NED UNIVERSITY
OF ENGINEERING & TECHNOLOGY

www.neduet.edu.pk

FOREWORD

NED University of Engineering & Technology being one of the oldest engineering institutions of Pakistan is offering more than one hundred degree programmes including 29 bachelors' degree programmes in various disciplines. With a student population of more than 12000, it had always maintained the quality in academic and research. Hence, the University has maintained its prominence in the Times Impact Ranking which evaluates academic institute against the Sustainable Development Goals. Correspondingly, in the renowned and reliable QS Ranking, NED University is among the top 2.5 percent institutions in Asia. Our alumni are placed across the globe and have been contributing in various professional capacities in almost every sector making a difference to engineering, technology, economy and ultimately society and humanity at large. The success stories and global presence of our alumni reflect the quality of graduates being educated and trained at this prestigious institution.

National Centres established in the University which include National Centre for AI, Cyber Security, Robotics, Data Analysis, Virtual Reality Centre and Centre for Infectious Disease Modelling are actively engaged in doing research on pressing, emerging and critical problems. In addition, State-of-the-art laboratories are established in various departments in collaboration with the partner industries and the NED Alumni. A strong academia-industry linkage which exists here has helped enhancing student learning through industry-exposure opportunities and industry engagement on demand-based research for the industry. Award of establishing a UNESCO Chair in Sustainable Urban Regions at NED University reflects the trust of international bodies on the quality and prestige of the University.

The newly founded constituent college of the University; Thar Institute of Engineering, Sciences and Technology (TIEST) at Islamkot, Thar has completed its third year of establishment. The students admitted at TIEST are facilitated with modern and state-of-the-art academic and relevant equipment aligned with the University's commitment to provide its students, applied, analytical, design, and computing skills that underpin modern engineering practices, while encouraging their creativity and problem-solving skills essential for contemporary engineers and professionals in allied disciplines. Learning one foreign language (either Chinese or German or French or Arabic) has been made compulsory for all students to make them integrate and contribute better in their future industrial, organizational and social contexts. This year, the University has launched classes for Turkish language as well in collaboration with Turkey's Maarif Foundation.

Our endeavours are to make our students useful to the society in particular and to humanity in general. The mobility programmes arranged by the University help the students to get exposure of the environment and practices in European and USA based universities. In dealing with industry and utilities, attempts are made to maintain standards of integrity as well as quality. Consequently, our students are nurtured to attain a high level of leadership skills. The NED experience not only transforms them to become technically strong, but also makes them ethically sound. The NED educational routines also emphasize multidisciplinary activities in education, service and research. Entrepreneurship skills are also inculcated in our students for aligning them to become successfully self-employed and directly contributing towards the economy of the Country. We maintain a friendly, supportive and diverse environment that encourages our faculty and students to achieve their best, which is aptly provided in the quality policy which is strictly adhered to.

This prospectus furnishes necessary information to all the aspirants who wish to seek admission at undergraduate programmes in various engineering and allied disciplines. The University provides a pure merit-based admission process after successful appearance in the admission test.

We wish all the aspirants good luck in their future endeavours.

Dr. Sarosh Hashmat Lodi
Vice-Chancellor

V I S I O N

"Be a leader in enabling Pakistan's social and economic transformation"

M I S S I O N

"Acquire education and research excellence in engineering and allied disciplines to produce leadership and enabling application of knowledge and skills for the benefit of the society with integrity and wisdom"

Q U A L I T Y   P O L I C Y

NED University of Engineering and Technology believes in establishing environment conducive to continual improvement in its efforts for providing the highest level of quality education.

This University is making all out efforts *to raise its standards through teaching excellence and quality research. These efforts are carried out with involvement of the entire University work force to obtain utmost possible satisfaction of its customers.*

Our endeavours are to make our students useful to society in particular and to humanity in general. In dealings with industry and utilities, attempts are made to maintain standards of integrity as well as quality.

QUALITY ASSURANCE

Quality Enhancement Cell, QEC (previously known as Quality Management Cell) was established at NED University in 1999 with the aim to develop and implement Quality Management System in the University. The cell successfully acquired ISO 9000 certification in the year 2002. Since then, the QEC has been instrumental in assuring quality to its customers, and stakeholders, and has successfully transformed the QMS standards to ISO 9001:2015. With the advent of QAA in recent years, QEC NED has coordinated with HEC with the spirit of continual improvement. In pursuance of QAA-HEC instructions, NED University has successfully established the QECs in all affiliated colleges/ institutes of the University.

Quality Assurance Agency (QAA) of the HEC assesses the progress of the Quality Enhancement Cells (QECs) of all Universities through a quantitative 'Scorecard System' based upon their performance and participation in quality-related processes. During the reporting period, QEC-NED has been assigned a score of 95.67% with a placement in 'W' Category.

Main responsibilities of QEC office are;

- *Conducting faculty/employee development through trainings*
- *Correspondence with HEC and other agencies for QEC/University Ranking*
- *Self-Assessment of academic programmes*
- *Quality Assurance in affiliated colleges*
- *Processing HEC NOC for academic all programmes*
- *Masters/PhD Programme Review*
- *Institutional Performance Evaluation (IPE)*
- *News Coverage of events*
- *Internal Quality Audits (IQAs)*
- *Surveillance Audits*
- *Board of Review (University Level/Department Level) Meetings*
- *University Level KPIs*
- *Yearly Quality Objective*
- *Developing and improving Quality Standard Procedures (QSP) and Standard Opening Procedures (SOPs)*
- *Acquiring and analyzing stakeholders' feedback*
- *Customer Complaint Management*

CHAPTER **1**

General Information

1.1 HISTORICAL BACKGROUND OF THE UNIVERSITY

The NED University of Engineering & Technology, was established in March 1977 under an Act of the Provincial Assembly of Sindh after upgrading of the former NED Government Engineering College, which was set up in 1921. The NED University is thus one of the oldest institutions in Pakistan for teaching and producing Engineering graduates. Prior to this, the D.J. Science College, used to run classes to train subordinates for the Sindh P.W.D., the Municipalities and Local Boards.

On August 29, 1921 College Principal C.S Shahani made a concerted effort to get Engineering Degree classes started to meet demands of Civil Engineers on the project for completion of the Sukkur Barrage. Application to this effect was made to the University of Bombay through the Commissioner of Sindh, who was ex-officio president of Sindh Collegiate Association (a registered society of subscribers for providing higher education in Sindh). The Bombay University, however, rejected the application on the grounds of insufficient finances and insisted on entirely separate buildings and laboratories for the engineering college as a separate institution. After collection of donations from the Puribai and Becharbai Trust, Vishandas Fatehchand Brothers and one huge donation (for that time) of Rs.150,000 from the heirs of Mr. Nadirshaw Edulji Dinshaw, the new college buildings and laboratories were constructed on a separate land. The new college was originally the Prince of Wales Engineering College but later renamed in memory of Nadirshaw Edulji Dinshaw. The NED College was provisionally granted affiliation on 23-05-1923 by the University of Bombay for the First and Second Year courses in Civil Engineering and 78 students were provisionally admitted into first year classes in 1922. Permanent affiliation followed in February 1927.

The first-full time Principal of NED Engineering College was Mr. G.N.Gokhale who joined on 1ˢᵗ July 1923. Prior to this, Rai Sahib Bhupatrai had acted as Honorary Principal. The first professor (and Vice Principal) was Mr. S.B. Jannarkar who, along with Mr. Gokhale, did all the spadework in organizing and equipping the various departments and ordering the equipment for the Power House, Boiler Room, Hydraulics Laboratory, Engine Room and Machine Shops.

The original NED Engineering College was housed in four blocks of buildings and two sheds. The main block was named as Seth Fatehchand Dewandas Khilnani Hall. The block housing the Power House, Electrical and Hydraulics Laboratories, and Workshops was named after Bai Puribai and Bacharbai. Further additions were made to this block to provide accommodation for the Machine Shop on the ground floor and a (Mechanical) Drawing Hall on the first floor. The fourth block, completed in 1945, contained a Classroom and Clerk's Office on the ground floor and another (Civil) Drawing Hall on the first floor.

Two sheds were also built, one to house the Carpentry and Smithy Shops, and the other, alongside the Electrical Laboratory and Engine Room, to train technicians. The total cost of the buildings was just over Rs. 265,000 and the cost of equipment (including machinery, electrical instruments; models, steam, gas and oil engines; surveying and leveling instruments), books and furniture was just under Rs. 400,000.

The college remained affiliated to the University of Bombay from its inception in 1922 to 1947, after which it was taken over by the Government of Sindh; renamed as NED Government Engineering College and affiliated to the University of Sindh. After establishment of the University of Karachi in 1951, the affiliation of the College was transferred to this University. In 1964, a comprehensive plan was prepared to shift the college from its location in the congested downtown area (where no expansion was possible) to a new site adjoining the University of Karachi. The project was carried out with the assistance of the World Bank which provided Rs.118 millions in two phases and the College was shifted to its new 40 hectares Main Campus in 1975.

On the 1st of March, 1977 the NED Government Engineering College became the NED University of Engineering and Technology. From an enrolment of 50 students in 1923, the student population, at undergraduate, graduate and Ph.D. levels, has now gone more than 12000. The Departments of Biomedical Engineering and Food Engineering are located at NED LEJ Campus for which the land and building - estimated value Rs. 350 million - was donated by (Late) Latif Ebrahim Jamal, a well-known philanthropist.

The first Vice Chancellor of the University was Mr. A. M. Akhoond who was succeeded in sequential order by Prof. Dr. A. T. Khan, Prof. Dr. Jameel Ahmed Khan, Prof. Dr. M. Munir Hasan, Prof. Dr. A. Q. Qazi, Engr. Abul Kalam and Prof. Dr. M. Afzal Haque. Dr. S. H. Lodi is the present Vice Chancellor.

1.2 Thar Institute of Engineering, Sciences and Technology (TIEST)

TIEST is established at Mithi, Tharparkar which is around 350 km towards East from Karachi. The main purpose of establishing this institute was to provide direct access of quality education to the deprived students of this district as well as producing qualified workforce for the future need of this rapidly developing area of the province.

TIEST is currently established in a temporary building which will eventually be shifted to its main campus which is going to be established at a land of around 300 acres on the main road leading to Islamkot and is almost in the mid of Mithi and Islamkot. It is also at a reasonable distance from the Airport. At TIEST currently, Bachelor of Computer Science and Bachelor of Civil Engineering programmes are offered with 60 and 50 seats respectively. First Principal of TIEST is Prof. Dr. Muhammad Raza Mehdi.
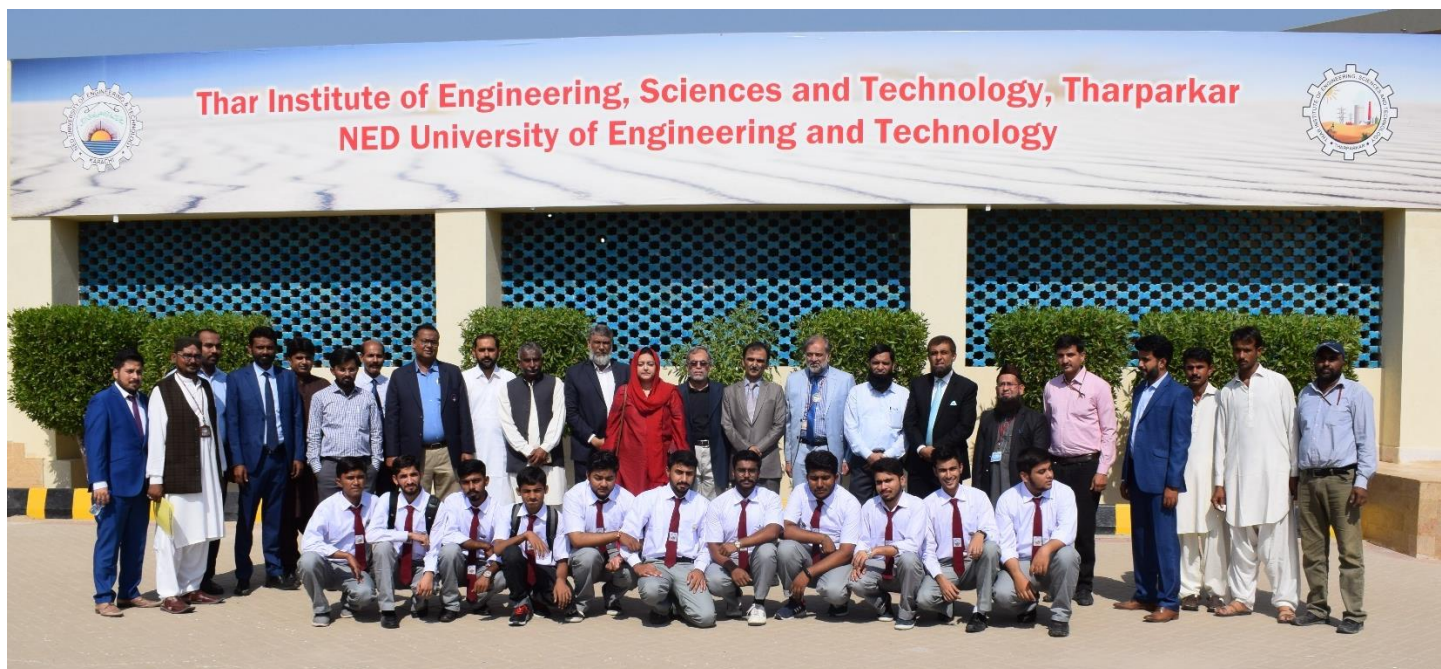
1.3 Administration & Academic Support

Vice-Chancellor

Dr. S. H. Lodi
B.E. (Civil) NED UET; M.S. Oregon State University, USA;
Ph.D. Heriot-Watt University, UK

Pro Vice-Chancellor

Prof. Dr. Muhammad Tufail
B.E. (Mech.) NED UET;
M.Sc. (Manufacturing System) Nottingham University, UK;
Ph.D. Nottingham University, UK; C.Eng; FIMechE, Mem ASME

Dean Faculty of Civil and Petroleum Engineering, Dean (CPL)

Prof. Dr. Asad-Ur-Rehman Khan
B.E. (Civil) NED UET; M.S. (Civil) KFUPM, Saudi Arabia;
Ph.D. (Civil) KFUPM, Saudi Arabia

Dean Faculty of Mechanical & Manufacturing Engineering, Dean (MME)

Prof. Dr. Syed Amir Iqbal
B.E. (Mech.) NED UET; M.E. (Mech.) NED UET;
Ph.D.(Mech.) University of Manchester, UK

Dean Faculty of Electrical & Computer Engineering, Dean (ECE)

Prof. Dr. Saad Ahmed Qazi
B.E. (Electrical) NED UET; M.Sc. (DSP) UK;
Ph.D., UK; MIEE, UK; MIEEE, USA

Dean Faculty of Chemical & Process Engineering, Dean (CPE)

Prof. Dr. Asif Ahmed Shaikh
B.E. (Civil) NED UET; M. Engg. (Civil) Nagasaki Uni, Japan;
Ph.D. (Civil/Environmental Engg); Nagasaki Uni, Japan

Dean Faculty of Information, Sciences & Humanities, Dean (ISH) (Acting)

Prof. Dr. Noman Ahmed
B.Arch,; M.C.P., METU, Turkey;
Ph.D., UK; MPCATP

Dean Faculty of Architecture & Management Sciences, Dean (AMS)

Prof. Dr. Noman Ahmed
B.Arch,; M.C.P., METU, Turkey;
Ph.D., UK; MPCATP

Principal, Thar Institute of Engineering, Sciences and Technology (TIEST)

Prof. Dr. Nasir Uddin Shaikh
B.E.(Mech.) NED UET; M.Sc(Mech.) NED UET;
Ph.D. (Thermofluids) Canada

Registrar (Acting)	**Director, QEC**
Mr. Ghazanfar Hussain *M.Phil; Ph.D. (In progress) UoK;* *M.Sc.(Physical Chemistry), UoK*	**Prof. Dr. Asif Ahmed Shaikh** *B.E. (Civil) NED UET; M. Engg. (Civil) Nagasaki Uni, Japan;* *Ph.D. (Civil/Environmental Engg); Nagasaki Uni, Japan*
Additional Registrar	**Director of Works & Services and Provost**
Engr. Rubina Naz *B.E. (Civil), MHRM, MS (HR)*	**Engr. S. Wasi Uddin** *B.E. (Civil); M.Engg.(Env.)*
Deputy Registrar (Academic-I)	**Controller Student Affairs (Acting)**
Mr. Irfan Ali *M.A. (Economics)*	**Dr. Ali Hasan Mahmood** *B. E. (Textile); M. Engg (Textile);* *Ph.D. (Textile), University of Manchester, UK*
Deputy Registrar (Academic-II)	**Director Procurement**
Syed Muhammad Tarique *M.A. (Economics)*	**Mr. Abdul Wahab** *M.B.A. (Finance and Accounting)*
Deputy Registrar (Security & General) / Coordination	**Director Industrial Liaison (Acting)**
Mr. Makhdoom Khalid Hashmi *M.A. (Economics)*	**Dr. Muhammad Amir Qureshi** *B.E. (Textile) NED UET; M.Engg. (Textile) NED UET;* *Ph.D., Heriot-Watt University, UK*
Controller of Examinations (Acting)	**Director, Information Technology Department (Acting)**
Mr. Safi Ahmed Zakai *B.E. (Electrical) NED UET; MBA (Marketing), IBA Karachi;* *M. Engg. (Telecommunications) NED;* *M.Phil (Management), UoK*	**Dr. Muhammad Asad Arfeen** *B.E. (Comp. & Info. Sys.); M.Engg (Comp. Sys);* *Ph.D. (Teletraffic Engineering) New Zealand*
Director of Finance	**Director General, NED Academy (Acting)**
Mr. Muhammad Sajeeruddin *B.Com UoK; L.L.B. UoK; A.C.M.A. (Accounts) ICMAP;* *F.C.M.A. (Accounts) ICMAP.*	**Prof. Dr. Rizwan-ul-Haque Farooqui** *B.E.(Civil) NED UET; M.S. (Civil) National Uni. of Singapore;* *Ph.D. (Civil) Florida International University, USA*
Resident Auditor (Acting)	**Director, Office of Research, Innovation & Commercialization (ORIC) (Acting)**
Mr. S. M. Hassan Shamsie *B.Com UOK; M.A. (Economics) UoK*	**Dr. Riazuddin** *B.E. (Electrical) NEDUET, M.Engg.(Electrical) NEDUET,* *Ph.D. (Mechatronics), GIST, South Korea.*
Director (Planning & Projects) (Acting)	**Principal Medical Officer, Medical Department**
Engr. Ashfaq Ahmed Khan *B.Sc., B.Sc. Engg. (Civil)* *Member S.A.M.E. (U.S.A.); P.E*	**Dr. Mariam Alam** *M.B.B.S (Baqai Medical University)*
Librarian (Acting)	**Technical Assistant to the Vice Chancellor**
Ms. Huma Sardar *B.Sc. (Microbiology) UoK; B.L.I.S. (Library and Info. Science) UoK;* *M.L.I.S. (Special Libraries) UoK*	**Engr. Danish Ur Rehman Khan** *B.E. (Computer Sys.) NED UET; M. Engg. (Electrical) NED UET;* *M.Engg. (Computer Networks & Performance Evaluation) NED UET* *Ph.D. (In progress) NED UET*

CHAPTER **2**

Academic Programmes and Departments

2.1 THE FACULTIES

The teaching departments under various Faculties are listed below:

