoAAD).

The working environment within the Department is pleasant and intimate. The students spend a significant part of their working in Design Studios which, coupled with low student intake, ensures high degree of interaction between students, and between students and staff. More than Forty years old tradition of co-education within the Department, and a high proportion of female teaching staff ensures healthy gender relationships. At present, the gender balance within the Department is strongly tilted towards female students (about 70 to 80%).

BACHELOR DEGREE PROGRAMS IN ARCHITECTURE (B. ARCH)

At present the Department runs a 5-year program of studies leading to a professional degree in Architecture (B.Arch.). Graduates of this program will have fulfilled all licensing requirements of Pakistan Council of Architects and Town Planners (PCATP), and shall be able to practice Architecture anywhere in Pakistan. Students registered for this program will also have the option to gain specialization as indicated above.

The program of study is highly demanding and only those students are recommended to apply who are willing to work long hours.

Furthermore, a significant component of studies involve fieldwork, where students are required to visit construction sites, conduct field surveys, and join out of station study tours. B.Arch. degree requirements also include 16 weeks of internship in a professional establishment, which would typically take place during summer vacations.

OUTLINE OF COURSES OF READING FOR

Bachelor in Architecture Under Semester System Session 2006 onwards

First Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
Arch:101	Basic Design – I	-	4.5
Arch:102	Materials and Construction – I	2	1
Arch:103	History of Civilization – I	2	0.5
Arch:104	Graphics and Model Making – I	-	2
Arch:106	Surveying and Levelling	1	2
Arch:108	Computer Applications in Architecture– I	-	2
Total:		5	12
Grand Total:		17	

Third Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
Arch:201	Architectural Design – I	-	4.5
Arch:202	Materials and Construction – II	2	0.5
Arch:203	History of Civilization – III	2	0.5
Arch:204	Graphics and Model Making – III	-	2
Arch:215	Physical Environmental Studies – II	2	0.5
Arch:207	Structural Systems – II	2	-
HU:220	Communication Skills	-	2
Total:		8	10
Grand Total:		18	

Fifth Semester

Code	Subject	Credit Hours	
		Theory	Practical
Arch:301	Architectural Design–III	-	7
Arch:302	Materials & Construction–IV	2	1
Arch:303	Research Methodology	2	0.5
Arch:304	Architectural Psychology	2	0.5
Arch:308	Computer Application in Architecture –III	-	2
Total:		6	11
Grand Total:		17	

Seventh Semester

Code	Subject	Credit Hours	
		Theory	Practical
Arch:401	Architectural Design–V	-	8
Arch:402	Architectural History, Theory and Criticism	2	1
Arch:405	Landscape and Environment	2	1
Arch:406	Introduction to Interior Design	2	1
Total:		6	11
Grand Total:		17	

Second Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
Arch:111	Basic Design – II	-	4.5
Arch:113	History of Civilization – II	2	0.5
Arch:114	Graphics and Model Making – II	-	2.5
Arch:115	Physical Environmental Studies – I	2	1
Arch:117	Structural System – I	2	1.5
HU/IS:101	Islamic and Pakistan Studies	3	-
Total:		9	10
Grand Total:		19	

Fourth Semester

Ref. No.	Subject	Credit Hours	
		Theory	Practical
Arch:211	Architectural Design – II	-	5
Arch:213	History of Civilization – IV	2	0.5
Arch:214	Presentation Skills	-	2.5
HU/IS:202	Islamic and Pakistan Studies	3	-
Arch:216	Materials, Construction & Services	2	1
Arch:218	Computer Applications in Architecture – II	-	2
Total:		7	11
Grand Total:		18	

Sixth Semester

Code	Subject	Credit Hours	
		Theory	Practical
Arch:311	Architectural Design–IV	-	7.5
Arch:315	Physical Environmental Studies–III	2	1
Arch:316	Theory of Architecture	2	1
Arch:317	Urban Design–I	2	1.5
Total:		6	11
Grand Total:		17	

Eighth Semester

Code	Subject	Credit Hours	
		Theory	Practical
Arch:411	Architectural Design–VI	-	8
Arch:413	Optional I: Landscape Architecture, Interior Design	2	1.5
Arch:505	Electives–I	2	0.5
Arch:417	Urban Design–II	2	1
Total:		6	11
Grand Total:		17	

OUTLINE OF COURSES OF READING FOR

Ninth Semester

Code	Subject	Credit Hours	
		Theory	Practical
Arch:501	Optional II: Landscape Architecture Studio/ Interior Design Studio / Architectural Design-VII	1	4.5
Arch:502	Thesis Design – I	-	7.5
Arch:504	Professional Practice	2	1
Total:		3	13
Grand Total:		16	

Tenth Semester

Code	Subject	Credit Hours	
		Theory	Practical
Arch:512	Thesis Design – II	-	11
Arch:513	Project Management	2	0.5
Arch:516	Electives-II	2	0.5
Total:		4	12
Grand Total:		16	

NOTE: 1* will be one counseling hour for students approaching final year. In this the concerned teachers would guide the students towards the options of sub specializations with in B. Architecture.

POSTGRADUATE PROGRAMS IN ARCHITECTURE

The postgraduate program in architecture was instituted in 1990. By now, it has matured and includes M. Arch, M. Phil and Ph.D. programs. The M. Arch is primarily a taught course though its research content is also significant; both one-year full time and two-year part time variants are offered. The M. Arch program is primarily geared towards professionals who wish to broaden their professional perspectives.

The two-year M. Phil, and Ph.D. programs are by research only. These are essentially intended for academics or mature architects who have developed an interest in some particular aspect of the built environment that they wish to explore in some depth.

Further details are provided in the Postgraduate Prospectus of the university.

DEPARTMENT OF DESIGN

Chairman

Prof. Dr. Arif Qayyum Butt

Assistant Professor

Mr. Sohail Wali Khan*

Mr. Farhan Faisal Sheikh**

Ms. Mohsina Karamat**

Professors

Prof. Dr. Shaukat Mahmood*

Prof. Ikram Ali Shah Gelani*

Lecturers

Ms. Naghmy Shireeen

Ms. Asma Khalid

Ms. Fariha Saeed

* Visiting Faculty

** On Contract

The School of Architecture and Design has established a new Department of Design from the year 2006 and started a degree program in the field of Product and Industrial Design. The new department and its Bachelor Program in Product and Industrial Design will support the innovative and creative environment of the school. This program combines design, technology and business. These dimensions further expand and also encompass culture, contemporary aesthetics, research development processes, engineering and ergonomics.

BACHELOR'S PROGRAM IN PRODUCT AND INDUSTRIAL DESIGN

WHAT IS PRODUCT AND INDUSTRIAL DESIGN?

- Product and Industrial Design involves the research and design of the whole range of consumer and capital products. These are as diverse as telephones and transportation, kitchen appliances exhibition systems. Ideally, the industrial designer works as part of a multidisciplinary team involving engineering, production and, marketing.

- Product design deals with the idea generation, concept development, testing and manufacturing or implementation of a physical object or service.
- Industrial design is an applied art whereby the aesthetics and usability of products may be improved. Design aspects specified by the designer may include the overall shape of the object, the location of details with respect to one another, color, texture, sounds and aspects concerning the use of the product ergonomics. Often, through the application of design, a product's appeal to the consumer is greatly improved.

- Role of Product and Industrial Designer is to create and execute design solutions towards problems of engineering, usability, marketing, brand development and sales. It emphasizes on the professional service of creating and developing concepts and specifications that optimize the function, value and appearance of products and systems for the mutual benefit of both user and manufacturer.
- Product and Industrial Designers conceptualize and evaluate ideas, making them tangible through products in a more systematic approach. The role of a product designer

DEPARTMENT OF DESIGN

- encompasses many characteristics of the marketing manager, product manager, industrial designer and design engineer.
- Product and Industrial Designers are equipped with the skills needed to bring products from conception to market. They should have the ability to manage design projects, and subcontract areas to other sectors of the design industry. Product designers are strategic assets to companies that need to maintain a competitive edge in innovation.
- Broadly speaking, the role of the product and industrial designer combines art, science and technology to create tangible three-dimensional goods.

WHO IS LIKELY TO CHOOSE PRODUCT AND INDUSTRIAL DESIGN?

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

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

WHAT IS BACHELOR OF PRODUCT AND INDUSTRIAL DESIGN PROGRAM?

- The Bachelor of Product and Industrial Design (B. PID) degree is an innovative four years full-time undergraduate program of study. The Bachelor of Product and Industrial Design degree may be awarded with honors based upon the quality of performance in the program and current Faculty regulations.
- The Bachelor of Product Design provides you with the skills for a career as a professional product designer. It brings together the creative 3D design culture of design, advanced technologies of engineering and the entrepreneurial spirit of business. The program is designed to appeal to the aspirations of the new generation of young multi-skilled and multi-talented creative entrepreneurial students who seek a creative career.
- Design education is not simply about learning skills or making beautiful objects. It is the training of young minds to develop innovative ideas that impact and contribute to the global community. The unique quality of the program is its pedagogic emphasis on a holistic approach to design thinking and practice. Integrative studio-based design projects provide opportunities for the rich exchange of ideas and synergy for learning and development of design. It serves as the platform for students to be exposed to design issues primarily apart from other dimensions such as engineering, business and marketing.
- This program encourages user-centered design. It addresses manufacturing technology, engineering, ergonomics and environmental sustainability.
- Students develop their creative and professional abilities to understand and resolve these requirements, while working at the frontiers of social and technological change.

DEPARTMENT OF DESIGN

- Department has close collaboration with industry in the formulation and execution of projects so as to enable students to develop a high level of professionalism. The program is planned to be supported by existing resource in traditional workshop facilities as well as equipment for digital media application and prototyping in future.

The work environment at the department is very friendly and comfortable, with considerable ratio of female students. There is strong interaction between students and teachers. The goal is to have designers who can synthesize technology and aesthetics in the service of human need. Graduates are anticipated to become leaders in the chosen field as self-starters making things happen.

DEPARTMENT OF DESIGN

First Semester

Course No.	Subject	Credit Hours	
		Theory	Practical
PID: 101	Fundamentals of Design – I	02	3.5
PID: 102	Visual Communication – I	--	2.5
MET/PID: 103	Materials and Technology - I	02	01
PID: 104	History of Creative Arts and Design – I	02	01
PID: 105	Introduction to Computers	01	01
IS/HU: 101	Islamic Studies	03	--
TOTAL		10	09
Grand Total		19	

Third Semester

Course No.	Subject	Credit Hours	
		Theory	Practical
PID: 201	Product Design-I	02	3.5
PID: 202	Ergonomics-I	02	01
MET/PID: 203	Materials & Technology-III	02	01
PID: 204	History of Creative Art & Design-II	02	01
PID: 205	Computer Aided Design-II	--	2.5
PID: 206	Aesthetics-I	02	--
TOTAL		10	09
GRAND TOTAL		19	

Fifth Semester:

Course No.	Subject	Credit Hours	
		Theory	Practical
PID:301	Product Design-III	02	3.5
PID:302	3d-Modeling-I	-	2.5
PID:303	Photography	02	1.0
PID:304	History of Creative Art & Design-III	02	-
PID:305	Computer Aided Design-IV	-	2.5
PHY/PID:306	Packaging Physics	02	1.0
TOTAL		08	10.5
GRAND TOTAL		18	

Seventh Semester:

Course No.	Subject	Credit Hours	
		Theory	Practical
PID:401	Product Design-V	01	3.0
PID:402	Thesis Design	-	8.0
PID:403	Electives Visual Communication Design (video production) Advanced Ceramics Furniture Design Advertisement Design (print media) Product Development & Manufacturing	02	1.0
TOTAL		03	12
GRAND TOTAL		15	

Second Semester

Course No.	Subject	Credit Hours	
		Theory	Practical
PID: 111	Fundamentals of Design – II	02	3.5
PID: 112	Visual Communication – II	--	2.5
MET/PID:113	Materials and Technology – II	02	01
PID: 115	Computer Aided Design - I	-	2.5
ME/PID: 116	Workshop Practice – I	-	1.5
MA/PID: 117	Mathematics	03	--
TOTAL		07	11
Grand Total		18	

Fourth Semester

Course No.	Subject	Credit Hours	
		Theory	Practical
PID: 211	Product Design-II	02	3.5
INL/PID: 212	Ergonomics-II	02	01
PID: 215	Computer Aided Design-III	--	3.5
PID: 216	Aesthetics-II	02	--
MA/PID: 217	Statistics	03	--
IS/HU-102	Islamic and Pakistan Studies	03	--
TOTAL		12	08
GRAND TOTAL		20	

Sixth Semester:

Course No.	Subject	Credit Hours	
		Theory	Practical
PID:311	Product Design-IV	02	3.5
PID:312	3d Modeling-II	-	2.5
PID:313	Graphic Design	02	02
PID:314	Research Methodology	03	01
PID:315	Introduction to Management	02	01
TOTAL		09	10
GRAND TOTAL		19	

Eighth Semester:

Course No.	Subject	Credit Hours	
		Theory	Practical
PID:411	Thesis Design	0	12
PID:412	Professional Practice	02	1.0
TOTAL		02	13
GRAND TOTAL		15	

DEPARTMENT OF CITY & REGIONAL PLANNING

Chairman

Prof. Dr. Qamar ul Islam

Professors

Dr. Syed Shabih-ul-Hassan Zaidi

Dr. Ihsanullah Bajwa

Dr. Ghulam Abbas Anjum

Dr. Rizwan Hameed

Assistant Professors

Mr. Obaidullah Nadeem

Mr. Ijaz Ahmad

Mr. Shaker Mahmood Mayo

Lecturers

Mrs. Afia Rehan**

Mr. Atif Bilal Aslam

Ms. Zareen Shahid

Mr. Mohammad Asim**

Mr. Azmat Awan*

*Visiting faculty

**On leave Abroad

The Department of City and Regional Planning (DCRP) established in 1962, maintains the pride to be the most prestigious and the instigating institution of City & Regional Planning education in Pakistan. Embracing more than forty years celebrated track record of imparting education, training and research in the field of City & Regional Planning, the DCRP has been the flagship institute of Development Planning in Pakistan. The department offers B.Sc, M.Sc., M. Phil. and Ph.D. Degree Programs in the fields of Urban Planning & Environmental Management. The degrees offered by the department are recognized and accredited by Pakistan Council of Architects and Town Planners (PCATP), Higher Education Commission (HEC), Pakistan and institute of planners Pakistan (IPP) and have long-established and time-honored recognition by International Institutes of Urban Planning & Environmental Management and the associated professional bodies all over the World.

COURSES OF STUDY

The department offers the following courses of studies:

- B.Sc. Degree in City & Regional Planning
- M.Sc. Degree in City & Regional Planning
- M.Sc. Degree in Community Development and Environmental Management
- M. Phil. Degree in City & Regional Planning
- Ph. D. Degree in City & Regional Planning

UNDERGRADUATE COURSE

B.Sc. In City & Regional Planning

The degree offered by the department has a well established and time-honored recognition by the academic and professional institutes of highest ranking all over the world.

The curriculum for the B.Sc. course in City & Regional Planning is designed to bring into being the professionals who can serve as the development managers of the human settlements encircling hamlets, villages, towns, cities, Megalopolises and Global cities sketching out a network of human built environment.

The courses of study in the B.Sc. program in City & Regional Planning covers an intensive coverage of theoretical understanding of planning concepts and practical experience of planning projects. Planning is an interdisciplinary field which deals with the social, economic, and physical aspects of human built environment. Therefore, the graduates of this department are trained not only in the basic physical sciences but also in the humanities and social sciences fields.

The broad areas of knowledge covered under this degree course includes; Mathematics, Engineering Sciences, Geography, Sociology, Statistics, Economics, Mapping, Community and Social Work, Management and Administrative Sciences, Applied Computer Sciences, Remote Sensing and Geographic Information System (GIS).

The core planning courses offered in this program includes; Housing,

DEPARTMENT OF CITY & REGIONAL PLANNING

Land use Planning, Urban Renewal, Rural Planning, Regional Planning, New Towns Planning, Urban Design, Building and Development Control, Transportation Planning, Local Government System, Human Settlements Planning, National/Provincial/Local Level Plans, Programs and Projects, Outline Development Plans, Regional Plans, and Master Plans of Towns and Cities.

The profession of City and Regional Planning is an established field and the graduates of this department hold key portfolios in Government, Semi-Government, Non-Governmental Organizations, and the Private Sector alike. The key recruiting agencies in the government sector includes; Planning Commission of Pakistan, Ministries of Housing, Environment and Urban Affairs, Planning and Development Research Institutes, Provincial Housing and Physical Planning Departments, The Punjab Housing and Town Planning Agency, Provincial Local Government and Rural Development Departments, Development Authorities, Improvement Trusts, and Tehsil Municipal Administrations to name few, and that's the reason the City & Regional Planning is a well-recognized profession at the local, provincial, and national governments levels. Furthermore, there also remain tremendous employment opportunities in the local, national, international NGO's and the semi-government/privates planning consulting firms.

POSTGRADUATE COURSES

M.Sc. in City & Regional Planning

The M.Sc. Degree program in City & Regional Planning was introduced in 1962, a year ahead of the formal initiation of B.Sc. Degree program in UPM. The M.Sc. program had its second beginning in the year 1984 through its Academic Link Program with the University of Edinburgh, United Kingdom. Afterwards the department was again able to establish a new Academic Link Program with the Heriot and Watt University, Edinburgh, United Kingdom. Since 1984, the M.Sc. program is running successfully and producing top quality City & Regional Planning experts for the country.

M.Sc. Degree in Community Development and Environmental Management

The Department of City and Regional Planning is offering a new one year degree course on Community Development and Environmental Management keeping in view the great demand for professionals trained in this field. The course will consider applicants from diverse academic background including civil engineering, sociology, rural sociology, economics, environmental engineering, geography, architecture, social work, geographical information system, and town planning.

M.Phil. & Ph.D. Degrees in City & Regional Planning

The two years M. Phil. Degree program in City & Regional Planning is a research degree program which is exclusively arranged for senior planners, intending to do research on different planning issues of their interest and choice.

In the backdrop of present government's firm commitment to foster Indigenous Ph.D. research in the country, the department has contributed its due share towards the achievement of this goal. The department is highly equipped with the required research facilities like latest research laboratories and the library. Presently, there are about eight students who are doing their Ph.D. research on a number of planning issues. The Ph.D. program has been able to attract the in-house faculty as well as prospective planners from the field.

Library and Equipments

The department has a well stocked library, with a wide range of latest books, international journals, reports and other documents related with the field of City & Regional Planning. The departmental library has been established with the assistance of British Government. The department is also equipped with the modern teaching and research facilities including modern audio visual aids such as Multimedia Projectors, overhead projectors & slide projectors.

The department is also well equipped with the latest planning instruments and equipments such as Digital Planimeters,

DEPARTMENT OF CITY & REGIONAL PLANNING

Pantographs, Electronic Drafting Tables, Color Plotters, Laser Printers, AO Size Digitizers, Scanners, and with the state of the art environmental and transportation planning equipments like Noise Meters for noise pollution studies, Spectro Photo Meter for water chemical testing and Flue Gas Analyzer for automotive and industrial emissions testing.