2.1.1 Faculty of Civil and Petroleum Engineering

i) Civil Engineering
(Also Administering Bachelor of Engineering in Civil with Specialization in Construction Engineering Programme)
ii) Urban & Infrastructure Engineering
(Administering Bachelor of Engineering in Civil with Specialization in Urban Engineering Programme)
iii) Petroleum Engineering
iv) Earthquake Engineering

2.1.2 Faculty of Mechanical & Manufacturing Engineering

i) Mechanical Engineering
ii) Textile Engineering
(Also Administering Bachelor of Science in Textile Sciences Programme)
iii) Industrial & Manufacturing Engineering
iv) Automotive & Marine Engineering

2.1.3 Faculty of Electrical & Computer Engineering

i) Electrical Engineering
ii) Computer & Information Systems Engineering
(Administering Bachelor of Engineering in Computer Systems Programme)
iii) Electronic Engineering
iv) Telecommunications Engineering
v) Biomedical Engineering

2.1.4 Faculty of Chemical & Process Engineering

i) Materials Engineering
ii) Chemical Engineering
iii) Metallurgical Engineering
iv) Polymer & Petrochemical Engineering
v) Food Engineering
vi) Environmental Engineering

2.1.5 Faculty of Information, Sciences & Humanities

i) Software Engineering
ii) Computer Science and Information Technology
(Administering Bachelor of Science in Computer Science Programme)
iii) Mathematics
(Administering Bachelor of Science in Computational Finance Programme)
iv) Physics
(Administering Bachelor of Science in Applied Physics Programme)
v) Chemistry
(Administering Bachelor of Science in Industrial Chemistry Programme)
vi) Humanities
(Administering Bachelor of Science in English Linguistics)

2.1.6 Faculty of Architecture & Management Sciences (AMS)

i) Architecture and Planning
(Also Administering Bachelor of Science in Development Studies Programme)
ii) Economics and Management Sciences
(Administering Bachelor of Science in Economics & Finance and also Administering Bachelor of Science in Management Sciences Programmes)

2.1.7 Thar Institute of Engineering, Sciences and Technology (TIEST)

i) Computer Science & Information Technology
(Administering Bachelor of Science in Computer Science Programme)
ii) Civil Engineering

2.2 Teaching Departments

2.2.1 Department of Civil Engineering
(Also administering Bachelor of Engineering in Civil with Specialization in Construction Engineering Programme)

Chairperson

Prof. Dr. Rizwan Ul Haque Farooqui

Professor Emeritus

Prof. Dr. Sahibzada Farooq Ahmad Rafeeqi
*B.E. (Civil) NED UET; M.S. (Civil) KFUPM, Saudi Arabia;
Ph.D. (Structures), Heriot-Watt, UK*

Professors

1. Dr. Muhammad Shafqat Ejaz
*B.E. (Civil) NED UET; M.S. (Civil) NED UET;
Ph.D., Utah State University, USA*

2. Dr. Asad-ur-Rehman Khan
*B.E. (Civil) NED UET; M.S. (Civil) KFUPM, Saudi Arabia;
Ph.D. (Civil) KFUPM, Saudi Arabia*

3. Dr. Rizwan-Ul-Haque Farooqui
*B.E.(Civil) NED UET; M.S. (Civil) National Uni. of Singapore;
Ph.D. (Civil) Florida International University, USA*

4. Dr. Syed Imran Ahmed
*B.E. (Agri. Engg.) Sindh Agriculture University;
M.S. (Bio Resource Engg.) Oregon State University, USA;
M.S. (Bio Systems Engg.) IOWA State University, USA;
Ph.D. (Bio Systems Engg.) IOWA State University, USA*

5. Dr. Abdul Jabbar Sangi
*B.E. (Civil) NED UET; M.Engg. (Civil) NED UET;
Ph.D. (Civil) Heriot-Watt University, UK*

6. Dr. Amanullah Marri
*B.E. (Civil) QUEST, Nawabshah;
M.E. (Civil) Asian Institute of Technology, Thailand;
Ph.D. (Civil) University of Nottingham, UK*

7. Dr. Shuaib Haroon Ahmad (JPC Chair)
*B.E. (Civil) NED UET; M.S. (Civil) Kensas State Uni, USA;
Ph.D. (Civil) University of Illinois, Chicago, USA*

8. Dr. Sadaqat Ullah Khan
*B.E. (Civil) NED UET; MS (Structure) NED UET;
PhD (Structural and Material Engineering) Universiti
Teknologi PETRONAS, Malaysia*

9. Dr. Tehmina Ayub
*B.E. (Civil) NED UET; M.Engg. (Civil) NED UET;
Ph.D. (Civil) Universiti Teknologi PETRONAS, Malaysia*

Associate Professors

1. Dr. Haider Hasan
*B.Sc.(Hons) (Math. & Computing) Kingston University;
M.Sc. (Ind. & Env. Modelling) University of Bristol, UK
Ph.D. (Civil) University of Nottingham, UK*

2. Dr. Arjumend Masood
*B.E. (Civil) NED UET; M.Engg. (Env.) NED UET;
M.Engg. (Civil) NED UET; Ph.D. (Civil Engg.) NED UET*

3. Dr. Huma Khalid (on Leave)
*B.E. (Civil) NED UET; M.Sc. (Computer Science) NED UET;
Ph.D. (Computational Mechanics) Imperial College, UK;*

4. Dr. Farrukh Arif
*B.E. (Civil) NED UET; MEM (Construction, NED UET;
Ph.D. (Civil) Florida International University, USA;*

5. Dr. Sadaf Qasim
*B.E. (Civil) NED UET; M.Sc. (Env. Sc.) UoK;
M.Engg. (Civil) NED UET; Ph.D. (Civil), UTP, Malaysia*

6. Dr. Farnaz Batool
*B.E. (Civil) NED UET; M.Engg. (Civil) NED UET;
Ph.D. (Materials, Structures) University of Alberta, Canada*

7. Dr. Shamsoon Fareed
*B.E. (Civil) SSUET; M.Engg. (Civil) NED UET;
Ph.D. (Civil) Heriot-Watt University, UK*

Assistant Professors

1. Dr. Syed Salman Mobeen
*B.E. (Civil) NED UET; M.Sc.(Structure) Uni. of Alberta, Canada;
Ph.D. (Structures) University of Alberta, Canada*

2. Dr. Syeda Saria Bukhary
*B.E. (Civil) NED UET; M.Engg. (Civil) NED UET;
M.S. (Civil) University of Nevada, USA;
Ph.D. (Civil) University of Nevada, USA*

3. Engr. Farhan Saleem
*B.E. (Civil) NED UET; M.C.S. UoK;
M.S. (Construction Management) Florida International
University, USA*

4. Engr. Muhammad Saqib
*B.E. (Civil) NED UET; M.C.S. UoK;
MS (IT) PIMSAT; MEM (Construction) NED UET*

5. Engr. Haris Akram Bhatti
B.E. (Civil) NED UET; M.Engg. (Civil, Water Resources) NED UET

6. Dr. Muhammad Aslam Bhutto
*B.E. (Civil) QUEST; MEM (Civil) NED UET;
Ph.D. (Civil) Heriot-Watt University, UK*

7. Dr. Aslam Faqeer Mohammad
*B.E. (Civil) NED UET; M.Engg. (Civil) NED UET;
Ph.D. (Civil) Sapienza University of Rome, Italy*

8. Dr. Fawwad Masood
*B.E. (Civil) NED UET; M. Engg. (Civil) NED UET;
Ph.D. (Civil) NED UET*

9. Engr. Muhammad Umer (on study leave)
B.E. (Urban) NED UET; MEM (Construction) NED UET

10. Engr. Shoaib Ahmed
B.E. (Urban) NED UET; M.Engg. (Civil) NED UET

11. Engr. Sajjad Ali
B.E. (Civil) NED UET; M. Engg. (Civil) NED UET

12. Engr. Syed Muhammad Noman
B.E. (Urban) NED UET;
M.S. (Transportation) Hasselt University, Belgium

13. Dr. Rana Rabnawaz Ahmed
B.E. (Civil) NED UET; MEM (Construction) NED UET;
Ph.D. (Civil) Hong Kong University of Science and Technology

Lecturers

1. Engr. Adnan Rais Ahmed
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

2. Engr. Etikaf Hussain
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

3. Engr. Sadia Moin
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

4. Engr. Wajeeha Mahmood
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

5. Engr. Tariq Aziz (On Study Leave)
B.E. (Urban) NED UET; M.Engg. (Structural Earthquake) NED UET

6. Engr. Fatima Khalid
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

7. Engr. Waleed Ahmed Khan
B.E. (Civil) NED UET; MEM (Construction) NED UET

8. Engr. Muhammad Saad Khan
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

9. Engr. Samra Masood
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

10. Engr. Faiza Saeed
B.E. (Urban) NED UET; MEM (Construction) NED UET

11. Engr. Muhammad Yousuf Iqbal
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

12. Engr. Kainaat Nadeem
B.E. (Civil) NED UET; M.Engg. (Structural Earthquake) NED UET

13. Engr. Hamna Hasan
B.E. (Civil) NED UET; M.Engg. (Water Resources) NED UET

14. Engr. Farhan Jamil
B.E. (Civil) SSUET;
M.Engg. (Transportation) Politecnico Di Milano, Italy

15. Engr Tajik Mustafa Shah
B.E. (Civil) NED; M.Engg. (Water Resources) NED

16. Engr. Syed Muhammad Shahrukh Ali
B.E. (Civil) MUET, SZAB Campus;
ME (Structure) MUET, Jamshoro

IT Manager

1. Engr. Muhammad Shahzad Raza Ali Asghar *(on leave)*
B.E. (Computer) SSUET; MCIT NED UET

2. Engr. Aisha Bano
B.E. (CIS) NED UET; M.Engg. (CIS) NED UET

Sr. Lab Engineer

Engr. Amir Nizam
B.E. (Civil) NED UET; M.Engg. (Civil) NED UET

2.2.2 Department of Urban and Infrastructure Engineering
(Administering Bachelor of Engineering in Civil with Specialization in Urban Engineering Programme)

Chairperson

Prof. Dr. Adnan Qadir

Professors

1. Prof. Dr. Adnan Qadir
B.E. (Civil) NED UET; M.Sc.(Civil) NED UET
Ph.D. Middle East Technical University, Ankara, Turkey

Associate Professors

Dr. Afzal Ahmed
B.E.(Urban) NED UET; M.Sc. (Civil) University of Mississippi,
USA; Ph.D. University of Leeds, UK

Assistant Professors

1. Dr. Nida Azhar
B.E.(Urban) NED UET; M.Engg.(Civil) NED UET;Ph.D. Florida
International University, USA

2. Dr. Ashar Ahmed
B.E. (Urban) NED UET; M.Engg. (Civil) NED UET;
Ph.D., University of Sains, Malaysia;

3. Dr. Sana Muqeem
B.E. (Urban) NED UET; M.Sc. (Civil) NED UET;
Ph.D. Universiti Teknologi PETRONAS, Malaysia

4. Syeda Madiha Zaidi
B.E. (Urban) NED UET; M.Engg.(Civil) NED UET

5. Dr. Muhammad Ahmed
B.Sc.-Hons (Geography) UoK; M.S. (Geography) UoK;
M.Phil (RSGIS) UoK; Ph.D. NED UET

6. Ms. Madiha
B.E.(Urban) NED UET; M.Engg(Civil) NED UET

7. Syed Muhammad Fahad Abdullah
B.E. (Civil) NED UET; MEM (Water Resources Management)

8. Mr. Shoaib Yaqub
B.E. (Civil) SSUET; M.Engg. (Civil) NED UET

Lecturers

1. Ms. Narmeen Tanweer Memon
   B.E. (Civil) QUEST Nawabshah; M.Engg. (Civil) NED UET;
   Ph.D. (In progress) NED UET

2. Ms. Aysha AYub
   B.E. (Urban) NED UET; M.Engg. (Civil) NED UET;
   Ph.D. (In progress) NED UET

3. Mirza Asad Ullah Baig
   B.E. (Urban) NED UET; M.Engg.(Civil) NED UET

I.T. Manager

Engr. Hira Javvad
B.E. (CIS) NED UET

2.2.3 Department of Petroleum Engineering

Chairperson (Acting)

Prof. Dr. Asad Ur Rehman Khan

In-Charge

Dr. Javed Haneef

Associate Professors

Dr. Javed Haneef
B.E. (Mech.) NED UET;
M.Sc. (Petroleum Tech); MCS, UoK;
M.E. (Petroleum), University of Alberta, Canada;
Ph.D. (Petroleum), University of Leeds, UK

Assistant Professors

1. Dr. Abdul Majeed
   B.E. (Petroleum) MUET;
   M.Sc. (Petroleum) Heriot Watt University, UK;
   Ph.D. (Petroleum), University of Leeds, UK

2. Engr. Faizan Ali
   B.E. (Petroleum) NED UET;
   MS (Petroleum) NTNU, Norway

3. Engr. Syed Adnan-ul- Haque
   B.E. (Petroleum) MUET;
   MS (Petroleum) NTNU, Norway

4. Engr. Aftab Hussain Arain *(On Study Leave)*
   B.E. (Petroleum), MUET;
   MS (Petroleum) NTNU, Norway

5. Engr. Shaine M. Ali Lalji
   B.E. (Petroleum) NED UET;
   MS (Petroleum) NTNU, Norway

6. Engr. Muhammad Noman Khan
   B.E. (Petroleum & Natural Gas Engg) MUET;
   MS (Petroleum Engg.) UTM, Malaysia

7. Dr. Ayesha Abbas
   B.Sc. UoP; MSc. (Geophysics) QAU;
   Ph.D. (Oil and Natural Gas Engineering)

Lecturers

1. Engr. Syed Imran Ali
   B.E. (Petroleum) NED UET; M. Engg. (Petroleum) NED UET

2. Engr. M. Arqam Khan
   B.E. (Petroleum) NED UET; M. Engg.(Petroleum) NED UET

3. Engr. Muhammad Mohsin Yousufi
   B.E. (Petroleum) NED UET;
   MS (Petroleum) Universiti Teknologi PETRONAS, Malaysia

IT Manger (Senior Scale)

Ms. Bushra Khalid
B.E. (CIS); MCIT, NED UET

2.2.4 Department of Earthquake Engineering

Chairperson

Prof. Dr. Muhammad Masood Rafi

Professors

1. Prof. Dr. Muhammad Masood Rafi
   B.E. (Civil) NED UET; M.Sc. (Civil) NED UET
   Ph.D. University of Ulster, UK

2. Prof. Dr. Rashid Ahmed Khan
   B.E. (Civil) NED UET; M.Sc. (Civil) NED UET
   Ph.D. Heriot-Watt University, UK

Associate Professor

Dr. Mukesh Kumar *(On Ex-Pakistan Leave)*
B.E.(Civil) NED UET;
M.E. (Engineering Seismology) NED UET;
M.Engg. (Earthquake), Italy;
Ph.D., Imperial College London, UK

Lab Engineer

Mr. Shahid Hussain
B.E.(EL) SSUET; M.Eng. (EL) NED UET

2.2.5 Department of Mechanical Engineering

Chairperson

Prof. Dr. Mubashir Ali Siddiqui

Professors

1. Prof. Dr. Nasir Uddin Shaikh
   B.E.(Mech.) NED UET; M.Sc(Mech.) NED UET;
   Ph.D. (Thermofluids), Canada

2. Prof. Dr. Mubashir Ali Siddiqui
   B.E.(Mech.) NED UET; M.S., USA;
   Ph.D., USA

3. Prof. Dr. Murtuza
   B.E.(Mech.) NED UET; M.S(Mech.) NED UET;
   Ph.D. (Mech.), South Korea

4. Prof. Dr. Muhammad Shakaib
   B.E. (Mech.) NED UET; M.Sc.(Mech.) NED UET;
   Ph.D. (Desalination) NED UET

5. Prof. Dr. Maaz Akhtar
   B.E. (Mech.) NED UET; M.Engg. (Industrial Mfg.) NED UET;
   Ph.D (Mech.), Oman

Associate Professors

1. Dr. Muhammad Uzair
   B.E. (Mech.) NED UET; M. Engg. (Mech.) NED UET;
   Ph.D. (Mech.), New Zealand

2. Dr. Ing. Usman Allauddin
   B.E. (Mech.) NED UET; M. Engg (Mech.) NED UET
   Ph.D. (Mech.), Germany

3. Dr. Haider Ali
   B.E. (Mech.) NED UET; M. Engg (Mech.) NED UET
   Ph.D. (Mech.) KFUPM, Saudi Arabia

Assistant Professors

1. Ms. Amber Fishan Zafar
   B.E. (Mech.) NED UET; M.S (Mech.) NUST

2. Mr. Imran Sikandar
   B.E. (Mech.) NED UET; MS (Mech.), USA

3. Dr. Muhammad Ehtesham ul Haque
   B.E. (Mech.) NED UET; M.S (Mech.), USA;
   Ph.D. (Mech.), Malaysia

4. Mr. Masood Ahmed Khan
   B.E. (Mech.) NED UET; M. Sc. (Computer Sc.) NED UET;
   M. Engg (Mfg.) NED UET

5. Mr. Kashif Noor
   B.E. (Mech.) NED UET; M. Engg.(Mech.) NED UET; MBA;

6. Ms. Erum Khan
   B.E. (Mech.) NED UET; M. Engg.(Mech.) NED UET

7. Dr. Tariq Jamil
   B.E. (Mech.) NED UET; M. Engg.(Mech.) NED UET;
   PhD (Mech.), USA

8. Dr. Mahrukh *(On study leave)*
   B.E. (Mech.) NED UET; M. Engg.(Mech.) NED UET;
   Ph.D. (Mech.), UK

9. Mr. Mumtaz Hussain Qureshi
   B.E. (Mech.) NED UET; M. Engg.(Mech.) NED UET
   Ph.D. (In progress)

10. Dr. Syed Ahmad Raza
    B.E. (Mech.) NED UET; M. Engg (Mech.) NED UET;
    Ph.D. (CFD), Taiwan

11. Dr. Muhammad Muzamil
    B.E. (Materials) NED UET; M.Engg. (Mech.) NED UET
    Ph.D. (Mech.), China

12. Mr. Saqib Sharif
    B.E. (Mech.) NED UET; M.Engg. (Mech.) NED UET;
    Ph.D. (In progress)

13. Mr. Adeel Ahmed Khan
    B.E. (Mech.) NED UET; M.Engg. (Mech.) NED UET;
    Ph.D. (In progress)

14. Mr. Syed Aun Ali Rizvi
    B.E. (Mech.) NED UET; M.S (Mech.) NUST;
    Ph.D. (In progress)

15. Mr. Arshad Siddiqui
    B.E. (Mech.) NED UET; M.Engg. (Mech.), Canada;

Lecturers

1. Ms. Bushra Fatima
   B.E. (Mech.) NED UET; M.Engg. (Energy Systems), Turkey;

2. Mr. Abdul Qadir
   B.E. (Ind. & Mfg.) NED UET; M.Engg.(Mech.) NED UET

3. Dr. Muhammad Uzair Yousuf
   B.E. (Mech.) NED UET; M.Engg. (Mech.) NED UET;
   PhD (Mech.), New Zeeland

4. Mr. Muhammad Muzammil Ejaz
   B.E. (Mech.) NED UET; MS (Thermal Power) NUST

5. Mr. Abdul Ghaffar
   B.E. (Mech.) NED UET; M.Engg. (Mech.) NED UET;
   Ph.D. (In progress)

6. Mr. S.M. Hassan Liaquat
   B.S. (Mech.), UET Taxila; M.S (Mech.), China;
   Ph.D. (In progress)

7. Mr. Sohail Hasnain
   B.E. (Mech.) NED UET; M.Engg. (Mfg.) NED UET

8. Mr. Muhammad Azam
   B.E. (Mech.) NED UET; M.Engg. (Mfg.) NED UET

9. Mr. Shehroze Tahir Khan
B.E. (Mech.) NED UET; MEM (Ind. Management) NED UET;
Ph.D. (In progress)

10. Ms. Hafiza Sumaiya Mohsin (On study leave)
B.E. (Mech.) NED UET; M.Engg. (Mech.) NED UET

11. Ms. Ifrah Asif
B.E. (Ind. & Mfg) NED UET; M.Engg. (Ind. & Mfg.) NED UET

12. Mr. Ahsan Ahmed
B.E. (Mech.) NED UET; MEM (Energy & Plant Mang.) NED UET

13. Mr. Talha Bin Nadeem
B.E. (Mech.) NED UET; MEM (Energy & Plant Mang.) NED UET

14. Mr. Zain Shahid
B.E. (Mech.) NED UET; M.Engg. (Mech.) NED UET;
Ph.D. (In progress)

15. Mr. Muhammad Siddique
B.E. (Mech.) NED UET; MEM (Energy & Plant Mang.) NED UET

16. Mr. Bilal Ahmed Soomro
B.E. (Mech.), MUET; M.Engg. (Mech.) NED UET
Ph.D. (In progress)

17. Mr. Syed Muhammad Asad Akhtar
B.E. (Mech.) NED UET; M.Engg. (Mech.) NED UET;
Ph.D. (In progress)

18. Mr. Mirza Hammad Baig
B.E. (Mech.) NED UET; M.Engg. (Mech.), Germany

19. Mr. Osma Anis
B.E. (Mech.) NED UET; M.Engg. (Mech.), Germany

20. Mr. Shaukat Ali Shaikh
B.E. (Mech.) GIKIEST; M.Engg. (Mech.) NED UET;
Ph.D. (In progress)

21. Mr. Duraid Ud Din
B.E. (Mech.) NED UET; MEM (Energy and Plant) NED UET

22. Mr. Hassan Alam
B.E. (Mech.) NED UET;
M.S. (Physics), University of Waterloo, Canada

23. Mr. Abdul Mujeeb
B.E. (Mech.) NED UET; MEM (Energy and Plant) NED UET

24. Mr. Muhammad Umaid Ghauri
B.E. (Mech.) NED UET; M. Engg. (Mech.) NED UET

25. Syed Umair Hassan Kazmi
B.E. (Mech.) NED UET; M. Engg. (Mech.) NED UET

Sr. Laboratory Engineer

Mr. Atiq ur Rab Siddiqui
B.E. (Mech.) NED UET; M.Sc. (Met. Engg.) NED UET

Laboratory Engineer

Mr. Shaikh Jawaid
DAE (Mech.); B.Tech. (Mech.)

2.2.6 Department of Textile Engineering
(Also administering Bachelor of Science in Textile Sciences Programme)

Chairperson

Prof. Dr. Sheraz Hussain Siddique

Co-Chairperson

Prof. Dr. Bilal Zahid

Professor

1. Prof. Dr. Sheraz Hussain Siddique
B.E. (Textile.);M.Sc. (Textile & Clothing), Germany;
Ph.D. (Textile Science & Technology), UK

2. Prof. Dr. Bilal Zahid
B.E. (Textile); M.Engg. (Textile); MBA (Textile
Management);Ph.D., (Textile Science & Technology), UK

3. Prof. Dr. Muhammad Dawood Husain
B.E. (Textile); M.Sc. (Textile & Clothing Management),
Germany; Ph.D. (Textile Science & Technology), UK

Associate Professor

1. Dr. Salma Farooq
B.Sc. (Textile); M.Engg. (Textile);
Ph.D. (Textile), United Kingdom

2. Dr. Ali Hasan Mahmood
B.E. (Textile Engg.); M.Engg. (Textile);
Ph.D. (Textile Science & Technology), UK

3. Dr. Fareha Asim
B.E. (Textile Engg.) ; M.Engg. (Textile) ;
Ph.D. (Textile), Pakistan

4. Dr. Muhammad Ali
B.E. (Textile Engg.) ; M.Engg. (Textile);
Ph.D. (Textile Science & Technology), UK

5. Dr. M. Owais Raza Siddiqui
B.E. (Textile Engg.) ; M.Engg. (Textile) ;
Ph.D. (Textile), UK

6. Dr. Saira Faisal
B.E. (Textile Engg.) ; M.Engg. (Textile) ;
Ph.D. (Textile Science & Technology), UK

7. Dr. Shenela Naqvi
B.E. (Textile Engg.) ; M.Engg. (Textile)
Ph.D. (Textile Science & Technology), UK

8. Dr. Quratulain Mohtashim
B.E. (Textile Engg.) ; M.Engg. (Textile) ;
Ph.D. (Textile Science & Technology) UK

Assistant Professor

1. Dr. Agha Deedar Hussain
   *B.Sc. (Textile Engg.) ; M.Engg. (Textile);
   Ph.D. (Supply Chain Management), Portugal*

2. Dr. Farhana Naeem
   *B.E. (Textile Engg.) ; M.Engg. (Textile) ;
   Ph.D. (Textile) NED UET*

3. Dr. Muhammad Amir Qureshi
   *B.E. (Textile Engg.) ; M.Engg. (Textile), ;
   Ph.D. (Textile), UK*

4. Dr. Sabeen Jahanzeb
   *B.E. (Textile Engg.) ; M. Engg. (Textile), ;
   Ph.D. (Textile) NED UET*

Lecturers

1. Engr. Tahreem Beg
   B.E. (Textile Engg.) ; MEM (Industrial Management)

2. Engr. Sehrish Naveed
   B.E. (Textile Engg.) ; MEM (Industrial Management)

3. Engr. Danyal Rashid Khan
   B.E. (Textile Engg.) ; MEM (Industrial Management)

4. Engr. Maha Farrukh
   B.E. (Textile Engg.) ; MEM (Industrial Management)

5. Engr. Sarah Jaweed
   B.E. (Textile Engg.) ; MEM (Industrial Management)

IT Manager (Senior Scale)

Engr. Arsalan Waheed
B.E. (Computer System) ;M. Engg. (Computer System)

2.2.7   Department of Industrial and Manufacturing Engineering

Chairperson

Dr. Maqsood Ahmed Khan

Co- Chairperson

Dr. Muhammad Fahad

Professors

1 Prof. Dr. Muhammad Tufail
   *B.E. (Mech.) NED UET;
   M.Sc. (Manufacturing System) Nottingham University, UK;
   Ph.D. Nottingham Uni., UK; C.Eng; FIMechE, Mem ASME*

2 Prof. Dr. Syed Amir Iqbal
   *B.E. (Mech.) NED UET; M.E. (Mech.) NED UET;
   Ph.D. (Mech.) University of Manchester, UK*

Associate Professors

1. Dr. Maqsood Ahmed Khan
   *B.E. (Mech.); M. Engg. (Mfg. Engg.)
   Ph.D., Canada*

2. Dr. Muhammad Fahad
   B.E., (Ind. & Mfg.); M.Sc., UK; Ph.D. UK

3. Dr. Muhammad Wasif
   *B.E. (Mech.); M. Engg. (Mfg. Engg.)
   Ph.D., Canada*

4. Dr. Anis Fatima
   *B.E. (Ind. & Mfg. Engg.); M. Engg. (Mfg. Engg.)
   Ph.D., UK*

Assistant Professors

1. Mr. Ali Zulqarnain
   *B.E. (Mech.); M. Engg. (Mfg. Engg.);
   Ph.D. (In progress)*

2. Ms. Sadia Majeed
   *B.A. (Hons.); M.A. (Eco.); MAS (Industrial Eco.);
   M.Phil. UoK*

3. Dr. Syed Mehmood Hasan
   B.E. (Ind. & Mfg. Engg.); M.S. (Engg. Mgt.);

4. Dr. Asim Zaheer
   B.E. (Mech.); M.S. (Engg. Mgt.); Ph.D. ,UK

5. Ms. Shaheen Perween
   B.E. (Mech.); M. Engg. (Mfg. Engg.); Ph.D. (in progress)

6. Dr. Aqeel Ahmed
   B.E. (MechEngg.); M. Engg. (Mfg. Engg.); Ph.D. (Canada)

7. Dr. Shakeel Ahmed
   B.E. (Ind. & Mfg. Engg.); M. Engg. (Energy Systems); Ph.D. (UK)

8. Ms. Rabia Siddiqui
   B.E. (Ind. & Mfg. Engg.); M. Engg. (Mfg. Engg.)

9. Dr. Sheheryar Mohsin Qureshi
   B.E. (Ind. & Mfg. Engg.); M. Engg. (Engg. Mgt.); Ph.D. (Korea)

10. Ms. Rabiya Zubair
    B.E. (Ind. & Mfg. Engg.); M. Engg. (Mfg. Engg.)

11. Ms. Javeria
    B.E. (Ind. & Mfg. Engg.) ; M. Engg. (Mfg. Engg.); Ph.D. (In progress)

12. Ms. Naima Javed
    B.E. (Ind. & Mfg. Engg.); M. Engg. (Engg. Mgt.)

Lecturer

1 Ms. Saima Yaqoob
   B.E. (Ind. & Mfg. Engg.); M. Engg. (Engg. Mgt.)

2 Mr. Hamood-ur-Rehman (On Study Leave)
   B.E. (Ind. & Mfg. Engg.); M. S. (Mech.) Hungary

3 Ms. Maria Iruj
   B.E. (Ind. & Mfg. Engg.); M. Engg. (Mfg. Engg.)

4   Mr. Muhammad Zaid Khan
B.E. (Ind. & Mfg. Engg.); M. Engg. (Engg. Mgt.)

5   Mr. Syed Raheel Adeel
B.E. (Ind. & Mfg. Engg.); M. Engg. (Mechanical)

IT Manager (Senior Scale)

1   Ms. Noureen Jahan
BCIT; MCIT; Ph.D., UK

2.2.8   Department of Automotive and Marine Engineering

Chairperson

Prof. Dr.-Ing. Syed Mushahid Hussain Hashmi

Professor

Prof. Dr.-Ing. Syed Mushahid Hussain Hashmi
*B.E. (Mechanical); M.Sc. (Mechanical) NED UET;
Ph.D. (Mechanical), Germany*

Associate Professor

Dr. Faraz Akbar
B.E. (Mechanical) NED UET; Ph.D. (Mechanical), United Kingdom

Assistant Professors

1.   Mr. Munir Ahmed
*B.E. (Mechanical) NED UET;
MASc. (Mechanical), University of Toronto, Canada
CSCP; APICS, USA*

2.   Dr. Saqib Jamshed Rind
*B.E. (Industrial Electronics), IIEE-NED
M.Sc. (Automation & Control),
University of Newcastle, England.
Ph.D. (Motor Drives for Electric Vehicles),
University of Liverpool, England*

3.   Dr. Noman Uddin Yousuf
*B.E. (Mechanical) NED UET;
M.S (Mechanical), Bradley, USA;
Ph.D. (Mechanical), Auckland University
of Technology, New Zealand*

4.   Mr. Assad Anis
*B.E. (Mechanical) NED UET;
M.S.(Mechanical), Finland*

Lecturer

Ms. Yasmeen Khan
*B.E. (Industrial & Manufacturing) NED UET;
M.Engg. (Automotive Manufacturing) NED UET*

IT Manager (Senior Scale)

Ms. Faiza Saleem
*B.S. (Computer Engineering), SSUET;
MCIT, NED UET*

Workshop Superintendent

Syed Ali Ahmed
B. Tech.; B. Tech. (Honors) NED UET

2.2.9   Department of Electrical Engineering

Chairperson

Prof. Dr. Attaullah Khawaja

Professors

1.   Prof. Dr. Saad Ahmed Qazi
*B.E.(Electrical) NED UET; M.Sc. (DSP), UK;
Ph.D., UK*

2.   Prof. Dr. Attaullah Khawaja
*B.E.(Electrical), MUET; M.Engg. (Electrical) NED UET;
Ph.D. (B.I.T), China*

Associate Professors

1.   Dr. Muhammad Ali Memon
*B.E.(Electrical); M.Engg., NED UET; MBA (MIS);
Ph.D., USA*

2.   Dr. Muhammad Mohsin Aman
*B.E.(Electrical) NED UET; M. Engg. (Electrical) NED UET
Ph.D., Malaysia*

3.   Dr. Riazuddin
*B.E. (Electrical) NED UET; M.Engg.(Electrical) NED UET
Ph.D. (Mechatronics), GIST, South Korea.*

Assistant Professors

1.   Dr. Muhammad Javed
*B.E. (Electrical) NED UET; M.Sc (Electrical) NED UET;
Ph.D., NED UET*

2.   Ms. Shahnaz Tabassum
B.E.(Electrical) NED UET; M. Engg (Electrical) NED UET

3.   Mr. Shoaib Siddiqui
B.E.(Electrical); M. Engg. (Electrical) NED UET

4.   Dr. Raja Masood Larik
*B.E.(Electrical) NED UET; M. Engg. (Electrical) NED UET;
Ph.D. (Electrical), University of Malaysia*

5.   Dr. Umbrin Sultana
*B.E.(Electrical) NED UET; M. Engg. (Electrical) NED UET;
Ph.D., Malaysia*

6.   Ms. Arjumand Samad
B.E.(Electrical) NED UET; M. Engg.(Elect) NED UET

7.   Dr. Abdurrahman Javed Shaikh
*B.E.(Electrical); M. Engg.(Elect) NED UET;
Ph.D., Malaysia*

8. Mr. Umar Sajid
B.E.(Electrical) NED UET; M.Sc (Comm. Engg. & SP), UK;
Ph. D (In progress)

9. Dr. Abdul Ghani Abro
B.E.(Electrical); M. Engg.(Elect) NED UET;
Ph.D., Malaysia

10. Dr. Krishan Lal Khatri
B.E.(Electrical) MUET; MSEE (Telecom) SSUET;
Professional Diploma Project Management, PIM Karachi.
Ph.D (USA)

11. Dr. Mirza Muhammad Ali Baig
B.E.(Electrical); M. Engg. (Electrical) NED UET;
Ph.D., NED UET

12. Ms. Samiya Zafar (On Leave)
B.E. (Electrical); M. Engg. (Electrical) NED UET;
Ph.D. (In Progress)

13. Dr. Beenish Sultana
B.E. (Electrical); M. Engg. (Electrical) NED UET;
Ph.D., Malaysia

14. Mr. Adnan
B.E. (Electrical) NED UET; M. Engg. (Electrical) NED UET;
Ph.D., (In Progress)

15. Mr. Hassan-ul-Haq
B.E. (Electrical); M. Engg. (Electrical) NED UET;
Ph.D. (In Progress)

16. Mr. Shariq Shaikh
B.E. (Electrical); M. Engg. (Electrical) NED UET;
Ph.D., (In Progress)

17. Mr. Fezan Rafique
B.E. (Electrical); M. Engg. (Electrical) NED UET;
Ph.D. (In Progress)

18. Mr. Muhammad Hammad Uddin *(On Study Leave)*
B.E.(Electrical) NED UET; M. Engg. (Electrical) NED UET;
Ph.D. (In Progress)

19. Dr. Syed Quadir Hussain Quadri
B.E (Electrical) NEDUET, MSc. (Power Electronics & Drives) (UK),
Ph.D (Electrical Machines) (UK)

Lecturers

1. Ms. Uzma Perveen
B.E. (Electrical); M. Engg. (Electrical) NED UET;
Ph.D. (In Progress)

2. Mr. Muhammad Irfan Sheikh
B.E. (Electrical) NED UET; M. Engg. (Electrical) NED UET

3. Ms. Ayesha Saeed
B.E. (Electrical) NED UET; M. Engg. (Electrical) NED UET

4. Mr. Muhammad Omar
B.E.(Electrical) NED UET; M. Engg. (Electrical) NED UET;
Ph.D (In Progress)

5. Mr. Abdullah Munir *(On Study Leave)*
B.E. (Electrical) NED UET; M. Engg (Elect) NED UET;
Ph.D. (In Progress)

6. Ms. Najia Naveed
B.E. (Electrical) NED UET; M. Engg (Electrical) NED UET;
Ph.D., (In Progress)

7. Mr. Iqbal Azeem
B.E.(Electrical) NED UET; M.Engg. (Electrical) NEDUET

8. Ms. Ayesha Khan
B.E. (Electrical) NED UET; M. Engg (Electrical) NED UET;
Ph.D. (In Progress)

9. Syed Muhammad Rashid Hussain
B.E. (Electrical) NED UET; M. Engg (Elect) NED UET;
Ph.D. (In Progress)

10. Ms. Hiba Kamal Zuberi
B.E. (Electrical) NED UET; M. Engg (Elect.) NED UET

11. Mr. Muhammad Farooq Siddiqui
B.E. (Electrical) NED UET; M. Engg (Elect) NED UET;
Ph.D. (In Progress)

12. Mr. Talha Javed Soleja
B.E. (Electrical) NED UET; M. Engg (Elect) NED UET

13. Mr. Muhammad Arshad
B.E. (Electrical), MUET; M. Engg (Elect) NEDUET;
Ph.D. (In Progress)

14. Mr. Muhammad Uzair Khan
B.E. (Electrical), MUET; M. Engg (Elect) NED UET;
Ph.D. (In Progress)

15. Mr. Nabeel Fayyaz
B.E. (Electrical), MUET; M. Engg (Elect) NED UET;
Ph.D. (In Progress)

16. Mr. Hafiz Muhammad Furqan
B.E. (Electrical) NED UET; M. Engg (Elect) NEDUET;
Ph.D. (In Progress)

17. Mr. Adeel Arif
B.E (Electrical Engineering), MS (Intelligent Power Systems)

18. Ms. Farah Andleeb Siddiqui
B.E (Electrical) NEDUET, M. Engg (Elect) NEDUET

19. Ms. Aiman Najeeb
B.E (Electrical) NEDUET, M. Engg (Elect) NEDUET

20. Ms. Hafsa Wahid
B.E (Electrical) NEDUET, M. Engg (Elect) NEDUET

Lab Engineers (Sr. Scale)

1. Mr. Ghulam Hussain Mugeri
B.E.(Electrical), MUET; M. Engg. (Electrical) NED UET

2. Ms. Anila Abbas
B.E.(Electrical) NED UET; M. Engg. (Electrical) NED UET

Junior IT Executive

Engr. Syed Muhammad Zahid
B.E. (Electrical); M.Sc. (Computer Science) NED UET;
Ph.D. (In Progress)

2.2.10 Department of Computer & Information Systems Engineering
(Administering Bachelor of Engineering in Computer Systems Programme)

Chairperson

Prof. Dr. Muhammad Ali Ismail

Professors

1. Prof. Dr. Muhammad Ali Ismail
B.E.(Comp & Info. Sys.); M.Engg.(Comp Sys.);
Ph.D. (High Performance Computing)

2. Prof. Dr. Muhammad Khurram
B.E. (Comp. Sys.); M.Engg. (Comp. Sys.);
Ph.D. (IC Design) New Zealand

3. Prof. Dr. Syed Abbas Ali
B.E.(Comp. Sys.); M.Engg.(Electrical)
Ph.D. (Automatic Speech Recognition & Machine Learning)

Associate Professor

1. Dr.-Ing. Shehzad Hasan
B.E.(Comp Sys.); M.Engg.(Comp Sys.);
Ph.D. (VLSI Testing), Germany

2. Dr. Muhammad Asad Arfeen
B.E. (Comp. & Info. Sys.); M. Engg. (Comp. Sys.);
Ph.D. (Teletraffic Engineering) New Zealand