Computer Laboratory

The departmental computer laboratory has been established with the latest Pentium-IV micro computers along with the allied computer accessories. The laboratory is fully equipped with the modern scanning, printing and plotting facilities. The department is also pursuing hard to establish a separate Remote Sensing and Geographic Information System laboratory to accommodate new advancements in the fields of geography and space sciences. The departmental computer laboratory and library remain open from morning till evening for research work of both undergraduate and postgraduate students of the department.

Research Extension & Advisory Service

The department has demonstrated its capabilities to disseminate knowledge beyond the four walls of the Campus by holding seminars, workshops and symposia for this purpose. The department also offers short training courses in Computer Aided Design (CAD) and other computer applications such as Statistical Package for Social Sciences (SPSS), Geographic Information System (GIS) and MS Office in the evening time.

The faculty members also extend consultancy and advisory services to government and non-governmental organizations. The department holds a number of planning projects such as preparation of Master Plans, Katchi Abadi Improvement Plans, and designing of Housing Schemes on its credit. The department has also worked with ERRRA for the rehabilitation and reconstruction of the earthquake effected areas of Azad Jammu & Kashmir and preparing a 25 years master plan for Bagh Town.

OUTLINE OF COURSES FOR B.Sc IN CITY AND REGIONAL PLANNING (SESSION 2006 AND ONWARDS)

FIRST SEMESTER

Ref. No.	Subjects	Credit Hours	
		Theory	Practical
CRP – 101	Introduction to Planning	3	1
CRP – 102	Technical Drawing	0	2
CRP – 103	Computer Aided Design	0	2
CE-101	Surveying	3	2
HU – 111	Functional English	2	0
MA – 101	Mathematics	3	0
		11	7
		18	

* Student Counseling and Guidance

SECOND SEMESTER

Ref. No.	Subjects	Credit Hours	
		Theory	Practical
CRP – 104	Mapping & Aerial Photography	1	1
CRP – 105	History of Urban Planning	3	0
CRP – 106	Transportation Engineering	3	1
CRP – 107	Applied Statistics	3	0
CRP - 108	Planning Surveys	2	2
IS/HU – 101	Islamic Studies and Pak Studies – I for Muslim students Ethics and Pakistan Studies – I for Non Muslim Students	3	0
		15	4
		19	

* Student Counseling and Guidance

THIRD SEMESTER

Ref. No.	Subjects	Credit Hours	
		Theory	Practical
CRP – 201	Transportation Planning	3	1
CRP – 202	Architectural Design	1	2
CRP – 203	Planning Law	3	0
CRP - 204	Information Technology & Database Management	1	2
CRP - 205	Technical Report Writing	1	1
CRP - 206	Economics	3	0
		12	6
		18	

* Student Counseling and Guidance

FOURTH SEMESTER

Ref. No.	Subjects	Credit Hours	
		Theory	Practical
CRP - 207	Sociology	3	0
CRP – 208	Housing	3	1
CRP – 209	Environmental Planning & Management	3	1
CRP – 210	Introduction to GIS	2	1
HU – 220	Communication Skills	0	2
IS/HU - 201	Islamic Studies and Pak Studies – I for Muslim students Ethics and Pakistan Studies – I for Non Muslim Students	3	0
		14	5
		19	

* Student Counseling and Guidance

FIFTH SEMESTER

Ref. No.	Subjects	Marks	
		Theory	Practical
CRP – 301	Environmental Engineering	3	1
CRP – 302	Planning of New Towns	3	2
CRP – 303	Urban Renewal & Conservation	2	1
CRP – 304	Hazards & Disaster Management	2	0
CRP – 305	Site Planning & Landscape Design	2	1
CRP – 306	GIS Applications in Planning	2	1
		13	6
		19	

SIXTH SEMESTER

Ref. No.	Subjects	Marks	
		Theory	Practical
CRP – 307	Global Positioning Systems	1	2
CRP – 308	Rural Planning	3	1
CRP – 309	Urban Design	3	1
CRP – 310	Building Construction Technology	2	0
CRP – 311	Community Empowerment & Development Planning	3	1
CRP – 312	Public Administration	2	0
		14	5
		19	

* Student Counseling and Guidance

SEVENTH SEMESTER

Ref. No.	Subjects	Marks	
		Theory	Practical
CRP – 401	Master Planning-I	2	2
CRP – 402	Finance Planning & Management	3	1
CRP – 403	Land Use & Building Control	3	1
CRP – 404	Project Planning & Management	2	1
CRP – 405	Research Methods	3	1
		13	6
		19	

* Student Counseling and Guidance

EIGHTH SEMESTER

Ref. No.	Subjects	Marks	
		Theory	Practical
CRP – 406	Master Planning-II	2	2
CRP – 407	Estate Management	3	1
CRP – 408	District & Regional Development Planning	3	1
CRP – 409	Organizational Behavior & Management	3	0
CRP – 410	Projects	0	4
		11	8
		19	

* Student Counseling and Guidance

TOTAL CREDIT HOURS 150

**Faculty of
NATURAL SCIENCES, HUMANITIES & ISLAMIC STUDIES**

**Dean of Faculty
Prof. Dr. Dr. Fazeelat Tahira**

**Faculty Includes
Department of Chemistry
Department of Mathematics
Department of Physics
Department of Humanities, Management and Social Sciences
Department of Islamic Studies**

DEPARTMENT OF CHEMISTRY

Chairman

Dr. Inam-ul-Haque

Professor

Dr. Fazeelat Tahira

Associate Professors

Dr. Saeed Ahmad

Dr. Syeda Rubina Gilani

Assistant Professors

Mr. Zamir Ahmad Ansari

Mr. M.Khurram Naseem Qureshi *

Ms. Aisha Chaudhry

Ms. Aneela Anwar

Lecturers

Mr. Khurram Saleem Joya*

Ms. Farhat Yasmeen *

Dr. Arjumand Iqbal Durrani

Mr. Muhammad Asif

Mr. Ijaz ul Mohsin*

Ms. Hina Saleem**

Ms. Maheen Gul *

Mr. Abdul Ghaffar*

Ms. Samina Akbar*

Mr. Kaleem Abbas Asghar*

Ms. Humaira Rasheed

Ms. Ashi Rashid

on short term contract

* On higher studies abroad

**On leave

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

The department started M Sc Applied chemistry degree program in 1995, and M Phil applied chemistry degree program in 2001. The department also offers Doctor of Philosophy (Ph D) degree program in chemistry. The first Ph D degree in chemistry was awarded by this department in 1986. The department is also offering applied chemistry courses to engineering disciplines: such as, chemical, polymer, metallurgical, mining, geological, and petroleum and gas engineering under-graduate degree programs.

Compulsory factory training is part of curriculum. The main objective of the training is collaboration between chemistry and industry, Promotion of higher education and postgraduate research continues

to be the main objective of the department. The department has several dozen HEC M Phil-leading to-Ph D students.

Advancement in science and technology, development of new fields and discoveries in the field of chemistry are incorporated into courses taught, by regularly upgrading the curriculum. The curricula and syllabi are relevant to the HEC criteria and international standards. Besides core courses, a number of specialized courses like electrochemistry and clean energy, fuel-cell chemistry, corrosion, electro-organic chemistry, green chemistry, chemometrics, co-ordination chemistry, environmental chemistry, polymer chemistry, and analytical chemistry are being taught by the faculty of the department at postgraduate level. The department has well-equipped laboratories.

The department has highly qualified faculty oriented toward using new and improved teaching techniques to meet the diverse needs of curriculum. It is committed to educate and train students as skilled professionals. The department features enriched educational and research environment that reflects its tradition of dedication and commitment to the profession. The academic staff of the department has brought out a large number of publications in journals of national and international repute.

DEPARTMENT OF MATHEMATICS

Chairman
Prof. Dr. Muhammad Ozair Ahmad

Professors

Dr. Muhammad Ozair Ahmad

Associate Professors

Mr. Saeed Ahmad
Mr. Maqbool Ahmad Chaudhry
Mr. Nazir Ahmad Shahid
Dr. Muhammad Iqbal Bhatti

Assistant Professors

Mr. Muhammad Naeem Gul
Mr. Nazir Ahmad Chaudhry
Mr. Muhammad Shafique
Mr. Muhammad Naeem
Mr. Muhammad Mushtaq
Mr. Shafique-ur-Rahman*
Mrs. Saima Azhar*

Lecturers

Mrs. Rubina Fayyaz
Mr. Mustafa Habib*

Mr. M. Irfan Qadir
Mr. Faraz Khalid Toor*
Ms. Saadia Ismail*
Ms. Saima Nazir
Mrs. Samina Saeed Khan
Ms. Faiza Khan Khattak*
Mr. Anjum Pervaiz
Mr. Qasim Ali Ch*
Ms. Sahar Afshan
Ms. Shamila Samreen

* On higher studies abroad

Most of the degree programmes offered by different departments of the University have courses in Applied Mathematics and Statistics as an integral part of their curricula. The department has the responsibility of planning and teaching these courses. In addition the department itself offers the courses of study in M.Sc. (Applied Mathematics), M. Phil. (Applied Mathematics) and Ph.D. degree in Mathematics.

Research Extension & Advisory Services

Research is an essential component of the academic pursuits of the faculty members and the postgraduate students. The work of the faculty is published in national and international journals. The department has a computer laboratory equipped with personal computers along with the internet facility.

A large number of institutions and organizations seek consultancy and advisory services of the faculty members and benefit from their expertise.

PHYSICS DEPARTMENT

Chairman

Prof. Dr. M. Khaleeq- Ur- Rahman

Professors

Prof. Dr. M. Zakria Butt

Prof. Dr. Khadim Hussain

Prof. Dr. Syed Javaid Iqbal

Associate Professors

Dr. Muhammad Shahid Rafique

Dr. Muhammad Iqbal

Assistant Professors

Mr. Anwar Latif

Dr. Khurram Siraj

Lecturers

Mr. Abdul Waheed Anwar*

Mr. Ather Mehmood*

Dr. Rehana Sharif

Mr. Ahmad Shuaib*

Mr. Rashid Jalil*

Mr. Muhammad Imran*

Ms. Ibtisam Riaz*

Ms. Ishrat Mubeen*

Ms. Sofia Siddique*

Mr. M. Shahbaz Anwar*

Ms. Saba Saeed*

Ms. Shumaila Shezadi*

Mr. Usman Ilyas

Ms. Umber Kalsoom

Mr. Khurshid Aslam Bhatti*

* On Higher Studies/Deputation abroad

The Department was established in 1962

Courses of Study

The Department offers the following Postgraduate programmes:

- (i) M.Sc. in Applied Physics
- (ii) M.Phil. in Applied Physics
- (iii) Ph.D. in Applied Physics

The faculty is highly qualified and motivated including eight (8) members with Ph.D. degrees. The interdisciplinary curriculum draws on faculty expertise in many areas of Applied Physics and includes such courses as Laser Physics, Applied Atomic & Nuclear Physics, Solid State Physics, Computer Science and its applications and Electronics etc.

The department has six well-equipped laboratories where students perform experiments of advanced level. At present the Department is providing facilities to the Postgraduate classes for research. The department is running M.Sc. (Applied Physics) M. Phil (Applied Physics) and Ph.D. (Physics) programme since 1999 and so far Five students have been registered for Ph.D. programme. The M.Sc. & M.Phil (Physics) curriculum balances many important dimensions of both general and Applied Physics employing both conceptual and

Technical approaches, the programme provides students with a solid base of general skills through core courses, and then enriches that knowledge through specialized advanced electives, laboratory work and research in various fields of physics. The students are expected to undergo research projects with the guidance and supervision of a highly qualified faculty. The total enrollment of M.Sc./M.Phil (Physics) is 82 and 49 students respectively.

The supervised research through postgraduate Studies in important areas of Applied Physics is also being done in Collaboration with R & D organizations.

There are five well equipped Laboratories in the department along with an Advanced Physics Laboratory in the Research Centre. The Laboratory work is backed up by well-equipped laboratories where students have the opportunity to perform experiments of an advanced level with the special emphasis on the applied concepts of Physics.

The department is also running Ph.D. programme. The primary aim of this Ph.D. program is to involve the postgraduate students into those areas of Applied Physics which are important for Scientific and Technical Development in Pakistan. One Ph.D. has already been produced in accordance with the HEC criteria.

PHYSICS DEPARTMENT

The Department has also Two fully Advanced Research Centres:

(i) **Laser & Optronics Centre** (Established & having latest state of art equipment). It's a first of its kind in Pakistan and will provide research facilities in Lasers, Laser Material interactions, Laser Produced plasma, Optoelectronics and photonics etc. The main equipment includes high power femto-second Ti-Sapphire Laser, Nitrogen Laser, Nd: YAG Laser, Diode Lasers, XeCl excimer Laser, high resolution three stage optical microscope and many other equipment related to above mentioned fields.

(ii) **Nanotechnologies Research Centre** (Work in progress)

The department also offers courses of Applied Physics to the classes of various engineering departments, computer science and architecture. The curricula of the courses cover many branches of physics including recent developments in the subject. These are reviewed periodically to keep them abreast with the rapid changes occurring in the Engineering disciplines and the correlative areas of Physics.

DEPARTMENT OF HUMANITIES, MANAGEMENT AND SOCIAL SCIENCES

Chairman

Syed Masood Haider Zaidi
Associate Professor

Assistant Professor

Ms. Saiyada Qasim Zaidi

Lecturers

Mr. Muhammad Ajmal Khurshid
Mr. Muhammad Islam
Mr. Rashid Parwaz

Ms. Amna Shafiq
Ms. Sabika Khurram
Ms. Alia Saleem Naushahi
Mian Muhammad Rauf Akhtar
Ms. Sadia Khan.
Mr. Abid Javed.

The general objective of the courses in the Department of Humanities, Management and Social Sciences are to offset the narrowness of perception and outlook that results from early specialization in a technical field. The department offers courses in such disciplines as Communication Skills, Industrial and Engineering Economics, Project Management, Consumer Behavior, Marketing, Economics for Planner and other Management subjects. Since engineers are responsible members of commercial enterprises and technical associations of a relatively high caliber, these disciplines help them to perform better in their job assignments and become high achievers in their

respective fields.

English is the medium for all technical & scientific disciplines in Pakistan. The department offers courses in remedial English and Technical Report Writing. The department also offers a course entitled Ethics & Pak Studies especially designed for Non-Muslim students, who take it up in lieu of a compulsory course that is Islamic & Pak Studies.

DEPARTMENT OF ISLAMIC STUDIES

Chairman

Prof. Dr. Hafiz Muhammad Israiel Farooqui

Professor

Dr. Hafiz Muhammad Israiel Farooqui

Associate Professors

Dr. Irfan Khalid Dhillon

Dr. Muhammad Khan Malik

Lecturers

Mr. Atiq-ur-Rahman (Islamic Studies)

Syed M. Nadeem Bukhari (Pak Studies)

Malik Akhtar Hussain (Pak Studies)

Research Associates/Lecturers (On contract)

Mr. Zia-ur-Rahman* (Islamic Studies) *

Hafiz Muhammad Shahbaz (Islamic Studies)

Mr. Tanveer Qasim (KSK) (Islamic Studies)

Hafiz Zahid Latif (Islamic Studies)

Ms. Gul Saria Ashraf (Pak Studies)

Visiting Faculty

Prof. ® Dr. Muhammad Yahya
(Arabic Language & Islamic Studies)

*Abroad on study leave

The curricula in the University include compulsory and optional subjects. Islamic and Pakistan studies are included in the compulsory subjects. The underlying purpose of teaching this subject to the students of engineering disciplines is to impress upon them the richness of Islamic culture, heritage and civilization and the role played by Islamic ideology in guiding the Muslims of the sub-continent towards their most cherished goal of an independent home land, Pakistan. After inculcating in them the Cultural, Social, Economic, Political and historical aspects of Islamic civilization, the students would be able to protect and promote Islam, not only as a religion but as a system in Pakistan and in the world as well.

Courses Offered

For the realization of these objectives the Islamic Studies was introduced in the University as an optional subject in 1961. In the subsequent years, due to its importance this subject was made compulsory for all the Muslim students and its scope was progressively enlarged. Now the department teaches Islamic Studies to the Engineering classes, Computer Science and Engineering as well as Architecture, PID, and City and Regional Planning. In 1982 the Government of Pakistan prescribed Pakistan Studies as an essential component of the syllabi at all levels of education. Since then the Department is teaching this subject also. Moreover, the subject Islamic & Pakistan Studies included as a compulsory subject in the affiliated colleges, Rechna College, KSK and Faisalabad Campuses.
Research and other Activities

The Faculty members of the department have over the time, excelled in their academic field and research as well. The faculty members have been producing research papers and articles in the quality research journals of national and international fame. Their productive research work have highlighted social, economic and political problems of the country and suggested their feasible solution in easy to understand way. Moreover, the department has a library rich with high quality research books.

In addition to all these activities, the Chairman of the Department has been delivering Friday Sermon in Jamia Mosque UET.

Arabic Language Courses

Arabic Language Courses are being taught in Computer Science and Engineering Department

Future Research Goals

1. Library

The department is striving to establish an Islamic International Digital library.

2. M. Phil leading to Ph.D.

M. Phil leading to Ph. D program would be offered to satiate the thirst for quality research of the prospective students.

3. Diploma in Arabic Language

Diploma Courses in Arabic Language for all the UET students.

FAISALABAD CAMPUS

FAISALABAD CAMPUS

Campus Coordinator

Prof. Dr. Muhammad Mahmood Ahmad

The University of Engineering and Technology, Lahore enjoys the status of one of the prestigious learning seats for professional students in Pakistan. It has successfully produced a large number of competent graduates who have made valuable contributions towards the overall technological/scientific development of the country. This alma mater broadened its access to the students when the Faisalabad Campus of UET Lahore sprang into its being in 2004 to meet the demands of growing and booming industry of Pakistan.

The campus is located on Khurrianwala-Makkuana Road, Faisalabad which is the hub of all industrial enterprises in the country. Further construction work is speedily under process under the supervision of Project Director because the perspectives plan of the Campus is to develop into an independent university in the near future. The Campus has the following four academic departments, whereas, faculty for the 'Centre for Advancement of Textile Technology' has been recruited and the centre will be launched soon.

- Department of Electronics & Communication Engineering
- Department of Mechatronics & Control Engineering
- Department of Chemical & Polymer Engineering
- Department of Humanities, Basic Sciences and Islamic Studies

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Professor

Dr. Muhammad Kamran

Lecturers

Mr. Muhammad Akram*

Mr. Hassan Tariq Chatta*

Mr. Salman Amin**

Mr. Shahzad Rasool*

Mr. Muhammad Mehboob-ur-Rahman

Mr. Arhan Yaqub Anjum*

Mr. Ahsan ul haq

Mr. Faizan Dastgeer*

Mr. Shoaib bin Altaf*

Miss Sara Ashraf

Mr. Muhammad Irfan

Mr. Wasim Nawaz

Mr. Muhammad Sohaib

Mr. Nauman Aftab

* on higher studies abroad

** on E.O.L

THE DEPARTMENT

The rapid growth in the field of Electronics & Communication Engineering has brought revolution around the world. In order to contribute towards this revolution, we need to equip our graduates in the field of Electronics and Communication. This department has been set up to address this need. The academic activity is fully promoted through teaching, laboratory work, field trips and extension lectures. In addition to its permanent faculty, a few faculty members come to the campus on part time basis from the field and UET main campus Lahore. Emphasis is given to all the aspects of Electronics Engineering including Electronic Systems, Digital Systems, Telecommunications, Power systems, Electrical Drives, Electrical Machines, Computer Systems, Microwave System, etc.

Students are given full access to variety of opportunities to interact with industry through assignments and projects. Interaction with senior teachers and experts is arranged through extension lectures.

COURSES OF STUDY

Department offers B.Sc. in Electrical Engineering.

LABORATORIES

The following laboratories have been set up at Faisalabad Campus while the equipment for the additional laboratories has been ordered and shall reach soon.

- Electric Circuits Laboratory
- Analogue Electronics Laboratory
- Digital Electronics Laboratory
- Electrical Instrumentation Laboratory
- Communication Systems Laboratory
- Power electronics Laboratory
- Network Analysis Laboratory
- Digital logic Design Laboratory

DEPARTMENT OF MECHATRONICS & CONTROL ENGINEERING

FACULTY

Professor

Dr. Tauseef Aized

Lecturers

Mr. Ali Haroon*

Mr. Ali Shahid*

Syeda Faiza Abbasi

Mr. Zohaib Aftab*

Mr. Ahmad Ali*

Mr. Shahid Hussain*

Mr. Farhan Maqbool*

Mr. Awais Hafeez*

Mr. Hashim Iqbal

Mr. Adnan Asif

*on higher studies abroad

THE DEPARTMENT

The modern technology coupled with the requirements of the industry

is to set a large number of innovative applications. One of such application in Mechatronics & Control Engineering. The discipline of Mechatronics & Control Engineering is a combination of Mechanical and Electrical Engineering domains. The Discipline deals with integration of Mechanical Devices, Actuators, Sensors, Electronics, Intelligent Controllers and Computers, etc. The field of Mechatronics & Control Engineering has led to new applications in Computer-Aided designs, Computer Numerical Control, Computer-Integrated Manufacturing, Advanced Quality Control and System Management, etc.

LABORATORIES

- Embedded Systems Laboratory
- Electric Circuits Laboratory
- Digital Systems Laboratory
- Mechanics Laboratory
- Thermodynamics Laboratory
- Engineering Mechanics Laboratory

DEPARTMENT OF CHEMICAL & POLYMER ENGINEERING

FACULTY

Professor

Dr. Muhammad Mahmood Ahmad

Lecturers

Mr. Syed Waqas ahmad*

Miss Ayesha Irshad

Miss Rabia Sharif

Mr. Qasim Imtiaz*

Mr. Khalid Mahmood*

Miss Saira Bano

Miss Iram Shahjehan

*on higher studies abroad

THE DEPARTMENT

Chemical industry is surrounding the city of Faisalabad and is still rapidly growing. A large number of innovations have taken place in the field of chemical and polymer engineering. New processes like,

polymer processing industry is growing at a fast pace. Finished goods industry is also booming.

The opening up of this Department in the city of Faisalabad shall considerably help in gearing up the development, research and productivity of quality products in Faisalabad in particular and in Pakistan in general.

COURSES OF STUDY

Department offers B.Sc. in Chemical Engineering.

LABORATORIES

- Chemical Process Industries Laboratory
- Fuels and Combustion Laboratory
- Chemical Engineering Thermodynamics Laboratory
- Chemical Reactor Design Laboratory
- Heat Transfer Laboratory
- Mass Transfer Laboratory
- Simultaneous Heat and Mass Transfer Laboratory
- Fluid Flow Laboratory
- Particle Technology Laboratory

DEPARTMENT OF HUMANITIES, BASIC SCIENCES AND ISLAMIC STUDIES

FACULTY

Mr. Abdul Rehman (Mathematics)
Miss Shazia Karim (Mathematics)
Miss Ghufrana Samin (Chemistry)*
Mr. Kamran Shaheen(English)
Mr. Muhammad Aslam (Islamic Studies)
Ms. Sajida Naveed (Chemistry)
Miss Arshi Khalid (Mathematics)
Miss Somia Tasneem(Pakistan studies)
Miss Shumaila Naureen (Mathematics)
Miss Sumaira Shaukat (Computer Science)
Mr. Sajjad Ahmad (Chemistry)*

* On higher studies abroad

THE DEPARTMENT

The objective of the Department of Humanities, Basic Sciences and Islamic Studies is to offset the narrowness of perception and outlook that results from early specialization in a technical field. The Department offers courses in English Communication Skills, Industrial and Engineering Economics, Project, Management and Economics, Applied Mathematics, Applied Physics, Applied Chemistry and Pakistan and Islamic Studies.

CENTRE FOR ADVANCEMENT OF TEXTILE TECHNOLOGY

FACULTY

Lecturers

Mr. Muhammad Tausif *
Mr. Muhammad Mohsin *
Ms. Razia Jabeen
Miss Nazia Nawaz

THE CENTRE

Under the Faculty Development Programme, the University has recruited four faculty members for this centre. All of them have been awarded scholarship to undertake higher studies in their areas of specialization; two faculty members have already gone abroad whereas the remaining two are in the queue. The university has its plan to establish an additional department namely, Technology Incubation Centre.

OTHER LABORATORIES

Mr. Aamir Jamshaid

System/Network Administrator

Two state of the art Computer Laboratories have been set up at the campus with more than 100 computers. All the machines are connected to the host machine through a network. Internet support is extended to all the students and faculty. A Network Administrator is employed to provide necessary support to the laboratories throughout the day. Moreover, a web link of Faisalabad campus is available.

* on higher studies abroad

LIBRARY

The library has a large collection of text books, technical encyclopedias, dictionaries, handbooks, standards, year books and reference materials. Besides engineering subjects, considerable reading material on humanities, social sciences, Islamic and Pakistan studies is also available. Newspapers and magazines are regularly received in the library to upgrade student's general knowledge.

HOSTELS

Lodging facilities include two boys and two girls' hostels for students. The campus also provides residence to the faculty members and other employees. The provision of internet for students and faculty members is also made available in the hostels

TRANSPORT

The Campus has its own fleet of six buses to facilitate the students for their learning pursuits. Industrial tours and visits to UET main campus for laboratory sessions are frequently arranged for students.

HEALTH CLINIC

A health clinic is available at the campus to provide necessary medical support to faculty members, students and other employees of the campus. The clinic is run under the supervision of an M.B.B.S. doctor. Faisalabad International Hospital is on the university panel to provide free medical facilities to employees.

UNIVERSITY CITY CAMPUS

UNIVERSITY CITY CAMPUS (KALA-SHAH-KAKU)

CAMPUS COORDINATOR:

Prof. Dr Faiz ul Hasan

With the gradual increase in student's enrollment at the main campus of UET-Lahore, a plan to establish additional campuses of the University was conceived. As a result, one of the campuses of UET is being set up at Kala-Shah-Kaku (KSK), for which the first session was admitted in September 2007. At present the classes are being held at the premises of UET-main campus, however, from January 2009, the KSK Campus shall become fully functional to hold its own classes and lab-work. KSK campus has a total

land area of about 313 acres and is located on the link road connecting G T Road with M2 near Kala-Shah-Kaku.

In the first phase, the KSK campus shall be offering bachelor's degree in three disciplines.

- **Mechanical Engineering**
- **Electrical Engineering**
- **Chemical Engineering**

Department of Electrical, Electronics & Tele-Communication Engineering

Chairman

Prof. Dr Muhammad Kamran

Professor

Prof. Dr. Mohammad Kamran

Lecturers

1. Muhammad Fahad Ijaz
2. Hafiz Yasir Latif *
3. Umer Rashid

4. Ahmad Umair
5. Saad Ahmad Khan
6. Bilal Wajid *
7. Fahad A. Khan
8. Farrukh Yaqoob
9. Qammar Abbasi*
10. Miss Hifsa Bano*
11. Mohsin Awan*

* Higher studies abroad.

** Senior faculty members from the main campus of UET are also involved in the teaching of classes at the Department.

The department offers a 4-year Bachelor's Degree in Electrical Energy. The department is being equipped with modern Lab-facilities in electronics, telecommunications, digital signals, Microwaves, Transmitters and antennas, and VLSI. The graduates of the Department are expected to meet the ever-growing demand of engineers in the electronics and Telecommunication industry.

DEPARTMENT OF CHEMICAL, POLYMER & MATERIAL ENGINEERING

Chairman

Prof. Dr. Nadeem Feroze

Professors

1. Dr. Nadeem Feroze
2. Dr. Anwar-ul-Haq
3. Dr. Javed Hakeem (Visiting)

Lecturers

1. Sayyed Mohsin Ali Kazmi
2. Mrs. Saima Yasin*
3. Ms. Humera Siddique*
4. Mr. Muhammad Tajammal Munir*
5. Ms. Masooma Sundus
6. Ms. Asma Khan

* On EOL for higher studies

The department offers a 4-years Bachelor's Degree in Chemical Engineering. The need for this degree program was felt due to the rapid growth of the use of biological processing techniques in the chemical & pharmaceutical industries.

The curriculum of the program encompasses the design and development of unit processes and unit operations and their applications in the production of chemicals/biochemicals and

pharmaceuticals. The prominent courses taught under this program include reaction engineering, heat transfer, separation processes, fluid mechanics, process design, instrumentation & control, quality control and management.

The department is being equipped with modern facilities in the following laboratories:

- Microbiology Lab
- Biochemistry Lab
- Pharmaceutical Preparation Lab
- Fluid Mechanics Lab
- Heat Transfer Lab
- Mass Transfer Lab
- Biochemical Reactors Lab
- Instrumental Analysis Lab
- Process Quality Control Lab
- Computer Lab

Students completing this degree program will find employment in industries related to the production, processing and design of biological products in particular and in chemicals in general. Opportunities include placement with manufacturers, consulting firms and work in the areas of biotechnology, biomedical, environmental engineering, pharmaceutical industry, food processing industries, agricultural industries and biochemical/chemical industries.

DEPARTMENT OF MECHANICAL, MECHATRONICS AND MANUFACTURING ENGINEERING

Chairman

Prof. Dr. Ijaz Ahmad Chaudhry
(Looking After)

Professor

1. Prof. Dr Tausef Aized *

Lecturers

1. Miss Rabia Shaukat *
2. Miss Maryam Masood *
3. Mr. Shahid Imran *
4. Mr. Fahad Noor *
5. Mr. Saqib Anwar *
6. Mr. Fahad Riaz
7. Mr. Muhammad Farooq
8. Mr. Hafiz M Shahid Akbar
9. Mr. Shahid Manzoor
10. Mr. Aqeel Ahmad
11. Mr. M Hinan Shafique
12. Mr. M Hinan Shafique
13. Mr. Zeeshan Amir
14. Ms. Huma Bilal

* on higher studies abroad

The department offers four years Bachelor Degree in Mechanical Engineering. The department is being equippt with the following labs.

- Thermodynamics
- Fluid Mechanics
- Mechanics of Machines
- Engineering Mechanics
- Mechanics of Materials
- Computer Applications
- Computer aided Design
- Conventional Machine Tools
- CNC Machines
- Renewable Energy Resources
- Heat Transfer
- HVAC
- CFD modeling
- Finite Element Analysis
- I C Engines/ Power Plants
- Instrumentation and Control
- Stress Analysis
- Advanced energy systems
- Fuel cell systems and development



Rachna College of Engineering & Technology, Gujranwala

RACHNA COLLEGE OF ENGINEERING & TECHNOLOGY, GUJRANWALA

(A Constituent College of University of Engineering & Technology, Lahore)

PRINCIPAL

Dr. RANA ABDUL JABBAR KHAN

The College

Situated at the hub of the Engineering Industries of the country, Rachna College derives its name from the lands stretching between the rivers, the Ravi and the Chenab.

The College was inaugurated by Lt. Gen. (R) Khalid Maqbool Governor of Punjab on 15th January, 2003, with the induction of the first batch of 105 students. The College is located on the left bank of Nokhar Branch Canal about seven kilometers off (East) G.T. Road, between Gakhar and Wazirabad.

The Rachna College of Engineering & Technology, Gujranwala campus is spread over an area of about 25 acres, surrounded by a canal on the south and lush agricultural land on the remaining three sides. In addition to this, about 48 acres of abutting land has been purchased with the aim of expansion in the near future.

College Status

RCET is a constituent college of University of Engineering & Technology, Lahore. The up gradation of RCET as Rachna University of Engineering & Technology has been announced on the directions of Prime Minister of Pakistan.

All the procedures regarding admissions, conduct of examinations and other degree requirements are governed by the University of Engineering & Technology, Lahore

PROGRAMS OFFERED

Engineering is a creative process involving the design of systems,

components and processes to meet desired needs. Throughout RCET curriculum, students gain experience in both the fundamentals of design as well as real Engineering problems. The laboratory work takes each student through all phases of a design project, emphasizing hands-on experiences while providing classroom guidance. Classes in the following disciplines are being conducted at RCET.

1. B.Sc. Electrical Engineering
2. B.Sc. Mechanical Engineering
3. B.Sc. Industrial & Manufacturing Engineering

4. B.Sc. (Hons) Computer Science

Accommodation

Hostel and transportation facilities are available to male and female students. College has also established a family residential colony for administration and teaching staff.

Research Activities

RCET has earned a special status among other Engineering Institutes, owing to its research contribution at national & international levels. Up till now considerable research work has been published and commendable consultancy services have been provided to various organizations.

RACHNA COLLEGE OF ENGINEERING & TECHNOLOGY, GUJRANWALA

DEPARTMENT OF ELECTRICAL ENGINEERING

Head of Department / Associate Professor

Dr. Khawja Riffat Hassan

Lecturer

Engr. Adnan Bashir

Lecturers/Lab Engineers

Engr. M. Naveed Akhtar

Engr. Tayyab Mehmood *

Engr. Azar Taufique*

Engr. Atta-ur-Rehman

Engr. Haroon Farooq

Engr. Muhammad Rehan Arif

Engr. Shakeel Ahmad

Engr. Muhammad Junaid

Engr. Tahir Akram

* On Study Leave

DEPARTMENT OF MECHANICAL ENGINEERING

Lecturers/Lab Engineers

Engr. Qasim Ali Ranjha

Engr. Ali Gibran *

Engr. Muhammad Junaid Gondal *

Engr. Shabbir Adil *

Engr. Zaib Ali *

Engr. Muhammad Qasim

Engr. Tariq Nawaz

Engr. Hassan Ali *

Engr. Muhammad Imran Malik

* On Study Leave

Instructors

Mr. Mian Jan Muhammad

Mr. Muhammad Riaz

OF INDUSTRIAL & MANUFACTURING ENGINEERING

Head of Department / Associate Professor

Dr. Muhammad Ashraf Sheikh

Lecturer

Engr. M. Mohsin Ahmed Sadiq

Lecturers/Lab Engineers

Engr. Muhammad Aslam

Engr. Ubaid-Ur-Rehman Ghorri

Engr. Muhammad Ramzan Tabbasum*

Engr. Muhammad Haseeb Hasnat

* On Study Leave

Engr. Muhammad Adil Farooq

Engr. Farukh

Engr. Muhammad Imran

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Incharge Department / Lecturer

Engr. Shahid Islam

Lecturers/Lab Engineers

Engr. Abdul Jaleel

Engr. Miss. Ayesha Naseer

Miss. Tayybah Kiran

DEPARTMENT OF NATURAL SCIENCE, HUMANITIES AND ISLAMIC STUDIES

Lecturers

Mr. Liaquat Ali Tahir

Mr. Muhammad Abdullah

Lecturer/Lab Engineer

Mr. Mateen Ahmed

LIST OF ADMINISTRATIVE STAFF

Mr. Muhammad Tufail Dhoodhaal

Deputy Registrar (Administration)

Mr. Faisal Mumtaz

Deputy Registrar (Accounts)

Mr. Liaquat Ali Tahir

Incharge Examinations

Mr. Muhammad Abdullah

Incharge Library

Engr. Javed Iqbal

Executive Engineer

Miss. Shumaila Shafique

Assistant Librarian

Mr. Rana Aftab Ahmad

Academics Officer

Mr. Muhammad Mazhar Ali

Accounts Officer

Mr. Kamran Rashid

Network Administrator

Research and Allied Centre

RESEARCH & ALLIED SERVICES

AL-KHAWARIZMI INSTITUTE OF COMPUTER SCIENCES

Chairman Board of Governors

Lt. Gen (R) Muhammad Akram Khan,

Chairman,

Board of Governors,
Al-Khawarizmi Institute of Computer
Science,
University of Engineering and Technology,
Lahore

Director

Dr. Waqar Mahmood

Technical Committee

Dr. Naveed Malik
Vice-Chancellor,
Virtual University, Lahore
Prof. Dr. Fakhar Lodhi
Professor,
FAST National University, Lahore

Dr. Hamayun Mushtaq Mian

Faculty

Prof. Dr. Zubair A. Khan
Consultant/Principal Investigator
Dr. Akmal Butt.
Professor
Dr. Abdul Waheed
Adjunct Faculty Member
Dr. Abad Ali Shah
Consultant/Principal Investigator
Dr. Ahsan Syed

Co-Consultant/Principal Investigator
Dr. Muid Mufti
Consultant/Principal Investigator
Dr. Ali Hammad Akbar
Consultant/Principal Investigator

Research & Office Staff

Research Staff

Abdul Qadeer
Abdul Rehman (Snr)
Ammara Tariq
Aniqa Dilawari
Anum Ali
Farzeen Abbas
Ghulam Mustafa
Hassan Saghir
Hina Javed
Iman Mustafa
Imran Javed
Imran Sarwar
Iram Naseer
Jamshaid Iqbal Janjua
Kashif Bashir
M Jang Khan
M. Asif Raza
M. Hassan
M. Hassan Jamal
M. Imran Abbas
M. Imran Sarwar
M. Safian Adeel
M. Waseem
Madiha Manzoor
Mamoona Tasadduq

Maria Chaudhry
Muhammad Ali
Muzammil Hussan
Naveed Nawaz
Rashid Mahmood
Ruqayya Akbar
Saad Ahmad Khan
Saba Shahid
Sajid Mahmood
Sarah Salim
Sehar Butt
Shafia Kiran
Shahid Awan
Sidra Shafiq
Sohail Shahzad
Wasif Tanveer
Zahoor ur Rehman

Office Staff

Imran Ali Shah
Rizwan Shahid
M. Musharaf Dar
M. Aamir Mughal
Mazhar Siddiquei
Shoukat Ali
Khurram Shahzad
Muhammad Javed
Muhammad Yasin
Niamat Ali
Nazar Hussain
Irfan Younas

RESEARCH & ALLIED SERVICES

INTRODUCTION:

Khawarizmi Institute of Computer Science (KICS) is established as an institute of applied research covering the general area of Information Technology and Computer Science. The name of the institute has been chosen to honor and commemorate one of the greatest Muslim thinkers and mathematicians, namely Al-Khawarizmi Abu Musa, who lived and worked in a small town of Azerbaijan from 780 AD to 850 AD. Al-Khawarizmi is recognized in learned circles not only as the father of Algebra, but also the inventor of the concept of 'Algorithm'. In fact the word algorithm is simply believed to be a corruption of Al-Khawarizmi. Therefore, Al-Khawarizmi is rightfully acknowledged as the inventor of all the mathematical concepts used by Alan Turing and John Von Neumann to introduce their respective models for digital computers.