3. Dr. Majida Kazmi
B.E. (Elect.); M. Engg. (Elect.);
Ph.D. (VLSI Design for Digital Image Processing)

Assistant Professors

1. Mr. Shahab Tahzeeb
B.E.(Comp Sys.); M.Engg.(Comp Sys.); Ph.D. (In Progress)

2. Dr. Syed Zafar Qasim
B.E. (Comp. Sys.); M. Engg. (Comp. Sys.);
Ph.D. (Multi-Objective Optimization)

3. Ms. Anita Ali
B.E.(Comp Sys.); M.Engg.(Comp Sys.)

4. Ms. Hina Danish Khan
B.E.(Comp & Info. Sys.); M.Engg.(Comp Sys.)

5. Dr. Maria Waqas
B.E.(Comp Sys.); M.Engg.(Comp Sys.);
Ph.D. (Computational Biology)

6. Dr. Urooj Ainuddin
B.E.(Comp Sys.) ; M.S.(Comp Sys.);
Ph.D. (Computational Biology)

7. Dr. Zareen Sadiq
B.E.(Comp & Info. Sys.); M.Engg.(Comp Sys.);
Ph.D. (Computer Architecture)

8. Mr. Gul Munir Ujjan
B.E.(Comp Sys.); M.Engg.(Comp Sys.);
Ph.D. (In Progress)

9. Dr. Saad Qasim
B.E. (Comp & Info. Sys.); M. Engg. (Comp Sys.);
Ph.D. (Artificial Intelligence / Neuromorphic Hardware)

10. Ms. Sumayya Zafar
B.E. (Comp & Info. Sys.); M. Engg. (Comp Sys.); Ph.D. (In Progress)

11. Dr. Syed Aqeel Haider
B.S. (Electronic); M. Engg. (Comp Sys);
Ph.D. (Biometrics Identification)

12. Dr. Hameeza Ahmed
B.E. (Comp. & Info. Sys.); M. Engg. (Comp Sys.);
Ph.D. (Big Data Computing)

Lecturers

1. Mr. Kashif Asrar
B.E. (Comp. & Info. Sys.); M. Engg. (Comp Sys.);
Ph.D. (In Progress)

2. Ms. Fauzia Yasir
B.E. (Comp. & Info. Sys.) ; M. Engg. (Comp Sys.)
Ph.D. (In Progress)

3. Mr. Muhammad Ali Akhter
B.E. (Comp Info. Sys.); M. Engg. (Comp Sys.)

4. Ms. Fakhra Aftab
B.E. (Comp. & Info. Sys.); M. Engg. (Comp Sys.);
Ph.D. (In Progress)

5. Ms. Mehwish Raza
B.E. (Comp. & Info. Sys.); M. Engg. (Comp Sys.)
Ph.D. (In Progress)

6. Mr. Umar Iftikhar
B.E. (Electrical); M.S. (Comp Engg.);
Ph.D. (In Progress)

7. Syeda Ramish Fatima
B.E. (Comp & Info. Sys.); M.S. (Comp Sys.)
Ph.D. (In Progress)

8. Ms. Ibhar Ishrat
B.E. (Comp & Info. Sys.); M.S. (Comp Sys.);
Ph.D. (In Progress)

9. Mr. Muhammad Nabeel Ibrahim Khan
B.E. (Electrical); M.S. (Information Security);
Ph.D. (In Progress)

I.T. Manager (Jr. Scale)

Mrs. Nida Fouq
BS (Comp. Science & Info. Tech.);
MS (Data Engg. and Info Management)

2.2.11 Department of Electronic Engineering

Chairperson (Acting)

Prof. Dr. Muhammad Imran Aslam

Professor

1. Prof. Dr. Muhammad Imran Aslam
*B.E. (Electrical) NED UET; M.Engg (Electrical) NED UET;
Ph.D. (Electrical), Michigan Tech, USA*

2. Prof. Dr. Ghous Bakhsh
*B.E.(Electronic) ; M.Engg(Electronic)
Ph.D.(Electrical), Michigan Tech, University USA*

Associate Professor

1. Dr. Sadia Muniza Faraz
*B.E. (Electrical) NED UET; M.Engg (Electronic) NED UET;
Licentiate of Engg. (Semiconductor Physics), Linkoping
Uni, Sweden; Ph.D (Electronic Engg.) NED UET*

2. Dr. Hashim Raza Khan
*B.E. (Electrical) NED UET; M.Sc (Communication), RWTH
Aachen University, Germany; Ph.D (Electronic) NED UET*

Assistant Professors

1. Dr. Syed Riaz-un-Nabi Jafri
*B.E. (Industrial Electronic), IIEE (NED);
M.Engg (Electronic Engg) NED UET; Ph.D. (Robotics), IIT, Italy*

2. Mr. Shahzad Siddiqi
B.E. (Electrical) NED UET; M.Engg (Telecommunications) NED UET

3. Mr. Safi Ahmed Zakai
*B.E. (Electrical) NED UET; MBA (Marketing), IBA Karachi;
M. Engg. (Telecommunications) NED;
M.Phil (Management), UoK*

4. Dr. Sana Arshad
*B.E. (Electronic) NED UET; M.Engg. (Electronic) NED UET;
Ph.D. (Electronic Engg.) NED UET*

5. Dr. Yawar Rehman
*B.E. (Electronic), MUET;
M.Engg. (Telecommunication), Hamdard University;
Ph.D. (Electronics & Communication) Hanyang
University, South Korea*

6. Dr. Amna Shabbir
*B.E. (Telecomm) NED UET; M.Engg. (Telecomm) NED UET;
Ph.D. (Telecommunication) NED UET*

7. Dr. Saleha Bano
*B.E. (Electronic) NED UET; M.Engg. (Electronic) NED UET;
Ph.D. (Electronic) NED UET*

8. Dr. Tariq Rehman
*B.E. (Industrial Electronic), IIEE-NED UET;
M.Engg. (Electronic) NED UET; Ph.D. (Electronic), Malaysia*

9. Dr. Muhammad Faizan Shirazi
*B.E. (Electronic) NED UET;
M.S (Electronic), Kyunpook National Uni, Republic of Korea;
Ph.D. (Electronic), Kyunpook National Uni, Republic of Korea*

10. Mr. Abdul Raheem Qureshi *(On study leave)*
*B.E. (Electronic) NED UET; M.Sc (Communications), LiU Sweden
Ph.D. (In Progress), TU Delft, The Netherlands*

Lecturers

1. Mr. Muhammad Nasir
*B.E. (Electronic) NED UET; M.Sc. (Computer Science) NED UET;
M.Engg. (In Progress)*

2. Ms. Madiha Mazhar
B.E. (Electronic) NED UET; M.Engg. (Electronic) NED UET;

3. Ms. Maheen Mazhar
*B.E. (Electronic) NED UET; M.Engg (Electronic) NED UET;
Ph.D (In Progress) NED UET*

4. Ms. Ayesha Akhtar
B.E. (Electronic) NED UET; M.Engg. (Electronic) NED UET

5. Ms. Saba Fakhar
B.E. (Electronic) NED UET; M.Engg. (Telecommunications) NED UET

6. Ms. Hira Imtiaz
B.E. (Electronic) NED UET; M.Engg. (Electronic) NED UET

7. Ms. Arham Iqbal
B.E. (Electronic) NED UET; M.Engg (Ind. Electronic)

8. Ms. Sidra Rahman
B.E. (Electronic) NED UET; M.Engg (Electronic) NED UET

9. Ms. Mariyum Jamshid
B.E. (Electronic) NED UET; M.Engg (Electronic) NED UET

10. Ms. Hafsa
B.E. (Electronic) NED UET; M.Engg. (Electronic) NED UET

11. Ms. Aqsa Khan *(On Study Leave)*
B.E. (Electronic) NED UET; M.Engg. (Electronic) NED UET

12. Sheikh Zahid Ali Siddiqui *(On study leave)*
*B.E. (Electronic) NED UET; M.Engg (Embedded Computing),
Chosun University South Korea;
Ph.D. (In progress), Sogang University, South Korea*

Manager, Instrumentation Centre

Syed Hasnain Ali Naqvi
*B.E.(Industrial Electronics), IIEE;
MS (Instrumentation And Control), UK*

Deputy Manager, Instrumentation Centre

Mr. Asim Ahmed
*B.E.(Electronics)NED;
M.Engg. (Industrial Electronics) NED*

Instrumentation Engineer, Instrumentation Centre

Mr. Adnan Rasheed
*B.E.(Electronics), UIT;
M.Engg. (Industrial Electronics) NED*

IT Manager,

Muhammad Yasir Khan
BCIT (University of Sindh Jamshoro).

2.2.12 Department of Telecommunications Engineering

Chairperson

Prof. Dr. Muhammad Imran Aslam

Professor

Prof. Dr. Muhammad Imran Aslam
B.E. (Electrical) NED UET; M.Engg (Electrical) NED UET;
Ph.D. (Electrical), Michigan Tech, USA

Assistant Professors

1. Dr. Amir Zeb
B.E. (Electrical) NED UET; M.Engg (Telecommunication) NED UET;
Ph.D. (Wireless Communication/Cognitive Radio) NED UET

2. Dr. Tahir Malik
B.E. (Electrical) NUST; M.Sc (Telecommunications & Info. System), Essex, UK; Ph.D. (Electrical & Electronic Engg.), University of Canterbury, New Zealand

3. Ms. Nida Nasir *(On Study Leave)*
B.E. (Electronic) NED UET; M.Engg (Telecommunications) NED UET

4. Ms. Saba Ahmed
B.E. (Electrical) NED UET; M. Engg (Telecommunications) NED UET Ph.D. (Telecommunications) NED UET (in Progress)

5. Dr. Sunila Akbar *(On Ex-Pakistan Leave)*
B.E. (Electrical) NED UET; M.Engg (Telecomm.) NED UET; Ph.D. (Telecommunications), King's College London

6. Dr. Uzma Afsheen
B.E. (Electrical) NED UET; M.Engg (Telecommunications) NED UET; Ph.D., University of Canterbury, New Zealand

7. Dr. Fahim Ull Haque
B.E. (Telecommunications) NED UET M.Engg (Telecommunications) NED UET Ph.D. (Electrical Engg.), Linkoping University, Sweden

8. Dr. Rizwan Aslam Butt
B.E. (Electronic) NED UET; MCIT, NED UET; M.Engg (Telecom) NED UET; Ph.D (Communication Engg.), Malaysia

9. Dr. Sundus Ali
B.S. (Telecommunications), FAST-NU; M.Engg (Telecommunications), Hamdard University; Ph.D (Telecommunications) NED UET

10. Ms. Hira Mariam
B.E. (Telecommunications) NED UET; M.Engg (Telecommunications) NED UET; Ph.D. (In Progress) NED UET

Lecturers

1. Ms. Komal Masroor *(On study leave)*
B.E. (Telecom) NED UET; M.Engg (Telecom) NED UET; Ph.D. (Telecommunications) NED UET

2. Mr. Shahid ur Rehman
B.E. (Electrical) NED UET; M.Engg. (Telecom) NED UET Ph.D. (Telecommunications) NED UET (in Progress)

3. Syed Muneeb Ahmed
B.E. (Telecom), SSUET; M.Engg, NED UET

4. Ms. Fatima Muhammad Saleem
B.E (Telecom) NED UET; M.Sc. (ELectrical Engg. & IT) Otto Von Guericke University Magdebug, Germany)

5. Ms. Ghulam Fiza
B.E. (Telecommunications) MUET; M.Engg (Telecommunications) MUET;

Senior Laboratory Engineer

Mr. Danish Mahmood Khan *(On study leave)*
B.E.(Telecommunications) NED UET; M.Engg.(Telecommunications) NED UET; Ph.D. (In Progress)

IT Manager

Mr. Waqas Raza
MBA (HRM), FUUAST; B.E. (Comp Sys. Engg.), SSUET

2.2.13 Department of Biomedical Engineering
The Department is located in NED-LEJ Campus

Chairman

Prof. Dr. Ali Raza Jafri

Co-Chairperson

Dr. Engr. Eraj Humayun Mirza

Professor

Prof. Dr. Ali Raza Jafri
B.E. (Mechanical) NED UET; M.Engg. (Mechanical) NED UET; Ph.D.(Mechatronics), Beijing Institute of Technology, China

Associate Professor

1. Dr. Eraj Humayun Mirza
B.S. (Biomedical), SSUET; M.S. (Biomedical), University of Dundee, UK; Ph.D. (Biomedical), University of Malaya, Malaysia

2. Dr. Muhammad Abul Hasan
B.E. (Electronics) NED UET; M.Engg. (Ind. Electronics) NED UET; Ph.D. (EEG-Neurofeedback & Signal Processing), University of Glasgow, UK

Assistant Professors

1. Dr. Syed M. Wasim Raza
   M.B.B.S., PGDPA, MAS;
   Ph.D. (Biomechanics, Orthopedic & Motion Analysis),
   University of Dundee, UK

2. Dr. Bilal Ahmed Usmani *(On Extra Ordinary Leave)*
   M.Sc. (Mathematics), UoK; M.Phil (Mathematics), UoK;
   Ph.D. (Epidemiology), University of Glasgow, UK

3. Ms. Rehana Kousar *(On Ex-Pakistan Leave)*
   M.Sc.; M.Phil. (Biology)

4. Mr. Riaz Uddin
   B.S. (Biomedical), SSUET ;
   M.S. (Biomedical), SSUET; MBA, IBA, Karachi;
   Ph.D. (In progress), Uni of Auckland, New Zealand

Lecturers

1. Ms. Tajwar Sultana
   B.E. (CIS) NED UET; M.Engg. (Comp. Sys.) NED UET;
   Ph.D. (In progress) NED UET

2. Ms. Saima Kashif *(On Study Leave)*
   B.E. (Biomedical) NED UET; M.E. (Biomedical) NED UET;
   Ph.D. (In progress), University of Edinburgh, UK

3. Ms. Madeeha Sadia *(On Study Leave)*
   B.S. (Biomedical), SSUET; M.Engg. (Electronics) NEDUET;
   Ph.D. (In progress), University of Technology, Malaysia

4. Mr. Mustafain Ali
   B.E. (Biomedical) NED UET; M.S. (Applied Mathematics) NED UET;
   Ph.D. (In progress) NED UET

5. Mr. Ahmed Zahid Rao
   B.E. (Biomedical) NED UET;
   M.S. (Biomedical) New Jersey Institute of Technology, USA;
   Ph.D. (In progress) NED UET

6. Ms. Amna Amin Sethi
   B.E. (Biomedical) NED UET; M.E. (Biomedical) NED UET;
   Ph.D. (In Progress) NED UET

7. Ms. Fizza Zia Shaikh
   B.E. (Biomedical) NED UET; M.E. (Biomedical) NED UET

2.2.14 Department of Materials Engineering

Chairperson

Prof. Dr. Fayaz Hussain

Professors

1. Prof. Dr. Fayaz Hussain
   B.E. (Metallurgical Engg.), MUET;
   M. Engg. (Materials Engg.) NED UET;
   Ph. D. (Functional Materials and Devices),
   The University of Sheffield, United Kingdom.

2. Prof. Dr. Muhammad Sohail Hanif
   B.E. (Industrial Manufacturing Engg.) NED UET;
   M. Engg. (Materials Engg.) NED UET;
   Ph. D. (Advanced Laser), KAIST, South Korea.

Assistant Professors

1. Dr. Muhammad Sajid Ali Asghar
   B.E. (Metallurgy and Materials Engg.), MUET;
   M. Engg. (Materials Engg.) NED UET;
   Ph. D. (Nano Materials), The University of Sheffield, UK

2. Engr. Humair Ahmed Siddiqui *(on study leave)*
   B.E. (Materials Engg.) NED UET;
   M. Engg. (Materials Engg.) NED UET
   Ph. D. (In Progress) New Zealand

3. Engr. Muhammad Faizan *(on study leave)*
   B.E. (Materials Engg.) NED UET
   M. Engg. (Materials Engg.) NED UET;
   Ph. D. (In progress), South Korea

4. Dr. Faaz Ahmed Butt
   B.E. (Metallurgical Engg.) NED UET;
   M. Engg. (Materials Engg.) NED UET;
   Ph. D. (Nano Materials for Energy Application),
   KOC University Istanbul, Turkey

5. Engr. Abdul Rauf Jamali
   B.E. (Metallurgy and Materials Engg.) NED UET
   M.Sc. (Materials Engg.), Germany;
   Ph. D. (In Progress) NEDUET

6. Engr. Sajida Shaikh
   B.E. (Materials Engg.) NED UET;
   M. Engg. (Materials Engg.) NED UET;
   Ph. D. (In Progress) NED UET

Lecturers

1. Engr. Danish Majeed
   B.E. (Metallurgy and Materials Engg.) NED UET;
   M. Engg. (Materials Engg.) NED UET

2. Engr. Muhammad Wasiq Ali Khan
   B.E. (Materials Engg.) NED UET
   M. Engg. (Materials Engg.) NED UET

3. Engr. Mudassir Farooq
   B.E. (Metallurgical Engg.) NED UET;
   M.S. (Materials Science & Engineering), KFUPM, Saudi Arabia

4. Engr. Muhammad Umair Jamal
   B.E. (Metallurgical Engg.) NED UET;
   MEM (Industrial & Management Engineering) NED UET;
   M. Engg (In progress) NEDUET

2.2.15 Department of Chemical Engineering

Chairperson

Prof. Dr. Inayatullah Memon

Professors

1. Prof. Dr. Inayatullah Memon
B.E (Chemical Engg), NED UET;
Ph.D (Chemical Engg), LEEDS, UK

2. Prof. Dr. Saud Hashmi
B.E. (Chemical), DUET; M.E. (Environmental), NED UET;
Ph.D. (Chemical), Chonkbuk Uni, South Korea

Associate Professors

1. Dr. Fahim Uddin
B.E (Chemical), NED UET; M.Engg (Chemical), NED UET;
Ph.D. (Chemical), Uni. Tek. PETRONAS, Malaysia

2. Dr. Syed Ali Ammar Taqvi
B.E (Chemical), NED UET; M.Engg (Chemical), NED UET;
Ph.D. (Chemical), Uni. Tek. PETRONAS, Malaysia

3. Dr. Faizan Raza
B.E. (Chemical), UoK;
Ph.D. (Fusion Chemical), Hanyang Uni. South Korea.

Assistant Professors

1. Mr. Rizwan Ahmed Qamar
B.Sc. (Chemical), BZU; M.Engg. (Chemical), NED UET

2. Dr. Sajid Muhbat
B.E (Chemical), MUET; M.Engg. (Chemical), NED UET;
Ph.D. (Chemical) NED

3. Dr. Saad Nadeem
B.E (Chemical), DCET; M.E. (Chemical), NEDUET
Ph.D. (Chemical), Uni. Tek. PETRONAS, Malaysia

Lecturers

1. Mr. Ahmed Ullah
B.E (Chemical), NED UET; M.E (Chemical) NED UET

2. Ms. Hafsa Bano
B.E. (Chemical), NED UET; M.E (Chemical) NED UET

3. Ms. Zaha Naseem
B.E. (Chemical), NED UET; M.E (Chemical) NED UET

4. Mr. Abdu Sami (On Study Leave)
B.E. (Chemical), DCET; M.E (Chemical) NED UET

5. Mr. Muhammad Umair Shaikh
B.E. (Chemical) MUET; M.E (Chemical) MUET

6. Mr. Ibtihaj Khurram Faridi (On Study Leave)
B.E. (Chemical) MUET; M.E (Chemical) Otto Von, Germany

7. Mr. Syed Muhammad Tariq
B.E. (Chemical) MUET; M.E. (Chemical) NED UET

8. Mr. Dileep Kumar
B.E. (Chemical) MUET; M.E. (Chemical) MUET

9. Mr. Muhammad Shahid (On Study leave)
B.E. (Chemical), UoK; M.E. (Chemical), NED UET

10. Ms. Tuba Siraj Ansari
B.E. (Chemical), NED UET; M.E. (Chemical), NED UET;
PhD (In Progress) (Chemical) NED UET

11. Mr. Shahzad
B.E. (Chemical), MUET; M.E. (Environmental), NED UET;
PhD (In Progress) (Chemical) NED UET

IT Manager (Senior Scale)