GOALS AND OBJECTIVES

Main objectives of KICS are to conduct research and development activities in the areas of Computer Science, Telecommunications and Electronics, in collaboration with Industries, International Research and Academic Organization. The Institute focuses on addressing fundamental factors constraining Pakistan from emerging as an industrialized nation; such as

1. Development of world class applied research resources in Pakistan.
2. Development of a stream of good teachers and researchers in the area of IT, Telecommunication and Electronics in Pakistan.
3. To gather the best talent and provide them with an environment and focus for creating new technologies and products.
4. To create national self-sufficiency, especially in the public sector, by addressing problems unique to Pakistan.
5. To develop a tradition of world-class research in Pakistan in mathematical algorithms, IT, Telecommunication & Electronics.
6. To pursue education and research, in collaboration with a highly accredited universities in the west at postgraduate level, and award masters and doctorate degrees by research.

7. To advise research thesis for Masters & Ph.D students from Electrical Engineering and Computer Science, Mechatronics & Control and Industrial Engineering Departments.
8. To provide high quality teaching support at the post-graduate level.
9. Gather best available Pakistani talent in one place in Pakistan and provide an environment for creating new technologies and products for promoting export from Pakistan.

KICS has undertaken projects in the following areas:-

1. 4G Mobile Wireless Technologies (WiMax)
2. Digital Content Protection and Digital Rights Managements
3. Design of Modems and Software Define Radio
4. Automated University Management System
5. Medical facility Management Systems
6. Library Management System
7. Automated Utility Metering
8. Enterprise Management Information System (EMIS)
9. Automated Test Management System
10. RFID based automation services
11. Optical Networking Technologies including OBS & GMPLS
12. Open Source Tools and Technologies Development
13. DSP Trainer Development
14. Energy Invoice Processing Automation System Development
15. Sensor Network Technologies
16. Free Space Optical Communication
17. Multicore Processors Characterization & Evaluation Virtualization and Cloud Computing
18. Distributed Computing
19. Kernel Profiling
20. Software outsourcing
21. Advanced GSM/GPRS/Edge VAS development
22. Trainings on specialized topic from the above list

RESEARCH & ALLIED SERVICES

DIRECTORATE OF RESEARCH, EXTENSION & ADVISORY SERVICES

Director General Research

Prof. Dr. Noor Muhammad Sheikh

The Directorate performs a variety of functions to promote research, extension and advisory services in the University. These include the following.

(a) Function of the Directorate

- Regulate M.Sc., M.Phil, and Ph.D. programmes
- Provide funds and monitor faculty research
- Provide funds for M.Sc., M.Phil and Ph.D. Research
- Approve, thesis titles, supervisors and examiners
- Co-ordinate the split Ph.D. programme with foreign universities.
- Award of Research Assistantships
- Sponsoring collaborative research work in Engineering and Architecture, City & Regional Planning and allied disciplines at the University and promote the research work
- Coordinating advisory services of the university for the benefit of the government departments and industries
- Arranging evaluation of research publications of faculty members and publishing of Research Journal of the University

(b) Research Centre

Research is an essential element of higher education. In the realization of this objective, soon after its establishment in 1961, the University set up a Directorate to organize and promote Research and Advisory Services. However, the phenomenal increase in the number of students at the undergraduate level, so over-whelmed the University that the development of research lagged behind considerably.

To arrest this situation, an effort was made in 1986 to establish an Advanced Research Centre, but unfortunately it could not take off, due to lack of financial support by the Government. However, in 1998-

99 it was decided to set up a Research Centre at the University from its own resources to start with. An adequate space has been allocated for the Centre out of the existing academic blocks. Necessary equipment and machinery is also being arranged for the Centre from various sources. A faculty unmatched in caliber is already available in the University, which can conduct and guide research in the fields of vital importance for the economic development of the country. In addition, full-time research assistants have been registered for post-graduate research and M.Sc. studies on a stipend of Rs. 5,000/- per month each. The research work will mainly focus on solving the problems faced by the Industry and private entrepreneur.

The following laboratories are functioning in the Research Centre.

Part – I

1) Product Research Laboratory:

To meet the needs of industry, this laboratory shall provide research base for critical analysis of contemporary equipment and its indigenous production. It will have the service of experts from Electrical, Mechanical and Metallurgical Department.

2) Advanced Electronics Laboratory:

This laboratory shall focus on research in the development of electronic components, silicon chips, printed circuits, integrated circuits, fiber optics and laser equipment.

3) Communication Systems Laboratory:

In this laboratory digital communication, internet, digital signal processing and wireless communications are major areas.

It is envisioned as a hub between industry and university in the realm of Mechatronics Engineering. Since its inception in 1999, this laboratory has been providing research facilities to its graduate students and faculty members. A team of well qualified Mechatronics and Electrical Engineers guide the researchers. The future of this lab is targeted towards Biomedical Engineering and Embedded Systems..

RESEARCH & ALLIED SERVICES

4) Advanced Engineering Materials Laboratory:

This laboratory will facilitate research on the development of Advanced Engineering Materials including alloys, polymers, and ceramics.

5) IT Research Laboratory:

This lab conducts research in emerging areas of software development. At present research being conducted in the areas of image processing, face recognition, Urdu speech recognition, artificial intelligence and office automation projects.

6) Environmental Management Laboratory:

This laboratory shall focus on research in efficient management of environment.

7) Advance Physics Laboratory:

This laboratory shall provide research facilities to the post-graduate students in the field of Advance Physics.

8) High Tech Centralized Resource Lab:

Government of Pakistan has provided a grant to UET for establishing this high technology laboratory to support inter-disciplinary and multi-disciplinary research activities at the University.

9) Computer Cell:

Computer Cell (Information and Communication Technology) is running the ISP of the University and providing the Internet, E-mail facility, software and hardware support to the users and responsible for maintaining the official website of the University. Computer Cell also provides the Digital Library access for searching, reading and downloading the research papers.

Part – II

It is proposed that the following laboratories shall be established during the second phase.

1) Automotive System and Energy Conservation Laboratory:

In this lab the focus of research shall be on the development of efficient automotive systems with lowest fuel consumption.

2) Chemical Engineering Indigenisation Laboratory:

To meet the demand of the industry, this laboratory shall develop pilot projects for the production for industrial chemicals. It will be led by a team of experts from Chemical Engineering Department, Chemistry Department and Mechanical Engineering Department.

3) Low Cost Construction Engineering Laboratory:

The purpose of this laboratory will be to develop techniques for the construction of low cost structures, roads and bridges, etc. It will have the services of experts from Civil and Architecture Departments.

Part – III

In addition, the Centre shall have the following two sections with functions shown against each.

1) Project Appraisal and Management Section:

It will carry out an appraisal of the research project, assign it to the concerned laboratories and furnish the research outcome to the tasking agency.

2) Total Quality Management Section:

This section will provide guidance on quality management in the light of latest International Standards.

The Centre will be headed by Director General Research who will coordinate the functioning of various laboratories with the help of Chairmen of various Departments concerned.

RESEARCH & ALLIED SERVICES

PLACEMENT BUREAU

Prof.Dr. AKHLAQ AHMAD MALIK

Chairman

One of the important functions of the Placement Bureau is to search and develop contacts with the industry and R&D institutes in public and private sectors of the country in order to identify prospective employers, jobs, scholarships and internship training for UET students.

UET Placement Bureau acts as a bridge between UET graduates and employers and donor agencies for scholarships, financial assistance, loans etc. The Bureau is committed to provide friendly and efficient services to UET students, graduates, employers and scholarship donor agencies. It provides information to the students with the recent jobs and scholarships available by displaying the information on the UET notice board frequently. Students get to know the different areas where they can grow as engineers and enhance their natural and technical skill which they developed during their stay as students in the University. It frequently arranges visits of the Prospective employers and their discussions with faculty members and students of relevant departments regarding the emerging need and training of the students in the same direction. The Placement Bureau facilitates various organizations in the process of pre-selection of students who are about to complete their studies by arranging tests and interviews of prospecting candidates for placement in the industry. As a result, the Placement Bureau maintains a mailing list of major companies employing engineers who are constantly informed about the graduating classes at proper time.

1. FINANCIAL ASSISTANCE FOR STUDENTS

The Placement Bureau looks after Needy Scholarships and Financial Assistance programme of the University for deserving students. These Scholarships are awarded by either government agencies or other sources both from local and international donors.

Some of the key sources are listed below.

- 1) Bestway Foundation, Islamabad.
- 2) Fauji Fertilizer Company Limited, Rawalpindi.

- 3) Sui Northern Gas Pipelines Limited, Lahore.
- 4) Gurmani Foundation, Lahore.
- 5) Pakistan Foundation London (Dr. A. Q. Khan Scholarship, London)
- 6) NESPAK Scholarship
- 7) ICE QUEST-G.Haider Scholarship, London (For Civil)
- 8) Iqbal Begum Scholarship, Lahore (For Civil)
- 9) Insaf Trust Scholarship, Lahore. (For Civil)
- 10) Khan I. U Durrani Merit Scholarship U.S.A. (Final year)
- 11) Zubeda Habib Scholarship (For Chemical)
- 12) The Institute of Engineering Society, Saudi Arabia(IEP SAK)
- 13) Zanib Bashir Scholarship, Lahore
- 14) Social Welfare Activities (SWA)
- 15) M. Ashraf Siddique Scholarship, Lahore
- 16) Class 49- Golden Jubilee Scholarship, Lahore.
- 17) Begum Nasira Kiani Scholarship, Lahore.
- 18) Omar Aftab Memorial Trust Scholarship, Lahore
- 19) Chemical Engineering Scholarship (For Chemical)
- 20) Begum Hameeda Durrani Merit Scholarship USA (Final year girls only)
- 21) Babar Ali Foundation, Lahore (girls only)
- 22) Bano Meraj Charitable Trust Scholarship.
- 23) Pakistan Engineering Congress Scholarship.
- 24) Coca Cola Scholarship.
- 25) Hemeeda Mehrunnisa Trust Scholarship, Lahore.
- 26) UET-Overseas Scholarship, Abu Dabi
- 27) Bari Khalil Scholarship. UK
- 28) Petroleum Institute of Pakistan.
- 29) Pak Telecom.
- 30) Board of Revenue Endowment Fund Scholarship. (Govt. of Pakistan)
- 31) Pakistan Bait-UI-Mal. (Govt. of Pakistan)
- 32) Dr. Safdar Hussain Memorial Scholarship, Lahore.

RESEARCH & ALLIED SERVICES

DIRECTORATE OF EXTERNAL LINKAGES

Prof. Dr. Shahid Naveed

Director

- Chartered Institute of Logistics (CILT), Pakistan

The directorate undertakes the tasks of industrial linkages, international linkages and liaison with national and international agencies. The scopes of these activities are development of mutual understanding, promotion of collaborative projects, research, facilitation for jobs, higher studies, short term training and other interests. The university has signed the following MOUs of mutual cooperation: -

- Saadullah Khan & Brothers (SKB), Lahore
- Synthetic Products Enterprises Limited, Lahore
- Huawei (Pvt) Limited, Islamabad
- Oil and Gas Development Company Ltd
- Schlumberger Seaco
- Lahore Chamber of Commerce & Industry
- Sui Northern Gas Pipeline Limited (SNGPL)
- Alternate Energy Board (AEDB)
- SUPCON, China

Similarly, cooperation is being promoted on international forum and MOUs have been signed with the following universities: -

- University of South Carolina at Columbia, USA
- Michigan Technological University, USA
- University of Regina, Canada.
- University of Tokyo, Tokyo Japan.
- United Nations University, Tokyo, Japan.
- University of Manchester (UMIST) U.K.
- University of Aden, Yemen
- Anhalt University, Germany.
- Patronas University, Malaysia.
- Queen Mary University of London, UK.
- ZTE University, China
- Michigan State University, USA

RESEARCH & ALLIED SERVICES

STUDENTS TUTORIAL & GUIDANCE BUREAU

Senior Tutor

Prof. Dr. M. Fiaz Hussain Shah

Assistant Councillor

Ms. Tayyiba Mushtaq

The University is concerned not only with imparting knowledge and skills but also with the overall development of the students. The aim is to produce young engineers who have stable and harmonious personalities, and are well-adjusted with their surroundings. The Bureau assists in the realization of these objectives. It offers counselling services to students who may have any

psycho-social problems or face any difficulty in coping with their academic roles and responsibilities. To play its role effectively, the Bureau endeavors to maintain students' physical, psychological and personal data. Such data helps the counsellors in making their services more useful and effective.

DIRECTORATE OF STUDIES

Director

Prof. Dr. Ghulam Abbas Anjum

The directorate has the following responsibilities:-

- ▶ To organize undergraduate teaching in different departments of the University
- ▶ To monitor the progress of the teaching during the academic session and to prepare comprehensive report for administration.
- ▶ To function as a liaison office between the departments for the smooth

- conduct of the courses.
- ▶ To coordinate academic activities of departments and to ensure the in time completion of courses by respective departments.
- ▶ To provide facilities to the students through their class representatives to solve their personal problems

RESEARCH & ALLIED SERVICES

NATIONAL LIBRARY OF ENGINEERING SCIENCES

Prof. Dr. Syed Tauseef Ahmad

Chairman Library Committee

The central Library of the University has the honor of having been chosen by the Higher Education Commission to serve as the primary resource center for engineering and technical education in Pakistan. As such, it has significantly improved its book holding and it is going through an ambitious program of computerization of its services and operations. Housed in a dedicated three-storey structure, the Library offers peaceful, air-conditioned atmosphere for its members. It is a lending library, and most of its holdings are available to members on loan. The Library holdings can be browsed through an Internet based fully searchable catalogue.

Hardcopy Resources

The Library houses more than 80,000 (after weeding out) volumes of books, over 22,000 volumes of bound serials, and roughly 600 scattered issues of scientific and technical serials. The balance of these library holdings is somewhat tilted towards engineering and technical subjects. However, there is a reasonable amount of reading material on humanities, basic sciences, social sciences and Islamic studies as well, and as a matter of policy the Library is committed to improve the diversity of its holdings.

Internet and Computing Facilities

As the primary resource center of a technical university, the library is also committed to provide access to electronic media and Internet to its members. At present, the library offers over 60 computers with high-speed dedicated Internet access for use of its members. These computers also

provide a dedicated link to HEC Digital Library, Ebrary, McGraw Hill Digital Engineering Library, etc., that provides access to over 18000 e-journals spanning all fields of academic endeavor. There are also active plans to develop Soft-Library to support ongoing research within UET.

Other Facilities

The Library also has excellent facilities to support scholarly activities within its premises. These include a well-equipped seminar hall, conference room and necessary support services. Other library services include subsidized scanning, printing, photocopying and binding. The library also operates a Book Bank which lends textbooks to students for a complete academic session on nominal rent.

Current Projects

The Library is in a process of integration with various departmental Libraries on the Lahore Campus. This shall result in a Library System where all Library resources on the campus shall be accessible to all members in a seamless way. Later on Libraries of other UET Campuses shall also be included in this System. Other developments projects include an RFID based automated and secure Library Management System which is being carried on by KICS.

URL: www.library.uet.edu.pk

E-MAIL: lib@uet.edu.pk

RESEARCH & ALLIED SERVICES

SOFTWARE ENGINEERING CENTRE

Director

Prof. Dr. Mohammad Ali Maud

The Information Technology Centre is the first Centre of its kind set up in Punjab. It has four IT Laboratories, and an air-conditioned library. All IT laboratories have Internet facility. The Centre has expansion capacity to add four more laboratories. The Information Technology Centre is equipped with computers in the state of art Network environment.

The University students and the staff have access to the required information for processing under the appropriate security system through the available Servers which have been linked using Fiber Optics with the Computer Science Department and Software Engineering Labs. The available facility in the IT Labs are being linked with UET Research Centre as well as with the other departments. The total capacity of Information Technology Centre, Computer Laboratories is about 170 workstations.

Activities at the Software Engineering Centre

1. Training programs in collaboration with Punjab Information Technology Board such as Oracle Software course for Instructors, Certificate in Oracle Database Management (CODM), JAVA Training program for

Instructors.

2. The Centre provides Computing facilities for the students of M.Sc. (Information Technology) M.Sc. (Software Engineering), M.Sc. (Computer Science Morning/Evening programs) as well as B.Sc. (Hons) in Computer Science, Software Engineering & Information Technology.

Close to the CS & IT Department, Computer Laboratories for students and staff have been set up which have the capacity to accommodate 120 computers at a time. The university has plans to install latest computers in these laboratories in the near future.

The labs are linked with Software Engineering Centre and the Computer Science Department, which are utilized for the students of B.Sc. engineering, B.SC.(Hons) Computer Science, Information Technology & Software Engineering, as well as M.Sc. Computer Science.

All classrooms are air-conditioned with four most modern labs equipped with most recent computers P-IV. These labs are also linked with the internet

ADVISORY SERVICES FOR FOREIGN STUDENTS

Advisor

Prof. Dr. Muhammad Yusuf Awan

The University had established Advisory Services for Foreign Students in addition to the Directorate of Students Affairs. There are Foreign Students from more than 15 countries. The Advisor's Role is to provide them guidance in their academic matters and also organize Socio-cultural functions at important occasions with help of the students. These functions include

celebration of the Independence Day of Pakistan, Eid-ul-Fitr and Eid-ul-Dhoha etc. The students can also organize celebrations of the National festivals etc of their own countries with permission of the university authorities through the Advisor.

RESEARCH & ALLIED SERVICES

THE UNIVERSITY PROCTORIAL BOARD

Chairman

Prof. Dr. Muhammad Yusuf Awan

The Proctorial Board has been functioning for the last several years. Its role is to provide assistance to students in the enhancement their academic and extracurricular activities. Its role also includes maintenance of discipline at the campus and provision of academic guidance to the students.

The Proctorial Board comprises of a Chairman as well as about 15 Teacher Proctors selected from senior teachers of various departments/disciplines of the University. The most essential part of the Board is Students' Class

Representatives (CRs.) and Students' Proctors. They are from each section/class of every discipline of the University. The CRs. and Student Proctors are those students who stand First and Second in their previous Examinations respectively in each section/class. After declaration of the result of every examination of the university new CRs and Student proctors are notified. Thus a healthy academic competition continues among the students

REPAIR AND MAINTENANCE CENTRE

Chairman

Prof. Dr. Nadeem Ahmad Mufti

Ever since the establishment of various laboratories in the University of Engineering and Technology, need for providing back-up repair and maintenance support has always been felt. A serious effort was made in this regard in 1995 when the matter was taken up with the government to set up a centre for Repair and Maintenance of Scientific Instrument. However, the project could not materialize for want of financial allocation. The furnishing of University laboratories with modern sophisticated equipment through Japanese assistance once again necessitated the setting up of a Repair and Maintenance Centre. This facility started with University own resources & upgraded through HEC funded project.