Ms. Nadia Ajaz
B.E (CIS) NED; MCIT, NED UET

2.2.16 Department of Metallurgical Engineering

Chairperson

Prof. Dr. Ali Dad Chandio

Professors

1. Prof. Dr. Ali Dad Chandio
B.E. (Metallurgy & Materials) MUET;
M.E. (Materials Engg.) NEDUET;
Ph.D. (High Temperature Materials for Aero-engine Applications) UK

2. Prof. Dr. Shahid Hussain Abro
B.E. (Metallurgy & Materials) MUET;
M. Engg. (Materials) NEDUET;
Ph.D. (Nano and Functional Materials) South Korea

Associate Professors

Dr. Nafis-Ul- Haque
B.E. (Metallurgy & Materials) MUET;
M.E. (Materials Engg.) NEDUET;
Ph.D. (Metallurgy & Materials Engg.) UK

Assistant Professors

1. Dr. Aqeel Ahmed Shah
B.E. (Metallurgy & Materials) MUET;
M.S. (Nano Materials) South Korea;
Ph.D. (Materials Engg.), NEDUET

2. Dr. Muhammad Ali Siddiqui
B.E. (Metallurgy & Materials) MUET;
M.E. (Materials Engg.) NEDUET
Ph.D (Materials Scie. & Engg.),IMR,CAS,USTC

3. Dr.-Ing. Laraib Sarfraz Khanzada
B.E. (Metallurgy & Materials) MUET;
M.E. (Materials Engg.) NEDUET;
Ph.D. (Materials Engg. Materials for Electronics & Energy Technologies)

4. Dr. Iftikhar Ahmed Channa
B.E (Metallurgy & Materials) MUET;
M.E (Materials Engg.) NEDUET;
Ph.D. (Thin Film Barriers)

5. Engr. Muhammad Samiuddin
B.E. (Materials) NEDUET; M.E. (Materials) NEDUET
Ph.D. (In progress)

6. Engr. Waseen Khan
B.E. (Metallurgical) NEDUET; M.E. (Materials) NEDUET;
Ph.D. (In progress)

7. Dr. Muhammad Rizwan
B.E. (Materials) NEDUET; M.E. (Materials) NEDUET;
Ph.D. (Material Engg. Biomaterials) University of Malaysia,
Malaysia

8. Dr. Shafaq Asrar
B.E. (Materials) NEDUET; M.E. (Materials) NEDUET;
Ph.D. (Materials) NEDUET

Lecturers

1. Dr. Ambreen Azmat
B.E. (Materials) NEDUET; M.E. (Materials) NEDUET;
Ph.D. (Materials) NEDUET

2. Engr. Zubia Anwer
B.E. (Metallurgical)NED; M.E. (Materials) NED;
Ph.D. (In progress)

3. Mr. Jahanzeb Bhatti
B.E. (Metallurgy & Materials) MUET;
M.E. (Mechanical) University of Malaysia
Ph.D. (In progress)

4. Mr. Hammad Ur Rehman
B.E. (Metallurgical) NED;
M.E.M (Industrial Management) NEDUET;
Ph.D. (In progress)

IT Manager (Senior Scale)

Mr. Muhammad Imran
MCIT (NEDUET); MCS. (FUUAST);
PGD (CS) KU; DCS (AT & T)

2.2.17 Department of Polymer & Petrochemical Engineering

Chairperson

Prof. Dr. Saud Hashmi

Professor

1. Prof. Dr. Saud Hashmi
B.E. (Chemical), MUET; M.Engg. (Env.) NED UET;
Ph. D. (Chemical), Chonkbuk Uni, South Korea

2. Prof. Dr. Zahoorul Hussain Awan
B.E. (Mechanical) NED UET; M.Engg. (Chemical) NED UET
Ph. D. (Chemical), Chonkbuk Uni, South Korea

Associate Professors

Dr. Asim Mushtaq
B.E. (Chemical), DUED; M.E. (Env.) NED UET;
Ph.D. (Chemical), Universiti Teknologi PETRONAS,
Malaysia

Assistant Professors

1. Engr. Raza Muhammad Khan
B.E. (Polymer Engg), Hamdard University;
M.Sc. (Advanced Materials Engg); Uni of Bradford, UK

2. Dr. Rafiq Ahmed
B.Sc. (Hons); M.Sc. (Metallurgy & Materials Technology);
Ph.D. (Polymer Tech.), Eindhoven University of
Technology, Netherlands

3. Dr. Junaid Akhlas
B.E. (Mechanical) NED UET; M.E. (Chemical) NED UET;
Ph.D(Industrial Engineering), University of Padua, Italy

4. Engr. Nadia Khan
B.E.(Chemical) NED UET; M.E. (Chemical) NED UET

Lecturers

1. Engr. Asra Nafees
B.E. (Polymer & Petrochemical) NED UET;
M.E. (Polymer) NED UET

2. Engr. Amina Israr
B.E. (Polymer & Petrochemical) NED UET;
M.E. (Ind. Mgm) NED UET

3. Engr. Nabiha Syed
B.E. (Polymer & Petrochemical) NED UET;
M.E. (Polymer) NED UET

4. Engr. Ahmed Saleem
B.E. (Polymer & Petrochemical) NED UET;
M.Sc. (Engg. in Chemical and Energy Engineering),
Otto Von Guericke University, Magdeburg, Germany

Laboratory Engineers

1. Engr. Zia-ul-Hassan
B.E.(Mech.) NED UET; M.E. (Polymer) NED UET

2. Mr. Ali Raza
B.E. (Textile Engg.), MUET; M.E.(Polymer) NED UET

3. Mr. Umair Hasan
B.E.(Electronics Engg.), SSUET;
M.E. (Electrical Engg.), The Arctic University of Norway

I.T. Manager

Engr. Nuzhat Afreen
BS(Computer Engg.) SSUET; MCIT, NED UET

2.2.18 Department of Food Engineering
The Department is located in NED-LEJ Campus

Chairperson

Prof. Dr. Zahoor ul Hussain Awan

Professors

1. Prof. Dr. Farzana Yasmin
   Ph.D. (Biochemistry), UoK

2. Prof. Dr. Tariq Iqbal
   M.A. (Economics), UoP;
   M.Engg.Sc. (Food Process Engineering), Uni College Cork, Ireland;
   Ph.D. (Process & Chemical Engineering), Uni College Cork, Ireland

Assistant Professors

1. Dr. Muhammad Badaruddin
   M.Sc. (Food Science and Technology), UoK;
   Ph.D. (Biosciences), University of Exeter, UK

2. Dr. Jawaad Ahmed Ansari
   M.Sc. (Food Science and Technology), UoK;
   M.Phil. (Food Science and Technology), UoK;
   Ph.D. (Chemical and Materials Engg.), University of Auckland, New Zealand

3. Ms. Alia
   B.E. (Chemical) NED UET; M.Engg (Chemical) NED UET

4. Mr. Muhammad Hassam Siddiqui
   B.E. (Chemical), DUET; M.Engg (Chemical) NED UET

Lecturers

1. Ms. Farah Shamim
   B.E. (Chemical) NED UET; M.Engg (Chemical) NED UET

2. Mr. Salman Ali
   B.E. (Chemical Engg.), DUET; M.Sc. (Chemical & Energy Engg.), Otto Von Guericke University Magdeburg, Germany

3. Ms. Iqra Siddique Alvi
   B.E. (Food Engg.) NED UET; MEM, NEDUET

4. Ms. Aisha Jilani
   B.E. (Mech.) NUST; M.S. (Mech.) NUST

2.2.19 Department of Environmental Engineering

Chairperson

Dr. Atif Mustafa

Professor

1. Prof. Dr. Asif Ahmed Shaikh
   B.E. (Civil) NED UET; M. Engg. (Civil) Nagasaki Uni, Japan;
   Ph.D. (Civil/Environmental Engineering) Nagasaki Uni, Japan

2. Prof. Dr. Atif Mustafa
   B.E. (Civil) NED UET;
   M. Engg. (Environmental Engineering) NED UET;
   Ph.D. (Environmental Engineering), Uni of Edinburgh, UK

Associate Professors

1. Dr. Mehmood Ali
   B.E. (Mechanical) NED UET;
   M. Engg. (Environmental) NED UET;
   Ph.D. (Mechanical Engineering), Uni of Glasgow, UK

2. Dr. Sadia Khan
   M.Sc. (Microbiology); UoK;
   M. Phil (Molecular Medicine), UoK;
   Ph.D. (Civil & Environmental Engineering) University of Strathclyde Glasgow, UK

3. Dr. Abdul Ghaffar
   B.S. (Microbiology), Sindh University.
   MEM (Environmental Management) NED UET.
   Ph.D. (Environmental Science & Engineering), Tsinghua University, China

Assistant Professors

1. Dr. Zuhaib Siddiqui *(On Ex-Pakistan Leave)*
   B.E. (Civil), MUET;
   M.Engg. (Environmental Engg. & Management), Thailand.
   Ph.D. (Waste/Industrial Waste Treatment), University of Leeds, UK

IT Manager (Junior Scale)

Mr. Farhan Ahmed
B.S. (Computer Science), SZABIST;
M.S. (Information Sciences) NED UET

2.2.20 Department of Software Engineering

Chairman (Acting)

Prof. Dr. Mirza Mahmood Baig

Associate Professors

1. Engr. Dr. Sh. Muhammad Wahabuddin Usmani.
*Diploma (Computer Science), SBTE; B.E. (Electronics), DCET;
M.Sc (Computer Sc.) NED UET; Ph.D. (Computer Sc.) NED UET*

2. Engr. Dr. Raheela Asif.
*B.E. (Computer & Information Systems Engineering) NED UET;
MS(CSIT) NED UET; MS (Software Engineering), SSUET;
Ph.D. (Computer Science) NED UET*

Assistant Professors

1. Engr. Dr. Kashif Mehboob Khan.
*BS (Computer Engineering), SSUET; MS (CSIT) NED UET;
Ph.D. (Computer Science) NED UET*

2. Engr. Dr. Maria Andaleeb Siddiqui.
*B.E. (Telecommunications Engineering) NED UET;
ME (Computer Networks and Performance Evaluation) NED UET;
Ph.D. (Computer Science) NED UET*

3. Engr. Dr. Mustafa Latif.
*B.E. (Computer & Information Systems Engineering) NED UET;
M.E. (Computer & Information Systems Engineering) NED UET;
PhD (Computer Systems Engineering) NED UET*

4. Engr. Dr. Muhammad Faraz Hyder
*B.E. (Computer & Information Systems Engineering) NED UET;
M.E. (Computer & Information Systems Engineering) NED UET;
M.E. (Telecommunications Engineering) NED UET;
PhD (Computer Systems Engineering) NED UET*

5. Engr. Asma Khan
*B.E. (Computer Systems), MUET;
M.E. (Information Technology), MUET*

6. Engr. Shumaila Ashfaq
*B.E. (Computer & Information Systems Engineering) NED UET;
M.E. (Computer & Information Systems Engineering) NED UET*

7. Engr. Simra Najm
*B.E. (Computer & Information Systems Engineering) NED UET;
M.E. (Computer & Information Systems Engineering) NED UET*

Lecturers

1. Engr. Sidra Masood
*B.E. (Software Engineering), MUET;
ME (Communication Systems and Network), MUET;
Ph.D. (In progress) NED UET*

2. Engr. Sana Fatima
*B.E. (Computer & Information Systems Engineering) NED UET;
MS(CSIT) NED UET.*

3. Engr. Syed Muhammad Sheraz
*B.E. (Computer & Information Systems Engineering) NED UET;
M.E. (Computer & Information Systems Engineering) NED UET;
Ph.D. (In progress) NED UET*

4. Engr. Zainab Fatima
*B.E. (Computer & Information Systems Engineering) NED UET;
M.E. (Computer & Information Systems Engineering) NED UET;
Ph.D. (In progress) NED UET*

2.2.21 Department of Computer Science and Information Technology
(Administering Bachelor of Science in Computer Science Programme)

Chairperson

Prof. Dr. Muhammad Mubashir Khan

Professors

1. Prof. Dr. Muhammad Mubashir Khan
*B.Sc (Hons) & M.Sc (Hons) Telecom Univ. of Sindh;
MCIT (by Research) NED UET;
Ph.D., University of Leeds, UK;
Postdoctorate, University of Leeds, UK*

2. Prof. Dr. Najeed Ahmed Khan
*MSc (Maths,); MSc (Computer Science);
Ph.D., University of Leeds, UK*

3. Prof. Dr. Shehnila Zardari
*B.E. (Software), MUET;
M.E. (Communication Systems & Networks), MUET;
Ph.D., University of Birmingham, UK*

4. Prof. Dr. Shariq Mahmood Khan
*BCIT, NED UET; MCIT, NED UET;
Ph.D., Brunel University London*

Associate Professor

Dr. Saman Hina
*BS (CS), SSUET; MCIT, NED UET;
Ph.D., University of Leeds, UK*

Assistant Professors

1. Ms. Saba Izhar Haque
BSc (Hons), UMIST, UK; M Phil (Computation) UMIST, UK

2. Dr. Waseemullah
*BCIT, NED UET; MCIT, NED UET;
Ph.D., NED UET*

3. Dr. Muhammad Umer Farooq
*BCIT, NED UET; MCIT, NED UET;
Ph.D., NED UET*

4. Dr. Maria Andleeb Siddiqui
*B.E. (Telecom Engineering) NED UET;
M.E. (Computer Networks and Performance Evaluation) NED UET;
Ph.D., NED UET*

5. Dr. Murk Marvi
*B.E. (Telecom), MUET Jamshoro;
M.E. (Comm. Systems and Networks) MUET;
Ph.D., NED UET*

6. Dr. Usman Amjad
*BS (Comp. Sc.) Univ. of Karachi,
MS/PhD. (Univ. of Karachi)*

Lecturers

1. Mr. Abdul Karim Kazi
   BCS (KU); MCS (KU); MCIT (NED UET);
   Ph.D. (In Progress) NED UET

2. Mr. Muhammad Kamran
   BS (CS) KU; MCIT (NED UET);
   Ph.D. (In Progress) NED UET

3. Ms. Farah Sadiq
   B.E. (CIS) NED UET, MS (DEIM) NED UET

4. Mr. Furqan Hussain Essani
   BS (CS), MAJU; MS (CS), MAJU

IT Managers

1. Mr. Zahid Nazir Ahmed
   B.Sc.; DCS; MCS KU

2. Ms. Noor Afshan
   BS (Comp. Info. Sys) USA

3. Ms. Nazish Irfan
   MS (IT), PIMSAT

2.2.22 Department of Mathematics
(Administering Bachelor of Science in Computational Finance Programme)

Chairman

Prof. Dr. Mirza Mahmood Baig

Professors

Prof. Dr. Mirza Mahmood Baig
M.Sc. (Maths) UoK; MS (Comp. Sc.) NEDUET
Ph.D (Comp. Sc.) NEDUET

Assistant Professors

1. Mr. Umar Faryaz
   B.Sc. (Hons) UoK; M.Sc. (Maths) UoK
   MS (Comp. Sc.) NEDUET; Member KMA

2. Mr. Javed Ahmed Siddiqui
   B.Sc. (Hons) UoK; M.Sc. (Maths) UoK

3. Ms. Razia Shaheen
   B.Sc. (Hons) UoK; M.Sc. (Maths) UoK;
   M.Phil UoK

4. Dr. Muhammad Jamil
   B.Sc. (Hons) UoK; M.Sc. (Maths) UoK;
   M.Phil UoK; Ph.D. (Maths) G.C. University, Lahore

5. Dr. Fareed Ahmed
   B.Sc. (Hons) UoK; M.Sc. (Maths) UoK
   MS (Comp. Sc.) NEDUET; Ph.D. (Comp. Sc.) NEDUET

6. Dr. Azam Khan
   M.Sc. (Maths) UoK;
   Ph.D. (Linkoping University, Sweden)

7. Ms. Shumaila Usman
   B.Sc. (Hons) UoK; M.Sc. (Statistics) UoK;
   MS (Comp. Sc.) NEDUET

8. Dr. Fahim Raees
   B.Sc. (Hons) UoK;M.Sc. (Maths) UoK;
   Ph.D. (Computational Fluid Dynamics)
   TU Delft, The Netherlands

9. Dr. Kamran Zakaria
   M.Sc. (IBM) UoK; (DAE CS);
   (DAE Java Programme); Ph.D. (Maths) FUUAST

10. Dr. Faqiha Sultan
    B.Sc. (Hons) UoK; M.Sc. (Mathematics) UoK;
    Ph. D. (Applied Mathematics) UoK

11. Mr. Zakir Hussain Khan
    B.Sc. (Hons) UoK; M.Sc. Statistics UoK;
    MS. (Applied Mathematics) NEDUET

12. Syed Tauqeer Ahmed Hashmi
    B.Sc. (Hons); M.Sc. (Statistics) UoK;
    MS. (Applied Mathematics) NEDUET

13. Mr. Sohail Ahmed
    B.Sc. (Hons); M.Sc. (Statistics) UoK;
    MS. (Applied Mathematics) NEDUET

14. Dr. Muhammad Yousuf Tufail
    B.Sc.(Hons) (Mathematics) UoK; M.Sc. (Mathematics) UoK;
    Ph.D (Mathematics) Massey University, New Zealand

15. Dr. Ubaida Fatima
    B.E (Bio-Medical Engineering) NEDUET;
    MS. (Applied Mathematics) NEDUET;
    Ph.D. (Mathematics) NEDUET

16. Dr. Saima Gul
    B.Sc (Hons); M.Sc (Maths) UoK
    Ph.D (Mathematics) Massey University, New Zealand

Lecturers

1. Mr. Yasir Hussain Khan
   B.S.(Mathematics) FUUAST;
   MS (Applied Mathematics) NEDUET

2. Mr. Muhammad Samad Khan
   B.E. (Electrical) NEDUET;
   MS Applied Mathematics) NEDUET

3. Mr. Muhammad Amin
   M.B.A. Marshall University, USA

4. Mr. Sami Ullah Qureshi
   B.S. (Economics) UoK; M.Phil (Applied Economics) UoK

5. Ms. Komal Batool
   B.S. (CF) NEDUET; MS (Data Engineering) NEDUET

6. Ms. Saba Naz
   M.Sc. (Mathematics) UoK;
   MS (Applied Mathematics) NEDUET

7. Ms. Uroosa Baig
   B.S. (Mathematics) FUUAST;
   MS (Applied Mathematics) NEDUET

8. Ms. Onaiza Ali
   B.S. (Applied Mathematics) UoK;
   MS (Applied Mathematics) NEDUET

9. Ms. Ammarah Ashraf
   M.Sc. (Mathematics) UoK;
   MS (Applied Mathematics) NEDUET

10. Ms. Sidra Raees
    M.Sc. (Mathematics) UoK;
    MS (Applied Mathematics) NEDUET

11. Mr. Haris Ur Rehman Horani
    M.Sc. (Applied Mathematics) UoK; M.B.A. (Finance) MAJU;
    MS (Applied Mathematics) NEDUET

2.2.23 Department of Physics
(Administering Bachelor of Science in Applied Physics Programme)

Chairperson

Dr. Irfan Ahmed

Associate Professor

Dr. Irfan Ahmed
*B.E.(Electrical) NED UET; M.Engg (Electrical) NED UET;
Ph.D. (Electrical), Michigan Tech., USA*