The Repair and Maintenance Centre consists of three sections as under.

- (i) Electrical and Electronic Instruments/equipment repair section
- (ii) Micro processor based instruments/equipment repair

section

- (iii) Mechanical, hydraulic and pneumatic devices repair section

The functions of the Centre include:

- a) Routine maintenance and calibration of laboratory equipment and instruments.
- b) Repair of electronic, electrical mechanical, hydraulic, pneumatic and microprocessor based equipment.
- c) Repair and Maintenance services to non-laboratory equipment.

The center has its own director who is guided by a Management Board headed by the Vice Chancellor. Each of the sections has trained staff for repair/maintenance.

RESEARCH & ALLIED SERVICES

DIRECTORATE OF STUDENTS AFFAIRS

Director

Prof. Abdul Jabbar Bari

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 main 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 dignified and disciplined behaviour, which behaves a University student and a prospective member of the honoured community of engineers, architects, planners and scientists

DIRECTORATE OF SPORTS

Chairman Sports Committee

Prof. Dr. Muhammad Akram

The University provides ample facilities to the students for participation in games and sports, both outdoors and indoors. Facilities are provided for all the major sports including cricket, Hockey, foot Ball, tennis, badminton, basketball, squash table Tennis, Body Building and athletics. A series of inter faculty and inter hostel tournaments are held to provide participation to the maximum number of students. Outstanding sportsmen are encouraged to

take part in the inter-universities tournaments under shed of Higher Education Commssion. The sports complex is a commanding feature of the campus landscape and has, amongst other things, an Olympic-size swimming pool, tennis and squash courts a gymnasium and an impressive stadium

TRANSPORT SECTION

Chairman, Transport Committee

A large fleet of buses is maintained by the University. Transport facility is provided to day-scholars as well as hostel students against nominal charges. The buses for day-scholars ply on different routes within the Lahore Municipal Corporation limits. The details of different pick and drop points are available

with the Transport Section (Phone No: 9029466) Evening shopping routes are arranged for hostel students

RESEARCH & ALLIED SERVICES

HALLS OF RESIDENCES

Senior Warden

Prof. Dr. Fiaz Hussain Shah

The University has ample provisions for hostel accommodation. It has fifteen halls of residence with accommodation for about 2700 students. The halls reflect history of the institution through variations in the architectural styles over the last half a century. Some of them are of the pre-independence period, inherited from the former Maclagan College of Engineering or the Sikh National College whereas others were built over a period of quarter of a century since the inception of the University.

Al-Zohra Hall, Khadeeja Hall and Ayesha Hall are for girl students having accommodation capacity of 425 students.

The Senior Warden's Offices are housed in the Administration block.

Each hall is looked after by a Resident Tutor. Many aspects of the life in halls are managed by the students themselves such as the boarding arrangements. The halls are provided with common rooms, canteens, prayer rooms, internet facility and other common utilities. 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.

The names of the halls of residence are as follows:-

Name of Hostel	Phone No.
Khadeeja Hall	9250232
Al-Zohra Hall	9250242
Ayesha Hall	6824404
Ali Mardan Hall	9250244
Allama Iqbal Hall	9250236
Liaqat Hall	9250235
Mahmood Ghaznavi Hall	9250231
Muhammad Bin Qasim Hall	9250239
Mumtaz Hall	9250238
Quaid-a-Azam Hall	9250243
Sir Syed Hall	9250237
Umar Hall	9250233
Usman Hall	9250233
Zubair Hall	9250240

RESEARCH & ALLIED SERVICES

Sr. No.	Name of Resident Tutors	Hostel Name
1.	Dr. Neelum Naz (Warden Girls Hostels/RT) Professor, Architecture Department	Al-Zohra Hall
2.	Dr. Sajjad Maqbool Assistant Professor, Department of Transportation Engg & Management	Mumtaz Hall(W)
3.	Mrs. Sabahat Arif Khan Assistant Professor, Architectural Engg & Design Department	Khadeeja Hall
4.	Mrs. Monaza Hussnain Bio-Chemist University Health Clinic	Ayesha Hall
5.	Mr. Muhammad Shafique Assistant Professor, Department of Mathematics	Quaid-E-Azam Hall
6.	Mr. Mansoor Iqbal Assistant Professor Mining Engineering Department	Umer Hall
7.	Mr. Muhammad Mushtaq Assistant Professor, Mathematics Department	Zubair Hall (W)
8.	Mr. Zohaib Akhtar Lab Engineer/Lecturer Electrical Engg. Department	Zubair Hall (E)
9.	Mr. Saqib Ahmad Saqi Lecturer Mining Engg. Department	Liaqat Hall
10.	Mr. Ijaz Ahmed Assistant Professor City & Regional Planning	Sir Syed Hall

RESEARCH & ALLIED SERVICES

11.	Mr. Ishtiaq Ch Lecturer/Lab Engineer Mechanical Engg Department	S.M. Ghaznavi Hall
12.	Mr. Dr. Asad Ullah Qazi Assistant Professor, Civil Engineering Department	Allama Iqbal Hall
13.	Mr. Sagheer Abbas Ranjha Lecturer, Mechanical Engineering Department	M.B.Q Hall
14.	Mr. M. Rehan Hashmat Lecturer/Lab Engineer Petroleum & Gas Engg. Department	Usman Hall
15.	Mr. M. Farhan Lecturer/Lab Engineer Mechanical Engineering Department	Ali Mardan Hall
16.	Mr. Naveed Nawaz Lecturer/Lab Engineer Electrical Engineering Department	Mumtaz Hall (E)

STUDENTS SECTION

Convener, Admission Committee
& Incharge Students Section

Prof. Dr. Salim Abid Tabassum

This Section is located on the ground floor of the administration Block it deals with all matters relating to admission at undergraduate and postgraduate levels. Registration of new students, issuance of provisional certificates, verification of documents, preparation of

faculty cards and issuance of No Objection Certificates is also dealt with at this section.

RESEARCH & ALLIED SERVICES

HEALTH CLINIC

Prof. Dr. Khalid Mahmood ul Hasan

Chairman Health Committee

Dr. Muhammad Amin

Chief Medical Officer

The University provides medical cover to its employees and students under the supervision of a health Committee. On the request of a Resident Tutor, the Doctor may visit a patient in hostel if he is unable to move from bed.

The students are supposed to cooperate with the medical officer in maintaining record of their illnesses to enable him to issue medical certificates, when needed. The day-scholars can have their medical

certificates countersigned from the University Medical Officer if they are treated by an outside registered medical practitioner. Medicines, however, are not issued from the clinic on prescription of an outside medical practitioner.

**RULES & REGULATIONS
RELATING TO
ADMISSIONS AND EXAMINATIONS
IN
UNDERGRADUATE COURSES**

REGULATIONS

1. EXAMINATIONS:

The regulations relating to the semester system of teaching and examinations of bachelor degree applicable from the session 2006.

DEFINITIONS

- a). "University" means the University of Engineering and Technology, Lahore.
- b). "College" means the Constituent/Affiliated College of the University.
- c). "Faculty" means the concerned faculty of the University.
- d). "Vice-Chancellor" means the Vice-Chancellor of the University.
- e). "Pro Vice-Chancellor" means the Pro Vice-Chancellor of the University.
- f). "Dean" means the Dean of the concerned faculty.
- g). "Principal" means the principal of a college.
- h). "Chairman" means the Chairman of the concerned department of the University/College.
- i). "Controller" means the Controller of Examinations of the University.
- j). "Student" means a bonafide student of a degree program of the University who does not maintain admission simultaneously in any other degree/diploma program of the University or in any other Institution.
- k). "Candidate" means a student who intends to appear in an examination.
- l). "Board of Studies" means the Board of Studies of the concerned discipline of the University/College.
- m). "Academic Year" means a year normally consisting of two semesters of 18-20 weeks duration each inclusive of examinations and 12-14 weeks of Summer Vacations, internships or any other academic activity.
- n). "Subject" means a course of studies as prescribed in the detailed syllabi approved by the competent authority. It shall consist of Part-1 (Theory) or Part-II (Practical) or both. Each shall be considered as a separate paper.
- o). "Mid-Term Examination" means the examination to be held after 7-8 weeks of teaching on such dates as the University may determine.
- p). "End-Term Examination" means the examination to be held at the end of each of each semester on such dates as the University may determine.
- q). "Internal Examiner" normally means a teacher/person appointed by the competent authority who has been teaching the subject to the normal

class/section during the semester for which the examination is being held.

- r). "External Examiner" means a person holding suitable qualifications in the relevant discipline who is neither a teacher in the University nor has taught the subject to the class/section during the semester for which the examination is being held.
- s). An "Outstanding Subject" means a Part-I or Pat-II paper in which a student is awarded "F" grade in a semester.
- t). "Credit Hour" means one hour of theory lecture or 2-3 hours of practical work per week for the semester.

Explanations

- 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.

Degree Programs at Main Campus

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

- 1) Electrical Engineering
- 2) Computer Engineering
- 3) Computer Science
- 4) Mechanical Engineering
- 5) Mechatronics and Control Engineering
- 6) Industrial and Manufacturing Engineering
- 7) Civil Engineering
- 8) Environmental Engineering
- 9) Transportation Engineering
- 10) Building & Architectural Engineering
- 11) Chemical Engineering
- 12) Polymer Engineering
- 13) Mining Engineering
- 14) Geological Engineering

REGULATIONS

- 15) Petroleum and Gas Engineering
- 16) Metallurgical and Materials Engineering
- 17) City and Regional Planning

Bachelor's Degree shall be awarded in the following disciplines.

- 1) Architecture
- 2) Product and Industrial Design

Degree Programs at City Campus (KSK)

- 1) Mechanical Engineering.
- 2) Electrical Engineering
- 3) Chemical Engineering

Degree Programs at Faisalabad Campus

- 1) Electrical Engineering
- 2) Mechatronics & Control Engineering
- 3) Chemical Engineering

Degree Programs at Rachna College of Engineering & Technology

- 1) Electrical Engineering
- 2) Mechanical Engineering
- 3) Industrial & Manufacturin Engineering
- 4) Computer Science

Regulations Governing the Semester System of Teaching and Examinations of B.Sc. Degrees:

Regulations Governing the Semester System of Teaching and Examinations of B.Sc., B.Arch and B. PID Degrees

24th April 2009

Degree Duration

1.1 The minimum duration of the degree program shall not be less than four academic years in case of Engineering, Computer Science, City and Regional Planning, Product and Industrial Design and five academic years in case of Architecture and Building & Architecture Engineering (up to session 2007 only).

1.2 The maximum duration of the degree program shall not be more than six academic years in case of Engineering, Computer Science, City and Regional Planning, Product and Industrial Design and seven academic years in case of Architecture and Building & Architecture Engineering (up to session 2007 only).

Credit Hours Requirement

1.3 The minimum credit hours required for the award of degree shall not be less than 140 in case of Engineering, Computer Science, City and Regional Planning and 170 in case of Architecture and Building & Architecture Engineering (up to session 2007 only).

Medium of Instruction

1.4 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.

Curriculum

1.5 The course of study, the credit hours (CH) allocated to each subject and detailed syllabus shall be according to the proposals made by the Board of Studies concerned and approved by the Syndicate on the recommendations of the Board of Faculty concerned and the Academic Council.

REGULATIONS

Regulations Regarding Theory Paper (Part-I)

1.6 In Part-I of a subject, there shall be a mid-term examination of one hour duration and an end-term examination of at least one and a half hour duration. These examinations shall carry 30 and 40 percent weight of the Part-I of that subject respectively. A minimum of two short quizzes and a minimum of two home assignments shall carry the remaining 30 percent weight for Part-I of that subject. The teacher may assign some weight from within this 30% weight to class participation. Students joining late during the first semester due to official delays shall be provided an opportunity, to appear in all the missed examinations and submit all the missed assignments, by the concerned teacher.

Regulations Regarding Practical (Part-II)

1.7 In Part II of a subject, each Experiment, Design, Drawing, Project or Assignment shall be considered an examination. The cumulative performance in all the Experiments performed, Designs, Drawings or Assignments completed during the semester shall carry 100 percent weight for Part II of the subject. Teacher(s) of Part II shall keep all students informed of their performance at every stage in each category of task performed. Students joining late during the first semester due to official delays shall be provided an opportunity to appear in all the missed examinations by the concerned teacher. At the end of semester and before the commencement of end-term examination, teacher(s) would prepare a comprehensive award list. This list would show marks earned in each category of the task performed and the cumulative score earned by the student, out of 100. The teacher(s) would assign letter grades to the comprehensive scores in consultation with the chairman according to the prescribed guidelines. This list along with letter grades would be displayed for three days on notice board for the students to see and discuss anomalies, if any. Following this period, one copy of the comprehensive award list along with letter grade would be sent to the Controller through the chairman of the department. One copy each would be retained by the chairman and the teacher. It is the

responsibility of the chairman of the department to ensure correctness of the comprehensive award list.

Conduct Examination and Final Year Project Evaluation

1.8 For all examinations, the teacher or teachers of a subject shall set the question paper of that subject, supervise its examination, mark the answer books and prepare the award list. However, External Examiners shall be involved for the Final Year comprehensive projects. Continuous Assessment and Final Viva-Voce Examination for the Comprehensive Final Year Project may carry 60 and 40 percent weight respectively, or the department may introduce its own weights as deemed necessary.

Part-I Evaluation Process and Transparency

1.9 Every subject teacher(s) of Part I shall return the marked quizzes, assignments and mid-term examination scripts to the students for review. Mid-term scripts, however, would be recovered from the students and deposited with the chairman concerned. It is required that the students should know their complete results excluding the End-Term before commencement of the End-Term examinations. Teacher(s) would mark the End-Term examination scripts within one week after its completion. The teacher(s) would prepare a comprehensive award list indicating: (a) marks earned in each quiz; (b) marks earned in the Mid-Term Examination; (c) marks earned in assignments; (d) marks earned in the End-Term Examination; and (e) Cumulative score in percent, earned as a whole, by each student according to weights assigned to each category of examination/tests according to para (6) of these regulations. The teacher(s) would assign letter grades to the comprehensive scores in consultation with the chairman according to the prescribed guidelines. This comprehensive award list along with letter grades would be pasted on the notice board for three days for students to see and discuss anomalies, if any. The students may be shown the end term examination marked scripts, if they so desire. Ten days after the End-Term examination, one copy of this comprehensive award shall be

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sent to the Controller through the Chairman of the Department and one copy each shall be retained by the chairman and the teacher. It is the responsibility of the chairman of the department to ensure correctness of the comprehensive award list.

Official Authority for Computation of Result

1.10 Grade points (GP) in each subject, Semester Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) of each student shall be computed by the Controller at the end of each semester.

Award of Letter Grades

1.11 Letter Grade shall be awarded on a Relative Scale. Minimum achievement standard linked to content mastery is established. Student's performance relative to his peers forms the basis for award of a grade with minimum standard in perspective. Award of grades may be based on a normal curve or any other method as deemed suitable. An upper limit on percentage of students in a course that can have a particular grade may be placed, if required.

The letter grades and their corresponding grade points are given in the table below.

Table: Letter Grades And Corresponding Grade Points

A+	A	B+	B	B-	C+	C	C-	D	F	W
4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.0	0	-

Result Computation Scheme

1.12 The GPA and CGPA shall be computed according to the following formula:

$$GPA = \frac{\sum (GP_i * CH_i)}{\sum CH_i}$$

$i = 1$ to n , where n is the number of subjects in the semester for which GPA is computed.

$$CGPA = \frac{\sum (GP_j * CH_j)}{\sum CH_j}$$

$j = 1$ to m , where m is the number of total subjects covered in all semesters up to the semester for which CGPA is to be computed.

Withdrawing From a Subject

1.13 A student may withdraw from a course latest up to one week after the mid term examination. The student shall submit an application on a prescribed form for this purpose. Permission to withdraw shall be granted after approval by the chairman of the student's department. Withdrawn subjects shall appear in the transcript with a letter grade "W", and will not be treated as "F" grade. Subjects repeated after withdrawal will not be suffixed with a "R". Maximum six(6) Part I and six(6) Part II subjects may be withdrawn during the complete duration of study by a student.

Dismissal From the University

1.14 The name of a student shall be removed from the rolls of the university, if, (a) he fails to maintain a minimum CGPA of 1.0 at the end of first year of his studies at the university including the summer semester; Or, (b) he withdraws from Part I of five(5) or more subjects and/or Part II of five (5) or more subjects during first year of his studies at the university including the summer semester.

Repetition of Subjects

1.15 He has to repeat and pass subjects from which he has withdrawn. He may also repeat subjects in which he is passing but has earned a grade less than a "C" grade. A maximum of six(6) Part I and six(6) Part II of subject repetitions, including repetitions for 'W' grade, are allowed for this purpose. In case of repetition of a subject, the new grade earned shall replace the previous grade, whether high or low. However, there is no restriction on number of repetitions allowed for improving 'F' grades, if repeated within the maximum allowable period of six years. He may only get the opportunity to repeat a subject during summer semester or after completion of his eighth regular semesters at the university. Subjects repeated to

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improve grades, excluding "W" grades, will be shown on the transcript with a suffix "R".

Award of Degree

1.16 A minimum CGPA of 2.0 with all 'W' grade subjects repeated, if any, and without any 'F' grade for the prescribed subjects offered during all semesters of a degree program shall be required for the award of degree. Students shall qualify for a *Degree with Honors* if they satisfy the following conditions: (a) Have earned a CGPA of 3.70 or above out of a maximum of 4.00; (b) Have not repeated a course; (c) Have not withdrawn from a course; and (d) Have not earned an 'F' grade during the course of study. Students deferring (freezing) semester(s) may qualify for the award of Honors degree if they fulfill the conditions, however, they shall not qualify for any merit position/rank. All subjects studied for the first time after deferment, shall not be treated as repeated subjects.

Dean's Honour Roll

1.17 At the end of each semester, there shall be a Dean's Honour Roll of students earning a Sem GPA of 3.7 and above without any "W" grade during that semester.

Summer Semester

1.18 A summer semester of 8 weeks duration shall be scheduled during summer holidays. All policies governing regular semester shall be followed during summer semester. Contact hours during summer semester shall be doubled to ensure that a course is completed in half the duration as compared to the regular semester. All attendance and result display policies, during the summer, would be followed as done in regular semester. A student may only register for a maximum of three (3) Part I of subjects and a maximum of three (3) Part II of subjects during the summer semester.

Disposal of Answer Scripts

1.19 Answer sheets of mid term and end semester examinations will be stored in the respective department for one calendar year after declaration of result of that semester. The sheets would be destroyed subsequently.

Grade Change Request

1.20 A student may submit a Grade Change Request to the chairman's Office specifying the specific reason for change in grade. Grade Change Requests must be submitted not later than one week after the first grade was posted or within the first week of the following semester, whichever is later. The request will be routed to the concerned faculty member. Normally, the only person who can change a grade is the faculty member who gave the grade; however, in case that faculty member is no longer available or cannot be reached, the department chairman has the authority to evaluate the situation and change a grade, if required. When a grade is to be changed, the chairman shall forward the case to the Dean with justification for change. The result will be modified after approval of the Vice Chancellor.

Registration of Students

1.21 Within first fifteen days of the beginning of each semester excluding the first semester, Chairman of each department shall register students in subjects being taught during that semester in his department. Registration roll in each subject of the semester shall be dispatched to the Controller of Examinations.

Deferment of Studies (Freezing)

1.22 (a) If a student fails to attend classes during the first four weeks after commencement of a semester excluding the first semester, his admission shall stand canceled automatically.
(b) A student may defer studies for at most two consecutive regular semesters, for medical or other genuine reasons, with summer semester not being counted. In such cases, the student shall apply to the Chairman Admissions Committee (CAC), at least 15 days before

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the commencement of the semester, for approval of deferment by the concerned Dean. CAC, after approval, shall notify deferment for a specified period. The student shall rejoin, after this leave, in the next junior class in case of two semesters deferment. However, in case of one semester deferment, he may join his own class subject to his completing the remaining courses after completion of eight regular

semesters or during summer semesters. If a student fails to join within four weeks of commencement of a semester following his approved leave (deferment), his admission shall stand canceled.

(c) In such cases when student's admission has been canceled due to absence, he can appeal to the Vice Chancellor for re-admission, within 6 years of his first admission to the University, as a transfer student. Subjects in which he has earned a grade of "C" or above shall stand transferred and he will be placed in the semester recommended by the department.

Migration (Transfer) Rules

1.23 a) Students from other universities may apply for migration to this university, in accordance with the Migration Policy in vogue. Following conditions shall govern transfer of subjects (credits) to the university for subjects studied elsewhere. Subjects that do not satisfy these conditions shall not be transferred nor given any credit.

i) The course must correspond to a course offered by UET or be deemed equivalent in depth and intensity.

ii) Applicant must have received at least "40%" marks in case of absolute grading system or a minimum of "C" grade or higher in a letter grading system similar to the one the university. In case of any other grading system, the department shall decide with the above minimum limits in perspective. In case, both letter grades and marks are mentioned on the transcript, only letter grade will be considered for the purpose of transfer of semester credits.

b) The accumulative credits accepted for transfer in any program should not exceed one-half (50%) of the total credits required to complete that particular program, in any case.

c) The credits transferred are counted towards the degree requirements of the student. However, GPA of transferred credits shall not be counted towards the calculation of CGPA, and that only "Transferred" shall be written against those subject(s) in which transfer of credits was allowed. In addition, migrated students shall not be eligible for a merit position nor Honours degree.

d) Migrating student may be deficient in subjects as compared

to the class which he has joined. Such a student shall repeat these subjects. In case, he is studying a particular subject for the first time, it will not be classified as repeated subject for him.

2. STUDENTS DISCIPLINE:

2.1 GENERAL:

The students are expected to conduct themselves in a disciplined manner, and to acquire that nature and responsible outlook about life which is expected of them when they graduate into their professional careers. In this regard they are required to abide by a code of honour

and rules of discipline, except from which are reproduced below. Any violation of the rules of discipline can render a student liable to punishment ranging from exclusion from a class or a fine to rustication or expulsion from the University.

2.2 Every student must observe the following code of honour:

- a) He must be loyal, 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 anything which might lower its honour and prestige.
- c) he must be truthful and honest in dealings with all people.
- d) He must respect the elder and be polite to all especially women, children, old people, the weak and 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, sport and habits.
- g) He must help his fellow beings especially those in distress.
- h) He must devote himself faithfully to his studies.

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- i) He must observe thrift and protect property.
- 2.3 **No Student shall:**
- a) Smoke in the class room, laboratory, workshop, library, examination hall, convocation hall and during studio work or academic functions.
- b) Consume alcoholic liquor or other intoxicating drugs within the University Campus or a hall of residence or during the instructional, sports or cultural tours, or survey camps, or enter any such place or attend any such tour or camp, while under the influence of such intoxicants.
- c) Organize or take part in any function within the University campus or a hall of residence, organize any club or society of students except in accordance with the prescribed rules and regulations.
- 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:-
- e) Stage, incite or participate in any walkout, strike or other form of agitation against the University or its teachers and officers.
- 2.4 Every member of the teaching staff shall have the powers and it shall be his duty to check disorderly or improper conduct or any breach of the rules by students occurring in any part of the precincts of the University. Should such misconduct occur in room when the student is under the charge of a demonstrator, the latter shall report the matter without delay to the Chairman of the Department.
- 2.5 The Librarian shall be responsible for maintenance of order in the Library. In case of disorderly conduct or any breach of rules, he may require the student so offending to withdraw from the library for the remainder of the day and shall immediately report the offence to the Chairman of the Library Committee.
- 2.6 The Senior Warden/Warden and the Resident Tutor shall be responsible for maintenance of order among the students in halls of residence or hostels.
- 2.7 The Director of Physical Education shall be responsible for the maintenance of order among the students on or near the play grounds

or while otherwise under his charge.

2.8 A student who:

commits a breach of any of the rules of conduct specified in para 2.3;
or
disobeys the lawful order of a teacher or other person in authority in the University,
or
habitually neglect his work or habitually absents himself from his classes without reasonable cause;
or
willfully damages University property or the property of a fellow student or any teacher or employee of the University,
or
does not pay the fees, fines or other dues leviable under the University ordinances rules and regulations,
or
does not comply with the rules relating to residence in the hostels or halls of residence or the rules relating to the wearing of uniform or academic dress,
or
uses indecent language, wears immodest dress, makes indecent remarks or gestures or behaves in a disorderly manner,
or
commits any criminal, immoral, or dishonourable act whether within the University campus or otherwise which is prejudicial to the interest of the university shall be guilty of an act of indiscipline and shall be liable for each such act to one or more of the penalties under the General Discipline Rules.

3. MIGRATION REGULATIONS & RULES:

- 3.1 Subject to the provision of Regulations, the Vice chancellor may admit a student to the University by migration from other Universities or Institutions according to the regulations.
- 3.2 No student shall be admitted to First Year and Final Year classes by migration.
- 3.3
- 3.4

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- 3.5 Admission by migration to classes other than first year class shall not be allowed ordinarily after the expiry of three weeks from the commencement of the session.
- 3.6 No student shall be admitted by migration from a University or Institution in Pakistan unless he produces a "No Objection Certificate" and Good Moral Character Certificate to the effect that the student has not been debarred from taking University examinations and suspended or not expelled or rusticated from the University or
- 3.7
- 3.8 Institution from which he intend to migrate and that no disciplinary action is pending against him
- 3.9
- An application for admission by migration shall be accompanied by a detailed marks certificate showing the examination passed by a student including Intermediate (Pre-Engg) B.Sc. examination on the basis of which he secured original admission in the parent University or Institution.
 - No student admitted to any University or Institution against seats reserved for special categories shall be eligible for admission by migration.
 - Only those students who possess academic record comparable with admission requirements of this University shall be considered for admission by migration.
 - No student shall be migrated to the University who carries any of his papers of his previous years.
 - The grounds for migration shall constitute changes in circumstances which render it practically impossible for the student to continue his studies in his parent University or Institution.
- 3.10
- No migration shall be allowed to and from the constituent/ affiliated colleges.
 - Migration application will only be entertained on the prescribed application form, obtainable from the Students Section at the cost of Rs: 50/-.
 - Migration fee shall be charged from the candidates allowed to migrate to the University from other Universities/ Institutions under the rules at the following rates
- Rs:2,50,000/- (Rupees Two Lacs and Fifty Thousand only) in case of candidates of Universities/ Institutions abroad.
 - Rs: 2,00,000/- (rupees Two Lacs only) from applicants admitted elsewhere in Pakistan on Self Finance Basis.
 - Rs:25,000/- (Rupees Twenty Five Thousand only) per session to be studied in University of Engineering and Technology, Lahore from the applicants not covered (i) and (ii) above.
- Note:** The genuine and deserving cases falling under category (iii) mentioned above would be submitted to the Syndicate for waiver of the fee
- 3.11 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.
- 3.12 No migration certificate shall be issued unless the student has cleared all University dues.
- 3.13 In case of student who has been debarred from taking University examination or has been expelled or rusticated, no migration certificate shall be issued so far as the punishment is in force.
- 3.14 The Dean of Faculty concerned shall be competent to issue a migration certificate on the prescribed form.
- 3.15 A student who has obtained Migration Certificate from the University but has not secured admission in another institution may be re-admitted to the University in the class to which he can be admitted under the regulation provided that his absence from the current teaching session of that class does not exceed four weeks and further that he surrenders the Migration Certificate.
- 3.16 Any change / addition/ modification, if made, in the above regulations, will also be applicable.

4. REGULATIONS GOVERNING RESIDENCE IN UNIVERSITY HOSTELS (HALLS):

- Hostel accommodation is allotted on the basis of academic merit. However, a student involved in any act of misconduct, ill discipline, violation of rules and involvement in any political and objectionable activities shall be ineligible for the hostel allotment. A resident who violates the above rules/instructions shall be expelled from the hostel alongwith any other penalty as may be imposed by the University.

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- b) A student shall not occupy a room without due allotment. He shall not transfer it to any other person, not exchange it with another student without permission of the Senior Warden.
- c) 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.
- d) A resident who breaks or damages any University property shall have to pay the cost of the article, in addition to any disciplinary action that may be taken against him.
- e) 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.
- f) The residents are advised in their own interest, not to keep in their rooms cash or valuable articles like radios, transistors, or tape-recorders.
- g) The residents shall not use heaters without payment of approved charges and prior permission of the Senior Warden.
- h) the residents are not allowed to use air-conditioners, refrigerators, ovens or similar electrical appliances.
- i) Guests may visit the residents in the hostel between 9.00 AM to 7.00 PM. the residents shall not receive female guests in their rooms, but may see them in the place reserved for the purpose.
- j) Guests are not allowed to stay overnight unless it is permitted by the hostel authorities and accommodation is available in the guest room.
- k) The residents shall be responsible for keeping their rooms tidy and clean. They shall not dispose off litter in the varandahs or other parts of the hostel premises.
- l) Every part of the hostel shall be open to the hostel authorities for inspection at any time during day or night.
- m) The residents are not allowed to wear immodest dress in the hostel.
- n) The residents shall not keep in the hostel any fire arms or other weapons, even if licensed. Violation of this rule shall render a resident liable to expulsion from the University.
- o) A resident shall not indulge in any amusement which is likely to cause nuisance to others.
- p) Any religious ceremony likely to injure the sentiments of other residents shall not be performed in the hostel.
- q) 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.
- r) The residents shall not tamper with the room fittings, nor shall they get the doors fitted with internal locks.
- s) The residents shall not leave lights or fans on when the rooms are not in use.
- t) The gates of the girls hostel shall remain closed for the following hours.
Summer: 22.00 hours to 5.00 hours (April to September)
Winter: 21.00 hours to 6.00 hours (October to March)
- u) The girl residents shall not meet their male guests in or around the hostel premises.
- v) A girl resident shall not leave the Campus without the written permission of the Hostel Authorities.

5. RULES FOR ALLOTMENT OF HOSTEL ACCOMMODATION :

- A) A student seeking admission to a University Hostel shall submit an application to the Senior Warden on the prescribed form.
- B) Allotment will be made by the Resident Tutors under the supervision of the Senior Warden.
- C) Students ordinarily residing within the limits of the Lahore Metropolitan Corporation and Lahore Cantonment shall not be provided hostel accommodation, unless vacancies are available in the hostel after accommodating students from outside the above limits.

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- D) As far as possible foreign students shall be provided hostel accommodation.
- E) Foreign students may be so accommodated that they can have their own mess or messes if they so desire.
- F) The following types of accommodation are at present available in the hostels:
- | | |
|-----------------|-----------------|
| i) Cubicle | ii) Bi-seater |
| iii) Tri-seater | iv) Four-seater |
| v) Five seater | |
- G) Office bearers of hostels such as Prefects, Mess Managers, Common Room Secretaries and proctors shall be entitled to accommodation in Cubicles or bi-seaters provided that the total number of such entitled persons shall not exceed four in each hostel.
- H(1) The order of preference for allotment of the accommodation shall be as follows:-
- M.Sc. (whole time students)
 - Final Year Students
 - Fourth year Arch./AED Students
 - Third Year Students
 - Second year Students
 - First Year Students
- H(2) Within each of the categories mentioned in sub-rule (1) excepting categories (i) and (vi), the order of preference shall be as follows:-
- Students who have passed the next below examination at the regular examination taken as a whole.
 - Students who have failed in not more than three of the papers of the next below annual examination.
 - Others.

6. LIABILITY FOR INJURY, DAMAGE & LOSS

The University teaching programmes include training in its workshops and laboratories, places of engineering and architectural interest, industrial concern, and construction jobs. The University or other concerns shall not be responsible in the event of an injury, damage or loss to a student resulting from any cause whatsoever during the course of such training.

7. MODIFICATION OF RULES & REGULATIONS

The rule and regulations governing various aspects of students life at the University (such as discipline, admissions, examination, migration, fees and charges etc.) are given in this prospectus as they stood at the time of its publication. There is no guarantee that these rules and regulations will remain

unchanged throughout a student's stay at the University, nor does it in any way restrict or curtail the inherent powers for the University authorities to modify them whenever in their judgment any modifications are called for, and to implement the modified rules and regulations from a date which they deem appropriate

ADMISSION PROCEDURES

1. GENERAL INSTRUCTIONS

- 1.1 If you have any query regarding admissions which can be answered satisfactorily on the telephone, you may dial Convenor, Admission Committee at 9029216 and 9029452 at 9029470 during working hours. Members of the University staff will also be available for personal consultation during admission period.
- 1.2 Try to submit the application along with the required documents as early as possible. Do not wait for the last date.
- 1.3 As soon as the process of selection is complete, the merit list will be notified showing the percentage admission marks of the applicants admitted in different disciplines against different categories.
- 1.4 All documents to be attached with the application Form F-I should be attested by a Class-I gazetted officer of the government or Class-A officer of this University.

2. ELIGIBILITY FOR ADMISSION

2.1 Eligibility Requirements:

An applicant for admission to any of the B.Sc. Engineering Degree Courses, B.Sc. City & Regional Planning (CRP), Bachelor's Degrees in Architecture, Product & Industrial Design and Computer Science (Hons) must fulfill the following eligibility requirements:-

He should have passed the Intermediate (Pre-Engineering) Examination with Chemistry, Mathematics and Physics from a Board of Intermediate and Secondary Education of Pakistan or an equivalent examination recognized by the University.

However, Intermediate with Physics, Mathematics and Computer Science shall be acceptable only for Computer Science, Computer Science & Engineering, City & Regional Planning (CRP), Architecture and Product & Industrial Design. Intermediate with Physics, Mathematics and Statistics shall be acceptable only for admission in Computer Science, City & Regional Planning (CRP), Architecture and Product & Industrial Design.

2.2 General Eligibility Requirements:

An applicant for admission to any of the Bachelor Degree course offered by the University must fulfill the following requirements:

- a) He should have obtained **at least 60% marks** in F.Sc/ ICS/ DAE/

B.Sc/ B.Tech(Pass) Examination excluding Sports and Hafiz-e-Quran marks.

- b) He should have appeared in the entry test arranged by this University for that particular Academic Session in which he seeks admission.
- c) He should have at least 60% adjusted admission marks determined as per clause 3 of the prospectus
- d) He should be a bonafide resident of the area from where he seeks admission
- e) He should meet standards of physique and eye sight laid down in the medical certificate. (Form II)

2.3 Seats for Diploma Holders/B.Tech (Pass) Degree:

- a) For admission against seats reserved for the holders of Diploma of Associate Engineer, the candidate should have passed diploma examination of a Board of Technical Education in the relevant technology.
- 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 Auto & Diesel Technology
- ▶ Diploma in Refrigeration and Air-conditioning Technology

Mechatronics and Control Engineering

- ▶ Diploma in Automation Technology

Civil Engineering

- ▶ Diploma in Civil Technology

Chemical Engineering

- ▶ Diploma in Chemical Technology

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Petroueum & Gas Engineering

- ▶ Diploma in Petroleum Technology

Metallurgical Engineering and Materials Science

- ▶ Diploma in Metallurgy & Welding Technology
- ▶ Diploma in Welding & Sheet Metal Technology
- ▶ Diploma in Welding & Fabrication Technology
- ▶ Diploma in Foundry & Pattern Making Technology

Architecture

- ▶ Diploma in Architecture

Mining Engineering

- ▶ Diploma in Mining Technology

- c) Applicants seeking admission against seats reserved for the holders of B.Tech.(Pass) Degree shall not be eligible for admission to the B.Sc./Bachelor's Degree courses mentioned above unless their diploma are in the relevant technology as specified against each degree course as given in clause 2.3 (b).

Explanation:

- 1) A candidate having diploma in any other technology shall not be eligible for admission.
- 2) B.Tech. (Pass) candidate should have his first diploma (on the basis of which he was admitted in B.Tech. degree course) relevant to the branch of Engineering in which he seeks admission.

2.4 Provisions about admission on the Basis of a B.Sc. 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 B.Sc. degree is NOT eligible for admission to any Bachelor's degree course at the University unless he has also passed F.Sc. (Pre-Engineering or Pre-Medical) examination.

2.5 Scope of Eligibility for B.Sc.'s with F.Sc. (Pre-Engineering)

- a) For admission to the B.Sc. degree courses in Engineering other than those mentioned in 2.5 b & c, Computer Science, City & Regional Planning and Bachelor's degree courses in Architecture and Product & Industrial Design, an applicant must have passed the B.Sc. examination with Physics and Mathematics.

- b) For admission to the B.Sc. Courses in Chemical Engineering, Polymer & Process Engineering, Bio-Chemical & Pharmaceutical Engineering, Chemical & Polymer Engineering, Environmental Engineering & Management and Metallurgical & Materials Engineering an applicant, must have passed the B.Sc. Examination with Chemistry.

- c) For admission to B.Sc. Courses in Mining Engineering, Geological Engineering and Petroleum & Gas Engineering, an applicant must have passed B.Sc. examination with TWO of the following subjects:

- | | |
|-----------------|---------------|
| (1) Physics | (2) Chemistry |
| (3) Mathematics | (4) Geology |

2.6 Scope of Eligibility for B.Sc's with F.Sc. (Pre-Medical)

- a) For admission to the B.Sc. degree courses in Engineering other than those mentioned in 2.6 b & c, Computer Science, City & Regional Planning and Bachelor's degree courses in Architecture and Product & Industrial Design, an applicant must have passed the B.Sc. examination with Physics and Mathematics.
- b) For admission to the B.Sc. Courses in Chemical Engineering, Polymer & Process Engineering, Bio-Chemical & Pharmaceutical Engineering, Chemical & Polymer Engineering, Environmental Engineering & Management and Metallurgical & Materials Engineering an applicant, must have passed the B.Sc. Examination with Mathematics and Chemistry.
- c) For admission to the B.Sc. courses in Mining, Geological Engineering and Petroleum & Gas Engineering an applicant must have passed the B.Sc. examination with Mathematics and one of the following subjects:
(1). Physics (2). Chemistry (3). Geology

2.7 Equivalent Examinations

The University recognizes the following examinations as equivalent to the Intermediate (Pre-Engineering) Examination with Chemistry, Mathematics and Physics of the Pakistani Boards of Intermediate and Secondary Education:

- a) Intermediate (Pre-Engineering) Examination of the Board of Intermediate & Secondary Education, Azad Kashmir;

ADMISSION PROCEDURES

- b) Cambridge Overseas Higher School Certificate with Physics, Chemistry and Mathematics;
- c) British General Certificate of Education (Advanced Level) with Physics, Chemistry and Mathematics;
- d) F.Sc. (Pre-Medical) with Mathematics as an additional subject.
- e) American High School Graduation Diploma (12th Grade) or equivalent.