Assistant Professors

1. Mr. Tahir Jamal
*B.Sc. (Hons), UoK; M.Sc. (Phy), UoK;
M.Phil. (Phy), FUUAST*

2. Dr. Iqbal Tariq
*B.Sc. (Hons), UoK; M.Sc. (Phy), UoK;
Ph.D. (Medical Phy / Radiation Phy)
University Sains Malaysia*

3. Dr. Saba Javaid
B.Sc. (Hons), UoK; M.Sc. (Phy), UoK; MS, UoK; Ph.D., UoK

4. Dr. Roohi Zafar
B.Sc. (Hons), UoK; M.Sc. (Phy), UoK; MS, UoK; Ph.D., UoK

5. Mr. Junaid Karim Khan
*B.Sc., UoK; M.Sc. (Applied Physics), UoK;
M.Phil. (Renewable Energy), UoK; Ph.D. (In Progress)*

6. Dr. Hira Ashfaq Lodhi
*M.Sc. (Applied Physics), UoK;
MS (Applied Mathematics) NED UET; Ph.D., NED UET*

7. Dr. Uzair Majeed
*MSc. (Physics), FUUAST;
Ph.D. (Material Physics) UTHM, Malaysia*

Lecturers

1. Mr. Ghulam Mustafa
*B.Sc. (Hons), UoS; M.Sc. (Physics), UoK;
M. Phil. (Atomic/ Laser Spectroscopy), UoK;
Ph.D. (In Progress)*

2. Mr. Danish Ahmed Khan
*B.S. (Medical Physics), UoK
M.Phil. (Atomic/Laser Spectroscopy), UoK;
Ph.D. (In progress)*

3. Hafiz Muhammad Usama Ayub
*B.Sc. (Hons), UoK; M.Sc. (Applied Physics Electronics), UoK;
MS (Physics) NED UET; Ph.D. (In progress)*

4. Ms. Ayesha Khurshid
*B.Sc., UoK; M.Sc., (Applied Physics), UoK;
MS (Physics) NED UET;*

5. Ms. Zehra Hashmi
BS (Applied Physics) NED UET; MS (Physics) NED UET

2.2.24 Department of Chemistry
(Administering Bachelor of Science in Industrial Chemistry Programme)

Chairperson

Dr. Nuzhat Arshad

Associate Professor

1. Dr. Nuzhat Arshad
*M.Sc. (Chemistry), UoK; Ph.D., Karl-Franzens University of
Graz, Austria*

2. Dr. Kashif Ahmed
M.Sc. (Chemistry), UoS; Ph.D., FUUAST

3. Dr. Amtul Qayoom
M.Sc. (Chemistry), UoS; Ph.D., UoK.

4. Dr. Saeeda Nadir Ali
M.Sc. (Chemistry), UoK; Ph.D., UoK

Assistant Professors

1. Syed Ghazanfar Hussain
M.Sc. (Chemistry), UoK; M.Phil.(In Progress)

2. Mr. Muhammad Ansar Khan
M.Sc. (Applied Chemistry), UoK; M.E., (Chemical Engg.), USA

3. Dr. Anjum Ayub
M.Sc. (Chemistry), FUUAST; Ph.D. (ICCBS), UoK

4. Dr. Shazia Perveen
M.Sc. (Chemistry), UoK; Ph.D., UoK

5. Dr. Syed Farhan Hasany
*M.Sc. (Chemistry), UoK; Ph.D. (Chemical Engineering),
University of Malaysia*

6. Dr. Rafia Usman
*M.Sc. (Applied Chemistry), UoK; M.S. (Chemistry), Murray
State University, USA.
Ph.D., Kagoshima University, Japan*

Lecturers

1. Ms. Hira Sultan
*M.Sc. (Chemistry), UoK; M.S., Jinnah University for Women;
Ph.D. (In progress)*

2. Ms. Farhat Ikram
M.Sc., (Chemistry) UoK; M.S., NED UET; Ph.D. (In progress)

3. Ms. Atia Shamim
M.Sc. (Chemistry), UoK; M.Phil., UoK

2.2.25 Department of Humanities
(Administering Bachelor of Science in English Linguistics Programme)

Chairperson

Prof. Dr. Sajida Zaki

Professors

1. Prof. Dr. Sajida Zaki
   M. A. English (Linguistics), UoK;
   Ph.D. (Applied Linguistics), HU

2. Dr. Abdul Hai Madni
   M. A. (Islamic Studies), UoK;
   M. A. (Islamic Studies), Medina Uni, Saudi Arabia;
   M. A. (Islamic Studies), Wifaqul Madaris;
   L.L.B, UoK; Fazil-e-Arabi, UoK; Ph.D. (Islamic Studies), IUB

3. Dr. Farooq Hassan
   M. A. (Islamic Studies), UoK; L.L.B;
   Advanced Islamic Studies Course, Al-Azhar University, Egypt;
   Ph.D. (Islamic Studies), UoK

Associate Professors

1. Dr. Imrana Begum
   B. Ed. HU; M. A. (General History), UoK;
   M.I.T. Western International University;
   Ph.D. (European Studies), UoK

2. Dr. Muhammad Fareed
   M. A. English (Literature & Linguistics) NUML;
   M.Phil, Education (English Language Teaching), Iqra University;
   Ph.D., Education (English Language)

Assistant Professors

1. Mr. Muhammad Ghaus Ali
   M. A. (Pakistan Studies), UoK

2. Ms. Farzana Shakoor
   M. A. (Pakistan Studies), UoK;
   M.S. (Pakistan Studies), UoK

3. Dr. Muhammad Bilal Usmani
   M. A. (Islamic Studies), UoK;
   Ph.D. (Islamic Studies), FUUAST

4. Ms. Almas Ashraf
   M. A. English (Linguistics) JUW;
   M.S. (Applied Linguistics) NED UET

5. Dr. Rahila Huma Anwar
   M. A. English (Linguistics) UoK;
   M. Phil (Applied Linguistics) HU;
   Ph.D. (Applied Linguistics) NED UET

6. Ms. Hina Manzoor
   M.A. English (Linguistics) UoK;
   M.S. (Applied Linguistics) UoK
   Ph.D. (In Progress), UoS

7. Mr. Muhammad Asim Khan
   M. A. English (Lit. & Linguistics) UoK;
   M.S. (Applied Linguistics) UoK;
   Ph.D. (In progress) NED UET

8. Dr. Rahat Rizvi
   B. Ed. UoK; M.A. (Economics) UoK;
   M.A. (Political Sciences) UoK; M.A. (Islamic Studies) UoK;
   M.Phil (Islamic Studies) Iqra University;
   Ph.D. (Islamic Studies) Iqra University

Lecturers

1. Ms. Uzma Riyaz
   M.A. English (Lit. & Linguistics), UoK;
   M. Phil (Literature), UoK

2. Ms. Mahwish Arif
   M. A. English (Literature), UoK;
   M.S. (Applied Linguistics) NED UET

3. Ms. Hina Mohamnmad Ali
   M.A. English (Literature & Linguistics), UoK;
   M.S. (Applied Linguistics) NED UET

4. Ms. Asmara Shafqat
   M. A. English (Linguistics), UoK;
   M.S. (Applied Linguistics) NED UET;
   Ph.D. (In Progress) UoS

5. Ms. Sidra Awan
   M. A. English (Linguistics), JUW;
   M.S. (Applied Linguistics) NED UET

6. Ms. Maheen Tufail Dahraj
   B.S. English (Linguistics), JUW;
   M.S. (Applied Linguistics) NED UET;
   Ph.D. (In progress), UoS

2.2.26 Department of Architecture and Planning
The Department is located in City Campus
(also Administering Bachelor of Science in Development Studies Programme)

Chairperson

Prof. Dr. Anila Naeem

Professors

1. Prof. Dr. Noman Ahmed
   B. Arch; M.C.P.; METU, Turkey;
   Ph.D., UK; MPCATP

2. Prof. Dr. Anila Naeem
   B. Arch; M.S. (Restoration Historic Preservation) METU,
   Turkey; Ph.D., UK; MPCATP

Associate Professor

1. Ms. Fariha Amjad Ubaid
   B.Arch; MCPUD, METU, Turkey; MPCATP

2. Dr. Suneela Ahmed
   B.Arch; MUM (Canbura, Australia); Ph.D., UK; MPCATP

3. Dr. Saeed Ud Din Ahmed
   B.Arch; MURP; Ph.D., UK; MPCATP

Assistant Professors

1. Ms. Fahmida Bano Sheikh
   B.Arch; MURP; Ph.D. (In Progress); MPCATP

2. Mr. Ravindar Kumar Ravi
B.Arch; MUD.; Ph.D. (In Progress); MPCATP

3. Mr. Salman Manzoor Hasan
B.Arch; M.Arch; MPCATP

4. Dr. Masooma Mohib Shakir
B.Arch; M.Arch, KU-Leuven,Belgium;
Ph.D., Germany; MPCATP

5. Ms. Saadia Bano
B.Arch; MEM; MPCATP

6. Dr. Rabela Junejo
B.Arch; M.S. (History of Architecture), METU, Turkey; MPCATP

7. Ms. Farida Abdul Ghaffar
B.Arch; MURP; AIAP; MPCATP

8. Ms. Sarah Ather Khan
B.Arch; MURP; MPCATP

Lecturers

1. Ms. Afsheen Sadaf (On Study Leave)
B.Arch; MURP; MPCATP

2. Ms. Rabiya Asim
B.Arch; MURP; MPCATP

3. Ms. Rahat Arsalan
B.Arch; MURP; MPCATP

4. Ms. Safia Asif
B.Arch; M.Arch; MPCATP

5. Ms. Fariha Tahseen
B.Arch; M. Arch, Lincoin, UK;l MPCATP

6. Ms. Tania Ali Soomro (On study leave)
B.Arch; MS in Conservation (KU - Leuven, Belgium) MPCATP

7. Ms. Madiha Salam
B.Arch; M. Arch; MPCATP

Lecturers (Fine Arts)

Ms. Madiha Arif
BFA (NCA) Lahore

Development Studies

1. Mr. Mansoor Raza
B.E. (Electrical) NED UET; M.Sc. (Env. Science), UoK

2. Ms. Anum Mufti
MBA (Business Admin), SZABIST

IT Manager (Junior Scale)

Mr. Ahmed Anis Khan
BCIT, NED UET; MCIT, NED UET

2.2.27 Department of Economics and Management Sciences
(Administering Bachelor of Science in Economics & Finance and also administering Bachelor of Science in Management Sciences Programmes)

Chairperson

Prof. Dr. Raza Ali Khan

Professor

Prof. Dr. Raza Ali Khan
DAE (Civil), SEZIT; PGD (Public Administration), UoK;
M.A. (International Relations), UoK;
M.A. (Economics), UoK; M.S./M.Phil (Economics), SZABIST;
Ph.D. (Construction Economics Management), Universiti Teknologi PETRONAS, Malaysia

Assistant Professors

1. Mirza Faizan Ahmed
MBA (Finance) KUBS-UoK; MAS (Applied Economics), AERC-UoK;
Ph.D. AERC-UoK (In Progress)

2. Dr. Muhammad Shahid Iqbal
PGD (Statistics) UoK; MA (Economics) UoK;
MA (International Relations) UoK;
M.S. / M.Phil (Applied Economics) AERC-UoK;
Ph.D. (Economics) UoK

3. Dr. Hina Mubeen
Ph.D (Management Sciences) SZABIST;
M.S (Management Sciences) SZABIST;
M.B.A (Human Recourse Management) Bahria University

4. Dr. Faheem Akhter
Ph.D.(Public Administration/ Management and Administrative Sciences) UoK ;
M.B.A (Management) IBA, UoS;
M.A (International Relations) UoK;
L.L.B, S.M. Law College, UoK

Lecturers

1. Ms. Maham Fatima
BS (Economics) UoK; MS (Economics & Finance) NED UET
Ph.D. (In Progress) AERC – UoK

2. Mr. Farhan Ahmed
B.Com (SALU) CAT (ACCA-UoK); ACCA (P1) ACCA-UoK;
M.A. (Economics), SALU; MBA (Finance) SZABIST;
Ph.D. (In Progress) SZABIST

3. Ms. Marium Zehra
BBA (Finance) IoBM; MBA (Finance) IoBM

4. Mr. Shabbir Ahmed
BS (Economics), UoK; M.Phil (Economics), AREC-UoK;
Ph.D. (In Progress) AERC – UoK

5. Mr. Adnan Khalil
B.E. (Industrial Manufacturing), NED UET; MBA, KSBL

6. Mr. Ahmar Aleem
    ACCA; CIMA (Finalist); M.A. (Economics), UoK;
    M.Phil (Business Administration), Iqra University

7. Mr. Talha Qadeer
    MS (Management Sciences), University of Waterloo, Canada;
    B.E. (Electronics), MUET

8. Ms. Jaweriya Naz
    BBA (Finance), CAMS College, UoK;
    M.S. (Economics and Finance), NEDUET;
    Ph.D. (In Progress) AERC – UoK

9. Mr. Talha Ahmed Siddiqui
    MBA (Finance), KUBS, UoK;
    M.Phil. (Applied Economics), AERC UoK;
    Ph.D. (In Progress) AERC – UoK

10. Syeda Zuimah Wasim
    BBA IBA Karachi; MBA IBA Karachi

11. Mr. Muhammad Naeem
    B.Sc. Hons. (Business Administration) QAU;
    MBA (Finance) SZABIST

2.2.28 Thar Institute of Engineering, Sciences and Technology (TIEST)

Principal
Prof. Dr. Nasir Uddin Shaikh
B.E.(Mech.) NED UET; M.Sc(Mech.) NED UET;
Ph.D. (Thermofluids) Canada

2.2.28(i) Department of Computer Science & Information Technology
(Administering Bachelor of Science in Computer Science Programme)

Assistant Professor

Dr. Asif Aziz
B.E. (Computer System) MUET;
M.E. (Information Technology) MUET;
Ph.D. (Application Software) Chung-Ang University, Seoul, South Korea

Lecturers

1. Engr. Vanesh Kumar
    B.S. (Computer System);
    M.Engg. (Computer System) NEDUET

2. Ms. Farheen Mirza
    B.S (Information Technology), UoS;
    M.S. (Computer Science & Information Technology) NED UET

3. Mr. Neetesh Kumar
    B.E. (Computer System), MUET;
    M.Engg. (Computer Systems) NED UET;

4. Mr. Muhammad Abbas
    B.S. (Computer Science), QUEST;
    M.Engg. (Computer Technology) Beijing University of Posts and Telecommunications, China

5. Mr. Abdul Hafees
    B.E. (Software) NED UET; M.Engg. (Software) MUET;
    Ph.D. (In Progress)

6. Mr. Muhammad Aqeel Ahmed
    B.Sc. (Hons) UoK; MCS, UoK; M.S. (Software Engg) MAJU

7. Mr. Anees Ahmed
    B.E. (CS) QUEST;
    M.E. (CS) Harbin Institute of Technology, Harbin China

8. Mr. Talha
    B.S. (English) UoS,; M.S. (English Linguistics) MUET

2.2.28(ii) Department of Civil Engineering

Chairperson

Prof. Dr. Sadaqat Ullah Khan

Professor

1. Prof. Dr. Sadaqat Ullah Khan
    B.E. (Civil) NED UET; M.E.(Structures) NED UET
    Ph.D. (Civil) Universiti Teknologi PETRONAS, Malaysia

2. Prof. Dr. Tehmina Ayub
    B.E. (Civil) NED UET; M.Engg. (Structure) NED UET;
    Ph.D. (Civil), Universiti Teknologi PETRONAS, Malaysia

Lecturer

1. Mr. Farhan Ahmed
    B.E. (Civil) MUET; M.Engg. (Structure) MUET

2. Mr. Abdul Mannan Yousfani
    B.E. (Civil) MUET; M.Engg. (Civil), The University of Tokyo

Lab Engineer

1. Mr. Shahzaib Ahmed Shaikh
    B.E. (Civil) MUET

2. Mr. Mohsin Ali
    B.E. (Civil) MUET; M.E. (Civil) MUET

3. Ms. Aqsa Murad
    B.E. (Civil) MUET; M.E. (Structure) MUET

NB: Senior Faculty Members from Main Campus are also engaged for conducting classes at TIEST.

CHAPTER **3**

Course of Studies

Students admitted in this University are required to study all approved courses of the respective discipline. They are also needed to complete a course titled "Community Service (HS-200)" during the Four Years Studies.

Subject to changes and modifications by the University the courses of studies for Bachelors Degree programmes shall be as follows:

3.1 Bachelor of Engineering Programmes

3.1.1 Civil Engineering

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-107	Engineering Drawing-I	1	2	3	CE-109	Engineering Surveying-I	2	1	3
CE-102	Statics and Dynamics	3	1	4	CE-110	Chemistry for Civil Engineers	1	1	2
CE-108	Engineering Materials	2	1	3	CE-111	Introduction to Computing for Civil Engineers	1	2	3
EE-123	Basic Electrical Engineering	2	0	2	ME-110	Basic Mechanical Engineering	2	0	2
MT-114	Calculus	3	0	3	HS-111	Functional English	2	0	2
HS-106/	Pakistan Studies OR	1	0	1	MT-221	Linear Algebra & Ordinary Differential Equations	3	0	3
HS-127	Pakistan Studies (for Foreigners)								

SECOND YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-201	Engineering Surveying-II	3	1	4	CE-222	Engineering Drawing-II	1	2	3
CE-205	Mechanics of Solids-I	3	1	4	CE-221	Structural Analysis-I	3	0	3
CE-220	Geology for Engineers	2	1	3	CE-219	Fluid Mechanics-I	3	1	4
HS-205	Islamic Studies OR	2	0	2	MT-331	Probability & Statistics	3	0	3
HS-209	Ethical Behaviour (for Non-Muslims)				HS-219	Professional Ethics	2	0	2
HS-218	Business Communication	2	1	3	CF-303	Applied Economics for Engineers	3	0	3
					HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-320	Reinforced Concrete Design-I	3	0	3	CE-302	Transportation Engineering-I	3	1	4
CE-321	Construction Engineering	3	0	3	CE-305	Soil Mechanics-I	3	1	4
CE-323	Quantity & Cost Estimation	3	0	3	CE-314	Structural Analysis-II	3	0	3
CE-319	Fluid Mechanics-II	3	1	4	CE-322	Mechanics of Solids-II	3	0	3
AR-309	Architecture and Town Planning	3	0	3	CE-424	Essentials in Construction Project Management	3	0	3
MT-443	Numerical Analysis	3	0	3	HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester

Course Code	Course Title	Th	Pr	Total
CE-403	Soil Mechanics-II	3	1	4
CE-432	Transportation Engineering-II	2	0	2
CE-418	Hydraulics and Water Resources Engineering-I	3	1	4
CE-420	Reinforced Concrete Design-II	3	0	3
EN-301	Environmental Engineering-I	2	1	3
CE-409	Civil Engineering Project*	0	3	3
HSK-2	Chinese Language OR	-	-	NC
HS-232	Turkish Language-II	-	-	NC

Spring Semester

Course Code	Course Title	Th	Pr	Total
CE-421	Design of Steel Structures	3	0	3
C#-###	Civil Engineering Elective	3/2/1	0/1/2	3
C#-###	Management Sciences Elective	3	0	3
##-###	Social Sciences Elective	2	0	2
EN-401	Environmental Engineering-II	2	1	3
CE-409	Civil Engineering Project	0	3	3

Civil Engineering Elective (to be chosen from the following)