2.8 No Age Restrictions

There is no age restriction seeking admission to any Bachelor's degree course.

2.9 Sex

Both male and Female persons are eligible to apply for seats except Category F which is open for female applicants only.

3. DETERMINATION OF MERIT

3.1 Examinations considered for Merit Purpose

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

- a) Higher Secondary School Certificate Examination (H.S.S.C) Pre-Engineering, or equivalent, or Bachelor of Science (B.Sc.) or B.A. Sc.
- b) For fixed seats only: Diploma of Associate Engineer or Bachelor of Technology (B.Tech. Pass)
- c) Marks of Entry Test for Session 2009

3.2 Merit Determination:

The comparative merit of applicants will be determined on the basis of adjusted admission marks obtained by them in these examinations:-

- a) For applicant with H.S.C. (Pre Engineering) as the highest qualification:
 - i) H.S.S.C (Pre-Engg.) or equivalent including Sports and Hafiz-e-Quran marks 70%
 - ii) Entry Test marks 30%
- b) For applicants with B.Sc. or B.A. Sc. as the highest qualification:

- i) B.Sc. or B.A. Sc including Sports and Hafiz-e-Quran marks or H.S.S.C (Pre-Engg.) or equivalent including Sports and Hafiz-e-Quran marks, in whichever a student has the highest %age 70%

- ii) Entry Test Marks 30%

- C) For applicants having Diploma of Associate Engineer as the highest qualification (for fixed seats only)

- i) Diploma of Associate Engineer including Sports and Hafiz-e-Quran marks 70%

- ii) Entry Test Marks 30%

- D) For applicants having B.Tech. Pass as the highest qualification (for fixed seats only)

- i) B.Tech. Pass including Sports and Hafiz-e-Quran marks or Diploma of Associate Engineer including Sports and Hafiz-e-Quran marks, in whichever a student has the highest % age 70%

- ii) Entry Test Marks 30%

3.3 Deduction of Marks for Examination passed by Parts:

If an applicant has passed any examination by parts, ten (10) marks are deducted for that examination while determining the adjusted admission 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 IV(a) & Form-IV(b), duly filled in and signed by the controller of examination concerned. In case any form is not submitted, ten marks will be deducted from the relevant examination marks obtained.

3.4 Merit of F.Sc.'s (Pre-Medical) with Mathematics:

In determining the merit of an applicant having F.Sc. (Pre-Medical) with Mathematics as an additional subject:-

- a) It is deemed that candidate has passed the examination by parts; and
- b) The marks obtained in the subject of biology are replaced by those obtained in Mathematics.

3.5 Equivalence Of Certificates Upto H.S.S.C. Level:

The equivalence and issuance of certificates, marks upto HSSC level other than

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issued by Pakistan's Board is to be determined by the IBCC (Inter Board Committee of Chairmen) as per decision of the Supreme Court of Pakistan) Such applicants are required to attach an Equivalence Certificate showing marks with the application for admission issued by the IBCC. The following is the address of the IBCC

IBCC

342, St. No: 97, Sector G-9/4, Islamabad or Lahore

3.6 Credit for Hafiz-e-Quran:

0-20 marks will be added to the academic marks in HSSC or equivalent examination of an applicant who is Hafiz-e-Quran. He/She will get the benefit only he/she has:

- i) filled in the necessary check box provided in the online application Form and
- ii) Appeared before the "verification committee" appointed by the Vice Chancellor for oral test carrying 0-20 marks and the Committee awards marks according to the degree of his proficiency.

The "Verification Committee" will hold oral test at 09:00 A.M. in UET Lahore on 07-09-2009 (Monday). It may be noted that no separate call letters will be issued to the concerned applicants in this connection.

3.7 Credit for Sports

A maximum of ten marks will be added to the academic marks in HSSC or equivalent examination of an applicant who is sportsman. He will get the benefit only if he/she is:

- i) filled in the necessary check box provided in the online application Form and
- ii) appeared before the "verification committee" appointed by the Vice-Chancellor for credit of marks and the Committee will determine his proficiency as a Sportsman considering the following criteria:

"05 Marks for Physical Test showing actual performance and endurance"

"01 Marks for Inter College Champion"

"02 Marks for District Level Champion"

"03 Marks for Divisional Level"

"04 Marks for Provincial Level"

"05 Marks for National Level or under 18 representation abroad"

The "verification committee" will meet, for this purpose, in the office of the Chairman Sports alongwith Convener Admission Committee, at 9:00A.M. on Monday 8th of September 2009. It may be noted that no separate call letters will be issued to the concerned applicants in this connection.

3.8 Determination of Merit in case of Equal Percentage of Admission Marks:

If two or more applicants have equal percentage of admission marks (upto three places of decimal after truncation), they shall be treated at par for the purpose of admission.

EXPLANATION:

In case there is a tie for the last seat in a particular discipline/category, then all the candidates who have secured equal percentage of admission marks (upto 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 that discipline/category.

3.9 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 4 below. The details of the distribution of seats are available in the Seats Allocation Chart.

The applicants for each category are grouped separately. Then on the basis of the percentage admission marks, comparative merit of the applicants comprising the group is prepared. The applicants belonging to a category thus compete for admission amongst themselves for the seats allocated to it.

3.10 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 the 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.

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3.11 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.

3.12 Unutilized Seats:

If some seats allocated to any category (other than category A) remain unutilized for lack of adequate applicants, then the unutilized seats are transferred to category-A and are filled under the same terms and conditions as applicable to the former.

4. CATEGORIES & SYMBOLS

The seats for the Bachelor's Degree Courses are distributed over different categories. For brevity, these categories are assigned symbols. The list of symbols is given as under:

Symbols	Categories
A	Punjab Province
AP	All Pakistan Open Merit
B	Sind Province
C	Baluchistan Province
D	N.W.F.P. Province
E	Azad Kashmir including Kel Area and Northern Area
F	Girls only (Domiciled in Punjab)
H	Foreign Countries
I	Diploma Holders (Domiciled in Punjab)
J	Children of Armed Forces Personnel
K	Federally Administered Tribal Areas
L	Backward Areas of Punjab
M	Children of University Employees
N	Children of Graduates Engineers, Architects & City and Regional Planners (Domiciled in Punjab)
O	Children of the University Alumni
P	B.Tech (Pass) (Domiciled in Punjab)
Q	Tribal Areas of D.G. Khan and Rajanpur Districts
R	Bhakhar and Layyah Districts
S	Children of Overseas Pakistanis
SI	Children of Overseas Pakistanis holding DAE
T	Disabled Domiciled in Punjab
U	FATA/Baluchistan HEC Scholar

These categories are described below giving their symbols and procedure of admission.

4.1 Categories A [Open Merit Seats]

The applicant should be bonafide resident of the Punjab province. Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit. All students admitted under this category would receive 90% financial support from UET resources.

Categories AP [All Pakistan Open Merit Seats]

The candidates residing in any part of Pakistan (including Northern Areas) can apply on these categories. The detail of seats/disciplines for these categories can be seen on the seat allocation table.

4.2 Category B

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.

4.3 Category C

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.

4.4 Category D

The applicant should be a bonafide resident of the NWFP province. Applications are to be submitted to the Registrar, NWFP University of Engineering & Technology, Peshawar. Nominations and allocations of disciplines are made by the Department of Education, Government of NWFP, Peshawar. Diploma holders are also eligible to apply.

4.5 Category E

The applicant for the Azad Kashmir seats should be nationals of Azad Kashmir, and the applicant for the Northern Areas seats should be bonafide residents of these areas.

For the seats reserved for Azad Kashmir applications are to be submitted to the Secretary Education, Govt. of Azad Jammu & Kashmir,

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Muzaffarabad.

For the seats reserved for Northern Areas applications are to be submitted to the Director of Education, Northern Areas, 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.

4.6 Category F

Only female candidates can apply for these seats. The applicant should be a bonafide resident of the Punjab Province. Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. Selection and allocation of disciplines are made by the University according to merit.

4.7 Category H

The applicant is required to get his application sponsored by his government, and sent in triplicate to the Ministry of Finance & 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) Certificate indicating that the applicant has obtained at least 60% marks in the subject of English in the Intermediate (Pre-Engg) examination or an equivalent examination.
- b) Educational Certificates (attested photocopies) and details of syllabi and courses of study of the examinations passed with English translation if these are in different language.
- c) Domicile/National Certificate
- d) Character Certificate
- e) Health/Fitness Certificate
- f) Information regarding the class and discipline in which admission is required.

Nominations and allocation of disciplines are made by the Ministry of Finance and Economics Affairs (Economic Affairs Division) Islamabad. The prescribed application forms may be obtained from this ministry. Diploma holders are also eligible to apply.

4.8 Category I

The applicant should be a bonafide resident of Punjab Province. Applications are to be submitted to this University according to the

procedure and requirements laid down in this prospectus under clause 2.3. Selection and allotment of disciplines are made by the University according to merit.

4.9 Category J

Distribution of these seats over the Army, Air Force and Navy is available in the Seats Allocation Chart. Applications are to be submitted to the Headquarters of either 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 allocations of disciplines are made by the respective Headquarters.

4.10 Category K

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 Divisions, Government of Pakistan, Islamabad. Nominations and allocation of disciplines are also made by him. Diploma holders are also eligible to apply.

4.11 Category L

The backward areas of Punjab include districts of Bahawalnagar, Bahawalpur, Rahim Yar Khan, Muzaffargarh, Rajanpur, Jhang, Attock, Chakwal, Mianwali, D.G. Khan and Jhelum. The applicant should be a bonafide resident of any of these districts.

Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit.

4.12 Categories M

Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. The married sons or daughters of the employees are not eligible for these seats. The selection is made by the University according to merit. Diploma Holders are also eligible to apply. However, in order to determine relevant merit, Diploma Holders will be placed below applicants possessing F.Sc. (Pre-Engineering.) /B.Sc.

The applicants have to furnish with their applications, a certificate from the Registrar of the University on Form F-IX and a certificate of being

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Unmarried by a class-I gazetted officer or a University class-A officer on Form F-X.

For inclusion in this category the applicant's parent has to fulfill the conditions regarding University service given in Form F-IX.

Further, children of the employees whose services have been transferred to the University of Engineering and Technology, Taxila, are not eligible to apply under the category as their quota of seats has also been transferred to the University of Engineering and Technology, Taxila.

4.13 Category N

The applicant should be a bonafide resident of Punjab Province. Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit.

The applicants should furnish with their applications an attested photocopy of their parent's Bachelor's Degree in Engineering or City & Regional Planning or Architecture from a recognized university. Other qualifications such as AMIE (Pak) are not recognized for inclusion in this category.

4.14 Category O

Applications are to be submitted to the University according to the procedure and requirements. The selection and allocation of discipline is made by the University according to merit.

The applicant should furnish with his applications an attested photocopy of the degree of his parent as an evidence of the fact that he (the parent) is a graduate of this University or its parent institution, that is, the former College of Engineering.

4.15 Category P

The applicant should have passed Bachelor of Technology Examination from a University of Pakistan. He should be a bonafide resident of the Punjab.

Applications are to be submitted to the University according to the procedure and requirements. Selection and allocation of disciplines are made by the University according to merit.

4.16 Category Q

The applicant should be a bonafide resident of the area concerned. Applications are to be submitted to the Commissioner, D.G. Khan Division. Nominations are made by the Commissioner on merit. Diploma holders are not eligible to apply.

4.17 Category R

The applicant should be a bonafide resident of Layyah and Bhakkar districts. Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit.

4.18 Categories S, SI

Applications are to be submitted to the University according to the procedure and requirements laid down in this prospectus. The selection and allocation of disciplines are made by the University according to merit. The applicant is required to submit along with his application

- i) A certificate on Form F-VIII regarding his parent's employment in a foreign country issued by the Pakistani Embassy in that country.
- ii) A photocopy of his parent's resident visa for that country attested by the Pakistani Embassy.

4.19 Category T

Disabled Domiciled in Punjab excluding the disability of deafness, dumbness and blindness. (Medical Certificate required)

4.20 Category U

Seats for students of Balochistan and FATA under project provision of Higher Education opportunities for students of FATA and Balochistan. Applicants shall be nominated by the Higher Education Commission of Pakistan. Maximum 4 seats in one discipline.

5. DOCUMENTS REQUIREMENTS

5.1 Documents to be submitted by applicants (attested photocopies)

- a) Degree, Diploma or Certificate of all the examinations on the basis of which admission is sought (i.e. S.S.C. or equivalent, F.Sc. or equivalent, B.Sc., Diploma of Associate Engineer or B.Tech. (Pass)
- b) Detailed Marks Certificates

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- c) Domicile Certificate
- d) Entry Test Marks Certificate

5.2 Additional Documents:

- ▶ **To whom applicable If your certificate, diploma or degree does not show that you have passed any examination by parts or as a whole, you have to submit in original the certificate on Forms -IV(a), -IV(b) whichever are applicable**
- ▶ If you have passed F.Sc. (pre-medical), you have to submit an attested photocopy of the certificate for additional mathematics.
- ▶ If you are applying for Category P, you have to submit an attested photocopy of the Diploma of Associate Engineer as well.
- ▶ 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, and an undertaking of being unmarried, on Form F-X.
- ▶ 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.
- ▶ If you are applying for the O Category seats, you have to submit an attested photocopy of the degree of your father or mother.
- ▶ If you are claiming to be Hafiz-e-Quran read Clause 3.6 of the Prospectus carefully.
- ▶ 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.
- ▶ If you are applying for the S-category seats you have to submit a certificate on prescribed Form F-VIII regarding your parent's employment in a foreign country and a photocopy of his resident visa attested by the Pakistan Embassy in that country.
- ▶ Documents required from those applicants who have passed both the Secondary School Examination and Higher Secondary School Examination from any Board of Intermediate and Secondary Education not included in the Punjab Province or Federal

Capital Area, Islamabad.

These applicants have been grouped in Part (A), (B) and (C) in section 6

Note You should read Section 6 carefully to find out the additional documents you have to submit alongwith the declaration Form.

6. DOMICILE REQUIREMENTS

6.1 Domicile Certificate 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.

6.2 Applicants required to submit additional documents

Applicants for the categories requiring Punjab domicile will have to submit additional documents in support of their domicile certificate if they belong to cases mentioned at (a), (b) and (c) below:-

- a) Applicants for categories A, F, L, N, Q & R who have passed both the Secondary School Examination and the Higher Secondary School Examination from any Board of Intermediate and Secondary Education, not included in the Punjab province or Federal Capital Areas, Islamabad.
- b) Applicants for category I who passed their Diploma of Associate Engineer from a Board of Technical Education other than that of Punjab
- c) Applicants for category P who have passed the Diploma of Associate Engineer from a Board of Technical Education other than that of Punjab or the B.Tech (Pass) examination from a University other than the University of Engineering and Technology, Lahore (that is, even if one of the two examinations has been passed from outside the Punjab Province).

6.3 Additional documents required

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

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parent should produce a certificate on Form -V from the head of his department affirming that he is a permanent resident of the Punjab. It shall be necessary in such cases that the period of the applicants study corresponds with the period of the posting of the parent in that province.

b) Children of the Armed Forces Personnel

In addition to the seats reserved for the category J, the children of the Armed Forces Personnel can apply for admission on basis of merit against seats reserved for their province of domicile or the seats reserved for the province in which their parent (the member of the Armed Forces) is posted.

Thus an applicant who is domiciled in Sind but his parent is posted in Punjab can apply against seats reserved for Sind 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.

c) All other applicants have to submit the following additional documents:-

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

Applicant whose father is not alive

In case his father is not alive and the above documents can not be produced, the applicant should submit

- i) ^{z-1} 60346-742235 Documentary proof of his father's death
- iii) Documentary evidence of his parent's immovable property in Punjab or Federal Capital Area, Islamabad.

7. APPLICATION FEE

7.1 The price of Prospectus and Application Form is of Rs. 350. The application processing and preference fee is Rs. 500. Both are to be paid at the time of purchase of prospectus.

7.2 The application and verification fee once remitted shall not be refunded.

7-A Campus Preference Policy

Seats in any such programme which is being simultaneously offered at various campuses of the University shall be filled as per following merit policy.

- i. Main Campus Lahore (highest merit)
- ii. University City Campus (KSK)
- iii. Faisalabad Campus
- iv. Rachna College of Engineering and Technology Gujranwala (Lowest Merit)

8. HOW TO COMPLETE THE ONLINE APPLICATION FORM

- You can fill the admission application form by logging into <http://admission.uet.edu.pk>
- You will be asked to enter the following information:
 - Entry Test Roll No
 - Date of Birth
 - Password (You used at the time of registration of Entry Test)
- Next you will be asked to change your password
- Password should be minimum of 8 alphanumeric characters, e.g. (abcd1234), or (a1b2c3d4). Please keep this password secure. Your personal information can be edited using this password.
- On the next screen you will be required to fill out your personal information.
- On the next screen you have to choose your preferences for programs, campuses and categories.
- Campuses can be selected for every programme individually.
- Campuses should be carefully chosen by the applicant. By default all campuses have been selected and boxes are checked. If the applicant does not wish to be considered at a particular campus for particular programme the check box pertaining to that box should be unchecked for that programme.
- Print out this application form and attach all the documents as described in Declaration Form available in the prospectus.

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Incomplete Applications

APPLICATIONS WHICH ARE INCOMPLETE IN ANY RESPECT SHALL NOT BE ENTERTAINED. APPLICATION FORM, FEE AND THE DOCUMENTS SUBMITTED WITH IT SHALL NOT BE RETURNED ON ANY GROUND.

9. PROCEDURE FOR THE SELECTED CANDIDATES

9.1 Notification of Selection

A list of selectees will be put up on the University notice boards and on the UET web site as well.

9.2 Depositing of Dues and Documents

Within the prescribed time, a selectee is required to pay the University dues and submit the following documents in a manner prescribed on the website: www.uet.edu.pk, to the Deputy Registrar, Students Section.

- a) Medical Certificate Form-II duly signed and stamped by Medical Officer of any Govt./Semi-Govt. Hospital / District Medical Supdt/ Commissioned Medical Officer.
- b) Four attested copies of the most recent photograph.
- c) Attested certificate of Parent's Guardian income.
- d) Original degree and certificates of Matric, F.Sc., B.Sc., GCE(A), Diploma of Associate Engineer, B.Tech. (Pass) or the equivalent qualifications alongwith the two sets of attested photo copies of all these documents.
- f) Original N.C.C. and Domicile certificate.
- g) Bio-data Card Form-III duly completed.
- h) Undertaking Form -XI on a Rs. 50/- judicial paper duly completed.

9.3 Relaxation in time Limit

If a selectee is prevented by unavoidable circumstances from timely fulfillment of the requirements laid down in clause 9.2, he should intimate the Convenor Admission Committee about it within the prescribed time limit along with relevant documentary proof. The Convenor, Admission Committee may, at his discretion, grant relaxation in the time limit.

9.4 Forfeiture of right of admission

A selectee who fails to fulfill the requirements laid down in Clause 9.2 within the prescribed time-limit shall forfeit his right of admission

9.5 Provisional Admission

On fulfillment of the obligations mentioned in clause 9.2 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 checked for their veracity. In case any document proves to be false, fake, or fabricated at a later stage, a provisionally admitted student shall be liable to expulsion from the University and to any other disciplinary or legal action the University may deem fit. Moreover, all the fees and charges deposited by him shall stand forfeited in favour of the University.

9.6 WARNING

IF AT ANY STAGE, A STUDENT IS FOUND INDULGING IN POLITICS, HIS ADMISSION WILL BE CANCELLED AS REFERRED TO IN UNDERTAKING FORM F-XI

9.7 Deadline for Admission

Admission shall be closed after the expiry of thirty days from the commencement of the first year class.

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

9.8 Notification of Selection of Categories B,C,D,E,H,J,K Q & U

The applicants for the seats reserved for these categories will be informed about selections by the authorities responsible for their selection. After that the University will issue them call letters with a target date to report in the Students Section to complete the remaining admission formalities within the stipulated time.

9.9 The admission made as a result of an error, omission or mistake shall not confer any right on an applicant.

10. HOSTEL ACCOMMODATION

10.1 Hostel Accommodation is limited and is provided on the basis of merit. Local students are not eligible to apply.

10.2 The selectees may apply to Senior Warden, University of Engineering and Technology, Lahore for hostel accommodation on prescribed application form obtainable from Senior Warden's office, along with the following documents.

- i) Two attested photographs
- ii) An attested photocopy of the domicile certificate; and
- iii) Attested photocopy of Bank Challan from the Habib Bank (Engineering University Branch) or a Bank Draft/Pay Order for the

ADMISSION PROCEDURES

- iv) hostel dues in favour of the Treasurer, University of Engineering and Technology, Lahore.
- 10.3** The candidate selected for admission at Kala Shah Kaku campus should apply to Senior Warden, University of Engineering and Technology, Lahore for hostel accommodation.
- 10.4** For hostel accommodation at Faisalabad Campus candidate should apply to Hostel Warden of Faisalabad Campus.
- 10.5** For hostel accommodation at Rachna College of Engineering and Technology, candidate should apply to Hostel Warden of Rachna College of Engineering and Technology, Gujranwala.

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

11 FEES AND OTHER CHARGES

(See attached Chart)

11.1 Periods of Fees and other charges

Tuition, recreation, union, sui gas charges, and medical fees are charged for twelve months in two installements. The hostel charges are payable for the period of occupation, a part of a term being counted as a full term. Rent and electricity charges for fans are payable for six moths. Electricity charges for room heaters are payable for the winter season for four months.

11.2 Refund of Securities

The University security, library security, hostel security and mess securities are refunded when a student leaves the University or the hostel (in case of mess security) after deduction of outstanding dues of the University, library or the hostel respectively.

The University security, however, shall stand forfeited if a student withdraws from or leaves the University before completing the first year.

11.3 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 re-admitted.

However, a student who receives scholarship through the University Treasurer may pay his fees and charges without fine within a week of receipt of the scholarship for the corresponding period. In case of a special hardship,

a student may apply to the Dean of his Faculty for remission of the late fee fine.

Note:The Bank Draft/Pay order should be prepared in favour of the Treasurer, University of Engineering and Technology, Lahore drawn on Habib Bank Limited, Engineering University Branch, Lahore.

11.4 The dues can be submitted in the designated branches of Habib Bank Ltd., (see attached list of banks)

ABBREVIATIONS USED TO READ SEAT ALLOCATION CHART & FINAL MERIT 2008

Lahore Campus

1. Electrical Engineering	ELL
2. Computer Engineering	CEL
3. Computer Science	CSC
4. Mechanical Engineering	MEL
5. Mechatronics and Control Engineering	MCL
6. Industrial & Manufacturing Engineering	IML
7. Architectural Engineering Buiding	BAE
8. Civil Engineering	CIV
9. Environmental Engineering	EEL
10. Transportation Engineering	TEL
11. Chemical Engineering	CHL
12. Geological Engineering	GEE
13. Metallurgical & Materials Engineering	MME
14. Mining Engineering	MIN
15. Petroleum & Gas Engineering	PET
16. Polymer Engineering	PEL
17. Architecture	ARC
18. City and Regional Planning	CRP
19. Product & Industrial Design	PID

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Faisalabad Campus

1. Electrical Engineering	ELF
2. Mechatronics & Control Engineering	MCF
3. Chemical Engineering	CHF

University City Campus (Kala Shah Kaku)

1. Electrical Engineering	ELK
2. Mechanical Engineering	MEK
3. Chemical Engineering	CHK

Rachna College of Engineering & Technology, Gujranwala

1. Electrical Engineering	ELR
2. Mechanical Engineering	MER
3. Industrial & Manufacturing Engineering	IMR
4. Computer Science	CSR

FEES AND OTHER EXPENSES

		Pakistani	Foreigner / Overseas Pakistani
I	NON RECURRING FEES	(Rs)	(Rs)
1	Admission Fee payable in First Year/ Re-admission Fee	1,000	5,000
2	University Registration Fee	500	2,000
3	University Security (Refundable)	500	500
4	Hostel Security (Refundable)	1,000	1,000
5	Mess Security (Refundable)	1,000	1,000
6	Library Security (Refundable)	500	500
7	Verification Fee	500	500
8	Email Enrollment Fee	100	100
II	ANNUAL RECURRING FEES		
1	Tutorial Fee	50	50
2	Inter-University Tournament Fee	50	50
3	Magazine Fee	75	75
4	Medical Fee	250	250
III	MONTHLY RECURRING FEES		
1	Tuition Fee	5000❖	7500
2	Lab Fee	100	500
3	Sports Fee	50	50
4	Bus Fare	200	200
5	Hostel Charges		
	a. Room Rent		
	i) Cubicle	150	300
	ii) Dormitory	100	100
	b. Rent for Fans		
	i) Cubicle	25	25
	ii) Bi-seater	15	15
	iii) Dormitory	10	10

❖ Students admitted on open merit are provided (Rs. 4500) per month financial support which consists of (Rs. 3000 p.m.) non-refundable grant and (Rs. 1500) interest-free loan payable after graduation.

FEES AND OTHER EXPENSES

		Pakistani	Foreigner / Overseas Pakistani
		(Rs)	(Rs)
	c. Electricity Charges		
	i) Fans Cubicle	60	60
	Dormitory	45	45
	ii) Light Cubicle	130	130
	Dormitory	100	100
	d. Sui Gas Charges	75	75
IV	OTHER CHARGES		
1	Monthly Tennis/Squash Charges from those who join Tennis/Squash club	150	150
2	Survey Camp Charges (Civil Engg, Mining Engg, Geological Engg. & CRP Students) to be charged at the time of admission	500	500
V	EXAMINATION FEES		
1	First Semester & Second Semester	300 / Semester	300 / Semester
2	Third Semester & Fourth Semester	325 / Semester	325 / Semester
3	Fifth Semester & Sixth Semester	350 / Semester	350 / Semester
4	Seventh Semester & Eighth Semester	375 / Semester	375 / Semester
5	Ninth Semester & Tenth Semester	400 / Semester	400 / Semester
6	Summer School Registration fee	200 per subject/practical	200 per subject/practical
VI	CERTIFICATE FEES		
1	Detailed Marks Certificate	100	100
2	Degree in Absentia/Degree before Convocation/Duplicate Degree	500	500
3	Merit Certificate	150	150
4	Rechecking of Answer Book	300	300
5	Other Certificate/Duplicate Certificate	150	150
VII	DEFERRED RECOVERY OF FINANCIAL SUPPORT PROVIDED BY THE UNIVERSITY		
	Rs. 1500 p.m. interest-free loan provided by the University recoverable in easy installments after graduation. ❖		

❖ Those who opt to pay the charges during studies shall get a 50% concession and shall pay @ Rs. 750 p.m.

- **No dues/fees will be refunded after the date of registration whether students have reported/registered or not.**

FINAL MERIT LIST 2008

UNIVERSITY OF ENGINEERING AND TECHNOLOGY LAHORE.

LAHORE CAMPUS

Branch	EEL	GEL	GEG	MEL	MGL	IML	EM	GM	EEL	TEL	GHL	GEE	MME	MIN	PET	PEL	ARG	GRP	P/D
CAT	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
A1	80.425	72.800	68.731	77.520	76.445	72.806	71.509	74.122	68.859	68.781	73.886	68.043	69.927	68.790	74.995	69.481	69.975	67.315	67.245
A2	77.891	70.913	68.018	75.811	74.954	70.829	70.415	72.470	67.859	68.069	70.411	67.802	68.877	67.588	73.686	X	69.186	68.987	68.572
I	72.755	-----	-----	69.739	66.705	-----	-----	61.288	-----	-----	73.247	-----	68.223	62.427	69.346	-----	69.561	-----	-----
P	63.582	-----	-----	68.569	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
M	79.872	-----	-----	75.720	-----	-----	-----	70.304	-----	-----	73.677	-----	68.154	67.347	73.438	-----	68.029	68.695	-----
F	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	70.972	68.500	-----
L	80.293	-----	-----	77.345	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
O	77.197	-----	-----	75.475	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R	79.795	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
S	72.509	66.118	63.218	69.159	68.077	64.918	65.429	66.813	64.884	66.252	66.629	62.200	65.254	-----	67.179	62.763	64.985	60.068	-----
T	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	X	X	-----

Faisalabad Campus			
	CHF	ELF	MEF
A1	69.140	70.972	69.756
A2	67.269	68.831	68.079
I	-----	-----	65.056

Rachna College of Engineering & Technology				
	ELR	NER	IMR	GER
A1	72.256	68.579	66.825	64.897
A2	71.640	70.961	X	64.091
I	71.696	68.511	67.807	-----

University City Campus (RSK)			
	ELK	MEK	CHK
A1	75.249	70.845	68.408
A2	73.487	69.398	68.697
AP1	73.469	70.520	67.543
AP2	72.890	69.136	67.234

SEAT ALLOCATION CHART SESSION 2009

(OPEN MERIT)

CATEGORIES		FACULTY OF ELEG							FACULTY OF MEGH							FACULTY OF CIVIL				FACULTY OF GMM						FACULTY OF A&P			TOTAL			
		ELL	ELF	ELK	ELR	CEL	CSC	CSS	MEL	MER	MEK	MGL	MGF	MIL	IMR	CIV	BAE	TEL	EEL	CWL	CHF	CHK	PEL	LMJ	PET	MIN	GEE	ARC		PID	GRP	
A	PUNJAB	107	45	27	29	39	48	30	121	29	27	50	41	51	28	141	42	38	37	80	45	27	41	40	31	31	38	38	34	40	1451	
AP	AFGHANISTAN			18							18											18										54
I	DAE	8			1				8	1		1	1	1	1	5				1				1	1	2		1			29	
N	CHILDREN OF ENGINEERS, ARCHITECTS, PLANNERS	2							2							2				1				1	1	1		1		1	12	
F	GIRMS																											2		2	4	
L	BACKWARD AREAS OF PUNJAB	1							1																						2	
M	CHILDREN OF UNIV EMPLOYEES	OPEN (Maximum 10 in one Department)																									41*					
Q	CHILDREN OF UNIV ALUMNI	1							1																						2	
P	B.TECH (PASS)	1							1																						2	
R	BRAKAR & LAYAH DISTRICTS	1																													1	
S	OVERSEAS PAKISTANIS / INTERNATIONAL STUDENTS	19				10	2		14			7		6		14	5	2	3	10			4	2	2		2	3		2	107	
SI	OVERSEAS PAKISTANIS / INTERNATIONAL STUDENTS	1							1			1				1									1						5	
T	Physically Disabled																												1		1	2
SUB TOTAL (OPEN MERIT)		199	45	46	30	49	50	30	147	30	46	50	46	58	30	163	47	40	40	88	45	46	46	50	38	34	40	48	34	46	1712	

*Including one seat for DAE

SEAT ALLOCATION CHART SESSION 2009

(RESERVED SEATS)

CATEGORIES	FACULTY OF ELEC							FACULTY OF MECH							FACULTY OF CIVIL				FACULTY OF CMM						FACULTY OF R&P			TOTAL			
	ELL	ELF	ELK	ELR	CEL	CSO	CSR	MEL	MER	MEK	MCL	MCF	MLL	IMR	CIV	BAE	TEL	EEL	CHL	CHF	CHK	PEL	NME	PET	MIN	GEE	ARG		PID	CRP	
B	SMID	1						1							1				2					2	1	1			1	10	
C	BALUCHISTAN	1**	1		1			1	1			1		1	2		1		2				1	2	2	2	1		2	22	
D	NIWP	1						1							1	1			2				2	1	1	2			5	17	
E	AZAD KASHMIR	5	1	1	1			5	1	1					5	1			2	2					2	2		2	31		
	AZAD KASHMIR (KGI/area)	OPEN																												1	
H	NORTHERN AREAS	1						1			1										1				1				1	6	
	FOREIGN COUNTRIES	20						*12							*21	3			4				3	3	1	1			3	71	
H	Bangladesh							1							1				1				1		4				1	9	
	INDIAN HELD KASHMIR							1							1				1				1		1				1	6	
J	CHILDREN OF ARMED FORCES																														
	ARMY	3				2		3							2															10	
	AIR FORCE	1				1																								2	
K	MAJ					1		1																						2	
	FATA	2						2	1			1			4					1						1				12	
Q	TRIBAL AREAS of DG Khan & Rajanpur Districts																														
	DG KHAN	1								1					1															4	
U	RAJANPUR	1							1										1											3	
	FATA/BALUCHISTAN (HEC SCHOLAR)	OPEN (Maximum 4 seats in one discipline)																												20	
SUB TOTAL (RESERVED)		35				4		29			1				37	5			14			1	8	9	13	9			16	226	
SUB TOTAL (OPEN MERIT)		199	45	45	30	49	50	30	147	30	45	59	45	50	30	163	47	40	40	99	45	45	45	50	36	34	40	46	34	46	1712
Grand Total		234	45	45	30	53	50	30	176	30	45	60	45	50	30	200	52	40	40	112	45	45	46	50	45	47	49	46	34	62	1939

The university reserves the right to make minor changes in seat allocation if deemed necessary.

- Reciprocal Basis
- * One Seat reserved for African Nominee
- ** Seat Reserved for Engineer's Daughter sponsored by PEC

One Seat reserved for Central Asian States
Inter-University Admission Programme

Note: Seats unavailled by any category shall fall available to 'A' Category under same terms and conditions as applicable to the former

MAP

PROCEDURE FOR SELECTED CANDIDATES

1. The first merit list shall be announced on 12.09.2009 and the second merit list shall be announced on 24.09.2009, The admission lists will be available on the University Website: www.uet.edu.pk
2. The applicants can have the following details about their admission from website by supplying their application numbers.
3. Name; Father's Name, Category, Habib Bank Ltd. Branch, Bank ID and Deadline of Depositing Dues Detail of Dues will be available on website.
4. The successful candidate NEED NOT wait for call letter. Upon confirmation of admission from website, the candidate shall have to deposit the dues at the nearest online branch of Habib Bank Ltd in account No. 01280005533303 with Habib Bank Limited UET Branch with reference to his/her BankID. The dues can also be deposited at Habib Bank Ltd, UET Branch.
5. The list of designated branches of Habib Bank Ltd is available on the website www.uet.edu.pk
6. The admission offer shall stand withdrawn / cancelled in case a candidate does not deposit dues within the deadline.
7. The original documents must be submitted at the earliest after depositing the dues but not later than 19.09.2009 for 1st merit lists. The documents can be submitted in Students Section from 8:30 A.M. to 2:30 P.M.
8. The 3rd Merit list shall be announced on 01.10.2009.
9. The 4th Merit list shall be announced on 08-10-2009

UNIVERSITY TELEPHONES

	Office
VICE CHANCELLOR	99250201
	99029205
(Fax)	99250202
DEANS OF FACULTIES	
Faculty of Architecture & Planning	99029250
Faculty of Chemical, Mineral and Metallurgical Engineering	99029230
Faculty of Civil Engineering	99029222
Faculty of Electrical Engineering	99029234
Faculty of Mechanical Engineering	99029221
Faculty of Natural Sciences, Humanities and Islamic Studies	99029215
CHAIRMEN OF TEACHING DEPARTMENTS	
Architecture	99029223
Architecture Engineering & Design	99029419
Chemical Engineering	99029488
Chemistry	99029239
City & Regional Planning	99029203
Civil Engineering	99029202
Computer Science & Engineering	99029260
Electrical Engineering	99029229
Institute of Environmental Engg.	99029248
Geological Engineering	99029297
Humanities and Social Science	99029493
Industrial & Manufacturing Engineering	99029226
Islamic Studies	99029246
Mathematics	99029210
Mechanical Engineering	99029467

	Office
Mechatronics & Control Engineering	99029294
Metallurgical Engg & Material Science	99029207
Mining Engineering	99029212
Petroleum Engineering	99029471
Physics	99029204
Polymer & Processing Engineering	99029505
Transportation Engineering & Management	99029428
Chairman Health Committee	99029240
Chairman Placement Bureau	99029218
Chairman Transport Committee	99029466
Chief Medical Officer	99029240
Controller of Examinations	99029235
Convenor Admission Committee / Incharge Student Section/ Foreign Student Relations Officer	99029216 99250212
Director General Research Ext & Advisory Services	99029237
Director Studies	99029251
Director Students Affairs	99029244
Focal Person Higher Education Commission	99029144
Librarian	99029243
Project Director	99029238
Public Relation Officer	99029358
Registrar	99029227
Resident Auditor	99029232
Senior Warden	99029225
Treasurer	99029233

DISCLAIMER

This prospectus is information and should not be TAKEN AS BINDING ON THE University. Each aspect of the education set up, 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 and rule/rules and regulation applicable to students when ever it is Deemed appropriate or necessary.

Inquires concerning admission should be addressed to

Prof. Dr. Salim Abid Tabssum

Convener Admission Committee/
Incharge Students Section

UNIVERSITY OF ENGINEERING AND TECHNOLOGY

LAHORE 54890

TELEPHONE 9909216

E-mail: admission@uet.edu.pk

And

STUDENTS SECTION

TELEPHONE : 9929470

Price : Rs. 350/-

NOTE : Application processing and preference fee of Rs. 500 is payable at the time of purchase of prospectus.

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