CE-419	Applied Hydraulics	3	0	3
CE-422	Structural Design and Drawing	3	0	3
CE-423	Masonry Structures	3	0	3
CE-426	Building Information Modelling	1	2	3
CE-429	Geo Synthetics and Their Applications	3	0	3
CE-431	Geoinformatics Applications	2	1	3
CE-433	Coastal and Harbour Engineering	3	0	3
CE-438	Hydraulics and Water Resources Engineering – II	3	0	3
CN-424	Environmental Issues in Construction	3	0	3
CN-430	Disaster and Reconstruction Management	3	0	3

Management Sciences Elective (to be chosen from the following)

CN-423	Management and Marketing of Construction Services	3	0	3
CE-425	Modern Aspects of Construction Project Management	3	0	3
CN-432	Leadership and Human Skills in Management	3	0	3
CN-434	Procurement Management			
CE-435	Construction Contract Management	3	0	3

Social Sciences Elective (to be chosen from the following)

CE-427	Introduction to Entrepreneurship & Opportunity Assessment	2	0	2
CE-439	Engineer and Society	2	0	2
MG-228	Sociology and Development	2	0	2

Duration one academic year: Requires literature survey and preliminary work during this Semester

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3.1.2   Civil Engineering (Specialization in Urban)

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
UE-151	Engineering Drawing-I	1	2	3	UE-153	Engineering Surveying-I	2	1	3
EE-123	Basic Electrical Engineering	2	0	2	UE-154	Chemistry for Civil Engineers	1	1	2
UE-102	Statics and Dynamics	3	1	4	UE-155	Introduction to Computing for Civil Engineering	1	2	3
MT-114	Calculus	3	0	3	ME-110	Basic Mechanical Engineering	2	0	2
UE-152	Engineering Materials	2	1	3	MT-221	Linear Algebra & Ordinary Differential Equations	3	0	3
HS-106	Pakistan Studies OR	1	0	1	HS-111	Functional English	2	0	2
HS-107	Pakistan Studies (for Foreigners)								

SECOND YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
UE-201	Engineering Surveying-II	3	1	4	UE-253	Engineering Drawing-II	1	2	3
UE-251	Mechanics of Solids-I	3	1	4	UE-254	Fluid Mechanics-I	3	1	4
UE-252	Geology for Engineers	2	1	3	UE-255	Structural Analysis-I	3	0	3
HS-218	Business Communication	2	1	3	HS-219	Professional Ethics	2	0	3
HS-205	Islamic Studies OR	2	0	2	MT-331	Probability & Statistics	3	0	2
HS-209	Ethical Behaviour (for Non-muslims)				CF-303	Applied Economics for Engineers	3	0	3
					HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
UE-351	Reinforced Concrete Design-I	3	0	3	AR-309	Architecture and Town Planning	3	0	3
UE-352	Construction Engineering	3	0	3	UE-305	Soil Mechanics-I	3	1	4
UE-353	Quantity & Cost Estimations	3	0	3	UE-356	Traffic Engineering and Management	3	0	3
UE-455	Municipal Engineering and Urban Management	2	0	2	UE-218	Law and Regulatory Control Studies	2	0	2
MT-443	Numerical Analysis	3	0	3	UE-355	Essential in Construction Project Management	3	0	3
UE-361	Planning & Design of Transportation System	3	1	4	UE-453	Reinforced Concrete Design-II	3	0	3
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
UE-403	Soil Mechanics-II	3	1	4	##-###	Engineering Elective	3/1/2	0/2/1	3
UE-452	Urban Mass Transportation	2	0	3	UE-435	Financial Resource Management	2	0	2
UE-451	Hydraulic Engineering and Water Resources Engineering-I	3	1	4	UE-460	Geoinformatics	1	1	2
UE-359	Structural Analysis-II	2	0	2	UE-454	Design of Steel Structures	3	0	3
EN-301	Environmental Engineering-I	2	1	3	EN-401	Environmental Engineering-II	2	1	3
UE-415	*Urban Engineering Project	0	3	3	UE-360	Mechanics of Solids-II	2	0	2
HSK-2	Chinese Language OR	-	-	NC	UE-415	Urban Engineering Project	0	3	3
HS-232	Turkish Language-II	-	-	NC					

Inter-Disciplinary Elective (to be chosen from the following)

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-419	Applied Hydraulics	3	0	3	CN-430	Disaster and Reconstruction Management	3	0	3
CE-423	Masonry Structures	3	0	3	UE-422	Traffic Impact Studies	2	1	3
CE-426	Building Information Modeling	1	2	3	UE-423	Highway and Airfield Pavement Design	2	1	3
CE-429	Geosynthetics and their applications	3	0	3	EN-403	Environmental Impact Assessment	2	0	2
CE-438	Hydraulics and Water Resource Engineering-II	3	0	3	UE-421	Modern Aspects of Construction Project Management	2	1	3
CN-424	Environmental Issues in Construction	3	0	3	UE-436	Urban Sociology	3	0	3

* Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.3 Petroleum Engineering

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	**Course Title**	**Credit Hours**			**Course Code**	**Course Title**	**Credit Hours**		
		Th	Pr	Total			Th	Pr	Total
PE-103	Fundamentals of Petroleum Engineering	2	0	2	PE-104	Applied Petroleum Geology	2	1	3
EE-124	Basic Electricity and Electronics	2	1	3	ME-101	Engineering Mechanics	3	1	4
ME-111	Engineering Drawing	2	1	3	PE-105	Computer Programming & Application	1	2	3
CY-109	Applied Chemistry	3	1	4	PH-127	Applied Physics for Engineers	2	1	3
MT-114	Calculus	3	0	3	HS-111	Functional English	2	0	2
HS-106	Pakistan Studies OR	1	0	1	HS-205	Islamic Studies OR	2	0	2
HS-107	Pakistan Studies (for Foreigners)				HS-209	Ethical Behaviour (For Non Muslims)			

SECOND YEAR

Fall Semester					Spring Semester			
Course Code	**Course Title**	**Credit Hours**			**Course Code**	**Course Title**	**Credit Hours**		
		Th	Pr	Total			Th	Pr	Total
MT-221	Linear Algebra & Ordinary Differential Equations	3	0	3	PE-211	Introduction to Data Sciences	2	1	3
HS-218	Business Communication	2	1	3	PE-212	Reservoir Fluid Properties	2	1	3
PE-208	Reservoir Petrophysics	2	1	3	PE-209	Fluid Mechanics	3	1	4
CE-212	Mechanics of Solids	3	1	4	PE-213	Drilling Engineering-I	2	1	3
PE-210	Thermodynamics – I	2	1	3	MT-331	Probability & Statistics	3	0	3
UE-270	Surveying and Geo informatics	1	1	2	HS-###	Social Sciences Elective	2	0	2
					HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester					Spring Semester			
Course Code	**Course Title**	**Credit Hours**			**Course Code**	**Course Title**	**Credit Hours**		
		Th	Pr	Total			Th	Pr	Total
PE-314	Petroleum Production Economics	2	0	2	PE-318	Drilling Engineering-II	3	1	4
PE-315	Structural Geology & Geophysical Exploration	3	0	3	PE-###	Elective-I	2	0	2
P9E-316	Subsurface Production Engineering	3	0	3	PE-319	Reservoir Engineering – I	3	1	4
PE-317	Natural Gas Engineering	2	1	3	PE-320	Fundamentals of Well Logging	2	1	3
EL-305	Instrumentation & Control	3	1	4	MT-471	Applied Numerical Methods	2	1	3
HS-219	Professional Ethics	2	0	2	HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester					Spring Semester			
Course Code	**Course Title**	**Credit Hours**			**Course Code**	**Course Title**	**Credit Hours**		
		Th	Pr	Total			Th	Pr	Total
PE-415	Reservoir Simulation	3	1	4	PE-418	Oil and Gas Field Production Facilities	3	1	4
PE-416	Reservoir Engineering-II	2	1	3	PE-419	Water Flooding and Enhanced Oil Recovery	3	1	4
XX-###	Elective-II	3	1	4					
PE-417	Project Planning & Management	3	0	3	PE-421	Well Testing	3	1	4
PE-410	*Petroleum Engineering Project	0	3	3	PE-422	Petroleum Property Env. & Safety Management	3	0	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC	PE-410	Petroleum Engineering Project	0	3	3

Social Sciences Elective Courses (to be chosen from the following)									
HS-229	Anthropology	2	0	2	HS-230	Organizational Behavior	2	0	2

Elective-I Courses (to be chosen from the following)									
PE-321	Principles of Corrosion Control	2	0	2	PE-323	Renewable Energy-I	2	0	2
PE-322	Introduction to Unconventional Oil, Gas & Energy Resources	2	0	2					

Elective-I Courses (to be chosen from the following)									
PE-423	Petroleum Refinery Engineering	3	1	4	PE-424	Renewable Energy-II	3	1	4
CS-323	Artificial Intelligence	3	1	4					

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.4   Civil Engineering (Specialization in Construction)

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-107	Engineering Drawing-I	1	2	3	CE-109	Engineering Surveying-I	2	1	3
CE-102	Statics and Dynamics	3	1	4	CE-110	Chemistry for Civil Engineers	1	1	2
EE-123	Basic Electrical Engineering	2	0	2	CE-111	Introduction to Computing for Civil Engineers	1	2	3
CE-108	Engineering Materials	2	1	3	ME-110	Basic Mechanical Engineering	2	0	2
MT-114	Calculus	3	0	3	HS-111	Functional English	2	0	2
HS-106	Pakistan Studies OR	1	0	1	MT-221	Linear Algebra & Ordinary Differential Equations	3	0	3
HS-127	Pakistan Studies (for foreigners)								

SECOND YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-201	Engineering Surveying-II	3	1	4	CE-222	Engineering Drawing-II	1	2	3
CE-205	Mechanics of Solids-I	3	1	4	CE-221	Structural Analysis-I	3	0	3
CE-220	Geology for Engineers	2	1	3	CE-219	Fluid Mechanics-I	3	1	4
HS-205	Islamic Studies OR	2	0	2	MT-331	Probability & Statistics	3	0	3
HS-209	Ethical Behaviour (for Non-Muslims)				HS-219	Professional Ethics	2	0	2
HS-218	Business Communication	2	1	3	CN-223	Fundamentals of Applied Economics for Engineers	3	0	3
					HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-320	Reinforced Concrete Design-I	3	0	3	CE-302	Transportation Engineering-I	3	1	4
CE-321	Construction Engineering	3	0	3	CE-305	Soil Mechanics-I	3	1	4
CE-323	Quantity & Cost Estimation	3	0	3	CN-331	Construction Jobsite Engineering and Management	3	0	3
CN-323	Construction Contracts	3	0	3	CN-333	Construction Economic Analysis	2	0	2
AR-309	Architecture and Town Planning	3	0	3	CE-424	Essentials in Construction Project Management	3	0	3
CN-336	Accounting and Financial Management	3	0	3	CN-433	Introduction to Entrepreneurship and Opportunity Assessment	2	0	2
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CN-428	Sustainable Construction	3	0	3	CE-###	Civil Engineering Elective			
CN-435	Systems in Building Construction	3	0	3	CN-429	Building Information Modeling	1	2	3
CE-418	Hydraulics and Water Resources Engineering-I	3	1	4	CN-427	Quality and Safety Aspects in Construction Engineering	2	0	2
CN-416	Legal and Regulatory Environment in the Construction Industry	3	0	3	CN-434	Temporary Structures in Construction	3	0	3
EN-301	Environmental Engineering-I	2	1	3	CN-436	Heavy Construction Equipment and Operations	3	0	3
CE-409	Civil Engineering Project	0	3	3	CE-409	Civil Engineering Project	0	3	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Civil Engineering Elective (to be chosen from the following)

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-419	Applied Hydraulics	3	0	3	CE-433	Coastal and Harbour Engineering	3	0	3
CE-422	Structural Design & Drawing	3	0	3	CE-438	Hydraulics and Water Resource Engineering-II	3	0	3
CE-423	Masonry Structures	3	0	3	CN-424	Environmental Issues in Construction	3	0	3
CE-429	Geosynthetics and their Applications	3	0	3	CN-430	Disaster and Reconstruction Management	3	0	3
CE-431	Geoinformatics Applications	2	1	3	MG-228	Sociology and Development	2	0	2

* Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.5 Mechanical Engineering

FIRST YEAR

Fall Semester Course Code	Course Title	Th	Pr	Total	Spring Semester Course Code	Course Title	Th	Pr	Total
CY-111	Applied Chemistry	2	0	2	PH-112	Applied Physics	2	1	3
MT-114	Calculus	3	0	3	HS-111	Functional English	2	0	2
EE-124	Basic Electricity and Electronics	2	1	3	ME-112	Thermodynamics	3	0	3
ME-111	Engineering Drawing	2	1	3	ME-104	Workshop Practice	0	2	2
HS-105	Pakistan Studies OR	2	0	2	ME-115	Statics	3	0	3
HS-127	Pakistan Studies (for Foreigners)				ME-214	Computer Programming & Applications	2	1	3
ME-113	Computer Aided Drawing	0	1	1					
HS-200	Community Service	-	-	NC					

SECOND YEAR

Fall Semester Course Code	Course Title	Th	Pr	Total	Spring Semester Course Code	Course Title	Th	Pr	Total
MT-223	Ordinary Differential Equations & Fourier Series	3	0	3	MT-330	Applied Probability & Statistics	2	1	3
ME-221	Fluid Mechanics - I	3	0	3	ME-218	Solid Mechanics - I	3	0	3
ME-222	Dynamics	3	0	3	ME-209	Materials & Metallurgy	3	1	4
ME-223	Engineering Mechanics Lab	0	1	1	HS-205	Islamic Studies OR	2	0	2
ME-224	Internal Combustion Engines	3	0	3	HS-209	Ethical Behaviour			
ME-220	Manufacturing Processes - I	3	1	4	ME-219	Mechanics of Machine	3	0	3
					HS-208	Business Communication & Ethics	3	0	3

THIRD YEAR

Fall Semester Course Code	Course Title	Th	Pr	Total	Spring Semester Course Code	Course Title	Th	Pr	Total
ME-317	Manufacturing Processes - II	3	1	4	MT-332	Advanced Calculus & Linear Algebra	3	0	3
ME-321	Power Plant Engineering	3	0	3	EL-305	Instrumentation and Control	3	1	4
ME-322	IC Engine and Power Plant Lab	0	1	1	ME-323	Machine Design	3	0	3
ME-302	Solid Mechanics - II	3	1	4	ME-318	Heat & Mass Transfer	3	0	3
ME-316	Fluid Mechanics-II	3	1	4	ME-319	Refrigeration & Air Conditioning	3	0	3
HS-###	Social Science (Elective)	2	0	2	ME-320	RAC and Heat Transfer Lab	0	1	1
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester Course Code	Course Title	Th	Pr	Total	Spring Semester Course Code	Course Title	Th	Pr	Total
MF-303	Applied Economics for Engineers	3	0	3	MG-481	Entrepreneurship	3	0	3
ME-436	Mechanical Vibrations	3	0	3	MT-441	Advanced Mathematical Techniques	3	0	3
ME-437	Machine Design and Vibration Lab	0	1	1	ME-417	Compressible Flow and Propulsion Systems	3	0	3
ME-419	Stress Analysis	3	0	3					
ME-409	*Mechanical Engineering Project	0	3	3	ME-409	Mechanical Engineering Project	0	3	3
ME-###	Management Elective	2	0	2	ME-435	Operations Management	3	0	3
ME-###	Technical Elective 1	3/2	0/1	3	ME-###	Technical Elective 2	3/2	0/1	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					
MF-303	Applied Economics for Engineers	3	0	3					

Technical Elective (to be chosen from the following)

Course Code	Course Title	Th	Pr	Total
ME-421	Gas Turbines	3	0	3
ME-422	Nuclear Power	3	0	3
ME-423	Computer Aided Design/ Computer Aided Manufacturing	2	1	3
ME-424	Clean Energy Technology	3	0	3
ME-425	Finite Element Analysis	2	1	3
ME-426	Plant Maintenance	3	0	3
ME-429	Water Treatment & Desalination	3	0	3
ME-430	Mechatronics	2	1	3
ME-431	Tribology	3	0	3
ME-438	AI and Internet of Things	2	1	3

Management Elective (to be chosen from the following)

Course Code	Course Title	Th	Pr	Total
ME-432	Health, Safety & Environment	2	0	2
ME-433	Law for Engineers	2	0	2
ME-434	Total Quality Management	2	0	2

Social Sciences Elective (to be chosen from the following)

Course Code	Course Title	Th	Pr	Total
HS-219	Professional Ethics	2	0	2
HS-228	Sociology & Development	2	0	2
HS-229	Anthropology	2	0	2
HS-230	Organizational Behaviour	2	0	2

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.6   Textile Engineering

FIRST YEAR

Fall Semester

Course Code	Course Title	Th	Pr	Total
TE-113	Introduction to Textile Engineering	2	0	2
PH-122	Applied Physics	3	1	4
ME-111	Engineering Drawing	2	1	3
MT-114	Calculus	3	0	3
HS-105	Pakistan Studies OR	2	0	2
HS-127	Pakistan Studies (for Foreigner)			
HS-114	Functional English	2	0	2

Spring Semester

Course Code	Course Title	Th	Pr	Total
TE-111	Textile Chemistry	3	1	4
ME-112	Thermodynamics	3	0	3
ME-104	Workshop Practice	0	2	2
EE-122	Basic Electricity & Electronics	3	0	3
ME-101	Engineering Mechanics	3	1	4
TE-224	Polymer & Fiber Science	2	0	2

SECOND YEAR

Fall Semester

Course Code	Course Title	Th	Pr	Total
MM-205	Mechanics of Material	3	1	4
TE-208	Material Science	2	1	3
TE-203	Computer Programming & Application	2	1	3
TE-206	Fluid Mechanics for Textiles	2	1	3
MT-225	Linear Algebra & Ordinary Differential Equations	3	0	3

Spring Semester

Course Code	Course Title	Th	Pr	Total
TE-211	Textile Yarn Manufacturing	3	1	4
TE-205	Pre-treatment of Textile	3	1	4
TE-207	Machine Design	3	0	3
ME-311	Manufacturing Processes	3	1	4
HS-205	Islamic Studies OR	2	0	2
HS-209	Ethical Behaviour			
HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester

Course Code	Course Title	Th	Pr	Total
TE-312	Textile Fabric Manufacturing Processes	3	1	4
TE-307	Utilities for Textile Industry	3	1	4
MF-303	Applied Economics for Engineers	3	0	3
TE-326	Textile Dyeing	3	1	4
HS-304	Business Communication & Ethics	3	0	3

Spring Semester

Course Code	Course Title	Th	Pr	Total
TE-453	Garment Manufacturing	3	0	3
TE-313	Textile Product Evaluation-I	3	1	4
TE-319	Heat & Mass Transfer	2	1	3
TE-318	Textile & Environment	2	0	2
TE-305	Quality Control in Textiles	2	0	2
MT-333	Advanced Calculus & Fourier Analysis	3	0	3
HSK-1	Chinese Language OR	-	-	NC
HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester

Course Code	Course Title	Th	Pr	Total
MG-482	Organizational Behavior	3	0	3
TE-462	Advanced Fabric Manufacturing Mechanism	3	1	4
TE-###	Elective	3	1	4
TE-408	Textile Engineering Design Project	0	3	3
TE-413	Textile Product Evaluation-II	3	1	4
HSK-2	Chinese Language OR	-	-	NC
HS-232	Turkish Language-II	-	-	NC

Spring Semester

Course Code	Course Title	Th	Pr	Total
MG-481	Entrepreneurship	3	0	3
TE-451	Automation & Control in Textiles	3	0	3
TE-###	Elective Course	3	0	3
TE-408	Textile Engineering Design Project	0	3	3

Inter-Disciplinary Elective (to be chosen from the following)	Inter-Disciplinary Elective (to be chosen from the following)
TE-461 Advanced Yarn Manufacturing Mechanism	TE-406 Textile Production Management
TE-452 Textile Finishing	TE-454 Textile Merchandising
TE-455 Advanced Garment Manufacturing	

* Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.7 Industrial and Manufacturing Engineering

FIRST YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-114	Calculus	3	0	3	PH-122	Applied Physics	3	1	4
ME-101	Engineering Mechanics	3	1	4	HS-111	Functional English	2	0	2
EE-122	Basic Electricity and Electronics	3	0	3	ME-111	Engineering Drawing	2	1	3
ME-104	Workshop Practice	0	2	2	IM-101	Computer Applications in Engineering	2	1	3
HS-105	Pakistan Studies OR	2	0	2	IM-105	Thermofluids	3	1	4
HS-127	Pakistan Studies for Foreigners								

SECOND YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
IM-208	Materials Engineering	3	1	4	MT-225	Linear Algebra & Ordinary Differential Equations	3	0	3
IM-209	Mechanics of Materials	3	1	4	MF-303	Applied Economics for Engineers	3	0	3
IM-203	Manufacturing Processes	3	1	4	IM-211	Machine Design	3	1	4
MT-252	Introduction to Probability and Statistics	3	1	4	IM-212	Computer Aided Engineering Design	2	1	3
HS-205	Islamic Studies OR	2	0	2	IM-213	Metrology and Quality Control	3	1	4
HS-209	Ethical Behaviour				HS-200	Community Service	-	-	NC

THIRD YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-304	Business Communication & Ethics	3	0	3	IM-308	Operations Research	3	1	4
IM-303	Production Management	3	1	4	IM-307	Advanced Manufacturing Processes	3	1	4
MT-333	Advanced Calculus & Fourier Analysis	3	0	3	IM-408	Automation & Robotics	3	1	4
IM-312	Applied Thermo Fluids	3	1	4	IM-411	Methods Engineering	2	1	3
IM-310	Tool Design	3	1	4	IM-320	Modeling and Simulation	2	1	3
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
IM-405	Finite Element Analysis	3	1	3	MG-481	Entrepreneurship	3	0	3
IM-402	Computer Aided Manufacturing	3	1	4	IM-417	Health, Safety & Environment	2	1	3
MG-450	Principles of Supply Chain Management	3	0	3	MT-441	Advanced Mathematical Techniques	3	0	3
IM-##	Elective Course	3	1	4	IM-413	Plant Engineering	3	1	4
IM-409	*Manufacturing Engineering Project	0	3	3	IM-409	Manufacturing Engineering Project	0	3	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Elective Courses (to be chosen from the following)

IM-416	Management Information System	IM-420	Basics of Additive Manufacturing
IM-418	Condition Monitoring	IM-421	Smart Manufacturing Systems
IM-419	Project Management	IM-422	Ergonomics in Workplace Design

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.8 Automotive Engineering

FIRST YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
PH-122	Applied Physics	3	1	4	ME-106	Statistics	2	1	3
AU-113	Introduction to Automotive Systems	2	0	2	ME-112	Thermodynamics	3	0	3
HS-104	Functional English	3	0	3	AU-112	Engineering Drawing and Computer Graphics	2	1	3
MT-114	Calculus	3	0	3					
HS-105	Pakistan Studies OR	2	0	2	EE-118	Basic Electricity and Electronics	3	1	4
HS-127	Pakistan Studies (for Foreigner)				CY-109	Applied Chemistry	3	1	4
ME-104	Workshop Practice	0	2	2					

SECOND YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
AU-201	Automotive Power Plants	3	1	4	ME-213	Dynamics	2	1	3
AU-212	Computer Programming and Applications	2	1	3	ME-202	Solid Mechanics-I	3	1	4
AU-225	Fundamentals of Analogue and Digital Electronics	2	1	3	AU-231	Manufacturing Engineering-I	3	0	3
MT-223	Ordinary Differential Equations & Fourier Series	3	0	3	AU-222	Automobile Instrumentation	2	1	3
ME-209	Materials & Metallurgy	3	1	4	ME-204	Fluid Mechanics-I	3	1	4
AU-203	Statistics & Quality Control	3	0	3	HS-205	Islamic Studies OR	2	0	2
					HS-209	Ethical Behaviour (for Non-Muslims)			
					HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
AU-313	Combustion, Emission and Pollution	3	0	3	AU-315	Design of Machine Elements	3	0	3
AU-311	Manufacturing Engineering-II	3	1	4	MT-442	Numerical Methods	3	0	3
ME-313	Solid Mechanics-II	3	0	3	ME-314	Fluid Mechanics-II	3	0	3
MT-332	Advanced Calculus & Linear Algebra	3	0	3	ME-306	Mechanical Vibrations	3	1	4
HS-304	Business Communication & Ethics	3	0	3	MF-303	Applied Economics for Engineers	3	0	3
AU-314	Vehicle Dynamics	2	0	2	HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
AU-415	Vehicle Design	2	0	2	AU-431	Vehicle Thermal Management	3	0	3
AU-416	Mechatronics	3	1	4	AU-422	Automotive Transmission & Drives	2	0	2
AU-###	Elective Course	3	0	3	AU-441	Product Development and Operations Management	2	0	2
ME-315	Heat & Mass Transfer	3	1	4					
AU-442	FEM and FVM: Applications in Automotive Engineering	2	1	3	AU-499	Automotive Engineering Project	0	3	3
AU-499	Automotive Engineering Project	0	3	3	MG-481	Entrepreneurship	3	0	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Inter-Disciplinary Elective (to be chosen from the following)

AU-423	Body Engineering and Automotive Structure	AU-444	Hybrid Vehicles & Drives
AU-433	Automotive Health Safety and Environment	AU-417	Automotive Paints and Coatings

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.9 Electrical Engineering

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	**Course Title**	**Th**	**Pr**	**Total**	**Course Code**	**Course Title**	**Th**	**Pr**	**Total**
EE-125	Basic Electrical Engineering	3	1	4	EE-156	Engineering Drawing	0	2	2
PH-122	Applied Physics	3	1	4	EE-126	Circuit Analysis	3	1	4
HS-111	Functional English	2	0	2	MT-227	Differential Equation	3	0	3
ME-116	Basic Mechanical Engineering	3	0	3	CE-109	Engineering Surveying-I	2	1	3
MT-114	Calculus	3	0	3	EE-163	Computer and Programming	3	1	4
CS-113	Introduction to Computing	1	1	2	HS-105	Pakistan Studies OR	2	0	2
					HS-127	Pakistan Studies (For Foreigners)			
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester					Spring Semester			
Course Code	**Course Title**	**Th**	**Pr**	**Total**	**Course Code**	**Course Title**	**Th**	**Pr**	**Total**
EL-240	Electronic Devices & Circuits	3	1	4	EE-282	Electromagnetic Fields	3	0	3
EE-264	Data Structures and Algorithms	2	1	3	EE-223	Instrumentation and Measurement	2	1	3
MT-272	Linear Algebra & Geometry	3	0	3	EE-232	Signals and Systems	3	1	4
MT-226	Multi Variable Calculus	3	0	3	TC-201	Digital Logic Design	2	1	3
HS-214	Academic Writing	3	0	3	MT-331	Probability and Statistics	3	0	3
HS-205	Islamic Studies OR	2	0	2	HS-200	Community Service	-	-	NC
HS-209	Ethical Behaviour								
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Fall Semester					Spring Semester			
Course Code	**Course Title**	**Th**	**Pr**	**Total**	**Course Code**	**Course Title**	**Th**	**Pr**	**Total**
EE-346	Electrical Machines-I	2	1	3	EE-362	Power System Analysis	3	1	4
EE-395	Digital Signal Processing	2	1	3	EE-347	Electrical Machines-II	2	1	3
EE-359	Electrical Power Distribution and Utilization	3	1	4	EE-354	Embedded Systems	2	1	3
EE-313	Power Electronics	3	1	4	TC-306	Communication Systems	3	0	3
MT-442	Numerical Methods	3	0	3	HS-304	Business Communication & Ethics	3	0	3

FINAL YEAR

Fall Semester					Spring Semester			
Course Code	**Course Title**	**Th**	**Pr**	**Total**	**Course Code**	**Course Title**	**Th**	**Pr**	**Total**
EE-457	Electrical Power System Protection	3	1	4	MG-482	Organizational Behavior	3	0	3
EF-304	Occupational Safety and Health	2	0	2	MG-481	Entrepreneurship	3	0	3
EE-352	Electrical Power Transmission	3	0	3	CS-439	Computer Communication Networks	2	0	2
EE-375	Feedback Control Systems	3	1	4	EE-414	Power Generation	3	0	3
EE-401	*Electrical Engineering Project	0	3	3	EF-305	Engineering Economics & Management	3	0	3
					EE-401	Electrical Engineering Project	0	3	3

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.10   Computer Systems Engineering

FIRST YEAR

Fall Semester				Spring Semester			
Course Code	Course Title	Th	Pr	Total			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CS-114	Fundamentals of Computer Engineering	3	1	4	EL-103	Basic Electronics	3	1	4
EE-120	Basic Electrical Engineering	3	1	4	CS-116	Object Oriented Programming	3	1	4
HS-111	Functional English	2	0	2	PH-122	Applied Physics	3	1	4
CS-115	Computer Programming	3	1	4	CS-117	Discrete Structures	3	0	3
HS-106	Pakistan Studies OR	1	0	1	HS-205	Islamic Studies OR	2	0	2
HS-107	Pakistan Studies (For Foreigners)				HS-209	Ethical Behaviour			
MT-114	Calculus	3	0	3	HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CS-220	Digital Logic Design	3	1	4	CS-221	Computer Organization & Design	3	1	4
MT-224	Complex Variable & Fourier Analysis	3	0	3	CS-215	Signals and Systems	2	1	3
EE-217	Circuit Theory	2	0	2	CS-222	Database Management Systems	3	1	4
CS-218	Data Structure & Algorithms	3	1	4	MT-222	Linear Algebra & Ordinary Differential Equation	3	0	3
HS-218	Business Communication	2	1	3	HS-219	Professional Ethics	2	0	2
CS-219	Computer Engineering Workshop	0	1	1	HS-200	Community Service	-	-	NC
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-335	Probability and Statistics	3	0	3	CS-329	Operating Systems	3	1	4
CS-326	Software Engineering	3	1	4	CS-301	Microprocessor Based System Design	3	1	4
CS-327	Computer Communication Networks	3	1	4	CS-3##	Elective-I	3	1	4
CS-328	Computer Architecture	3	0	3	MT-442	Numerical Methods	3	0	3
CS-323	Artificial Intelligence	3	1	4	EF-305	Engineering Economics & Management	3	0	3

FINAL YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CS-425	Entrepreneurship of Computer Engineers	3	0	3	CS-406	Computer Engineering Project	0	3	3
CS-419	Digital Signal Processing	3	1	4	CS-438	Computer Systems Modelling	3	0	3
CS-431	Digital System Design	3	1	4	CS-432	Distributed Computing	2	1	3
CS-406	Computer Engineering Project	0	3	3	CS-4##	Elective-3	2	1	3
CS-4##	Elective-2	2	0	2	MG-482	Organizational Behaviour	3	0	3

Elective-1 (3+1) (to be chosen from the following)

CS-330	Digital Communication Systems
CS-324	Machine Learning
CS-325	Software Development & Testing

Elective-2 (2+0) (to be chosen from the following) | Elective-3 (2+1) (to be chosen from the following)

CS-433	Internet Computing	CS-426	Computer Systems Security
CS-434	Bioinformatics	CS-436	Computer Vision
CS-435	Software Project Management	CS-437	Parallel Programming

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.11 Electronic Engineering

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-111	Functional English	2	0	2	EE-121	Circuit Analysis	3	1	4
EE-120	Basic Electrical Engineering	3	1	4	EL-103	Basic Electronic	3	1	4
MT-171	Differential & Integral Calculus	3	0	3	MT-227	Differential Equations	3	0	3
EL-104	Electronic Engineering Drawing and Workshop	0	2	2	ME-110	Basic Mechanical Engineering	2	0	2
PH-122	Applied Physics	3	1	4	CY-110	Applied Chemistry for Engineers	2	1	3
CS-113	Introduction to Computing	1	1	2	HS-105	Pakistan Studies OR	2	0	2
					HS-127	Pakistan Studies (For Foreigners)			
					HSK-I	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
EL-236	Electronic Devices and Circuits	3	1	4	EL-239	Analog Integrated Circuits	3	1	4
EL-255	Programming Languages	2	1	3	CS-216	Data Structure & Algorithms	3	0	3
HS-214	Academic Writing	3	0	3	EE-223	Instrumentation and Measurement	2	1	3
TC-202	Signals and Systems	2	1	3	EE-246	Electrical Machines	2	1	3
EE-382	Electromagnetic Fields	2	0	2	HS-205	Islamic Studies OR	2	0	2
MT-272	Linear Algebra & Geometry	3	0	3	HS-209	Ethical Behaviour			
HSK-2	Chinese Language OR	-	-	NC	TC-201	Digital Logic Design	2	1	3
HS-232	Turkish Language-II	-	-	NC	HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-331	Probability and Statistics	3	0	3	EF-304	Occupational Safety & Health	2	0	2
TC-307	Communication Systems	3	1	4	CS-430	Microprocessor Programming & Interfacing	3	1	4
TC-212	Digital Signal Processing	2	1	3	HS-304	Business Communication & Ethics	3	0	3
EF-305	Engineering Economics & Management	3	0	3	EL-344	Power Electronics	3	1	4
EL-301	Industrial Electronics	3	1	4	EE-374	Feedback Control Systems	3	1	4

FINAL YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-442	Numerical Methods	3	0	3	TC-421	Telecommunication Networks	3	1	4
EL-408	VLSI Systems Design	3	1	4	EL-###	Elective-II	3	1	4
MG-482	Organizational Behavior	3	0	3	MG-481	Entrepreneurship	2	0	2
EL-###	Elective-I	3	1	4	EL-401	Electronic Engineering Project	0	3	3
EL-401	*Electronic Engineering Project	0	3	3					

Elective Courses (to be chosen from the following)

EL-433   Solid State Devices
EL-421   Embedded Electronics
EL-485   Opto. Electronics and Microwave Systems
EL-422   Robotics

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.12 Telecommunications Engineering

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-111	Functional English	2	0	2	EL-103	Basic Electronics	3	1	4
CS-113	Introduction to Computing	1	1	2	CY-110	Applied Chemistry for Engineers	2	1	3
EE-120	Basic Electrical Engineering	3	1	4	EE-121	Circuit Analysis	3	1	4
TC-105	Programming Languages	2	1	3	EL-104	Electronic Engineering Drawing and Workshop	0	2	2
HS-105	Pakistan Studies OR	2	0	2	MT-171	Differential & Integral Calculus	3	0	3
HS-127	Pakistan Studies (For Foreigners)				HSK-I	Chinese Language OR	-	-	NC
PH-122	Applied Physics	3	1	4	HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-205	Islamic Studies OR	2	0	2	TC-212	Digital Signal Processing	2	1	3
HS-209	Ethical Behaviour (for Non-Muslims)				CS-216	Data Structure & Algorithms	3	0	3
TC-202	Signals & Systems	2	1	3	MT-272	Linear Algebra & Geometry	3	0	3
EL-236	Electronic Devices and Circuits	2	1	3	EE-223	Instrumentation and Measurement	2	1	3
TC-201	Digital Logic Design	2	1	3	HS-214	Academic Writing	3	0	3
MT-227	Differential Equations	3	0	3	MT-331	Probability & Statistics	3	0	3
EE-382	Electromagnetic Fields	2	0	2	HS-200	Community Service	-	-	NC
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-304	Business Communication and Ethics	3	0	3	EL-333	Integrated Circuits	2	1	3
EF-305	Engineering Economics & Management	3	0	3	EF-304	Occupational Safety & Health	2	0	2
EE-374	Feedback Control System	3	1	4	TC-314	Wireless & Mobile Communication	3	1	4
TC-313	Antenna and Microwave Engineering	3	1	4	TC-315	Optical Fiber Communication	3	1	4
TC-307	Communication Systems	3	1	4	TC-311	Digital Communications and Information Theory	3	1	4

FINAL YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-442	Numerical Methods	3	0	3	MG-481	Entrepreneurship	3	0	3
CS-430	Microprocessor Programming and Interfacing	3	1	4	TC-431	Wireless Technologies and RF Planning	2	0	2
TC-###	Elective-I	2	0	2	TC-485	Telecommunication Switching Systems	3	1	4
MG-482	Organizational Behaviour	3	0	3	TC-###	Elective-II	2	0	2
TC-421	Telecommunications Networks	3	1	4	TC-490	Telecommunications Engineering Project	0	3	3
TC-490	*Telecommunications Engineering Project	0	3	3					

Inter-Disciplinary Elective (to be chosen from the following)

TC-422	Satellite Communication	TC-428	Communication Security
TC-423	Navigational Aids and Radar Systems	TC-429	Telecom Policies & Standards
TC-426	Mobile and Pervasive Computing	TC-430	Multimedia Communication Systems
TC-427	Digital Image Processing		

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.13   Materials Engineering

FIRST YEAR

Fall Semester				Spring Semester			
Course Code	**Course Title**	**Th**	**Pr**	**Total**			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MM-102	Introduction to Engineering Materials	2	0	2	EE-118	Basic Electricity & Electronics	3	1	4
ME-101	Engineering Mechanics	3	1	4	AU-102	Engineering Drawing and Computer Graphics	2	1	3
ME-104	Workshop Practice	0	2	2	CY-109	Applied Chemistry	3	1	4
PH-122	Applied Physics	3	1	4	MT-114	Calculus	3	0	3
HS-104	Functional English	3	0	3	HS-105	Pakistan Studies OR	2	0	2
					HS-127	Pakistan Studies (for Foreigners)			

SECOND YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MM-201	Physical Metallurgy	3	1	4	HS-205	Islamic Studies OR	2	0	2
MM-204	Engineering Ceramics and Refractory Materials	3	0	3	HS-209	Ethical Behaviour			
MM-205	Mechanics of Materials	3	1	4	IM-207	Computer Programming and Drafting	2	1	3
MT-215	Differential Equations and Complex Variables	3	0	3	MM-202	Production and Refining of Materials	3	0	3
MY-211	Metallurgical Thermodynamics & Kinetics	3	0	3	MM-208	Fundamentals of Modern Manufacturing and Foundry	3	1	4
					MM-307	Joining of Materials	3	1	4
					MM-309	Construction Materials	2	0	2
					HS-200	Community Service	-	-	NC

THIRD YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MM-301	Corrosion: Protection and Prevention	3	1	4	MM-305	Polymer and Composite Materials	3	1	4
MM-303	Inspection and Testing of Materials	3	1	4	MM-308	Materials Characterisation and Analytical Techniques	3	1	4
MM-304	Heat Treatment of Materials	3	1	4	PF-303	Applied Economics for Engineers	3	0	3
HS-304	Business Communication and Ethics	3	0	3	MG-481	Entrepreneurship	3	0	3
MT-315	Mathematical Methods	3	0	3	MT-441	Advanced Mathematical Techniques	3	0	3
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MM-404	Phase Transformations in Materials	3	1	4	MM-402	Design and Selection of Materials	2	1	3
MM-411	Nanomaterials and Nanotechnology	3	0	3	MM-###	Elective-II	3	0	3
MM-412	Surface Engineering	2	1	3	MM-415	Material Deformations and Failures: Mechanism and Analysis	3	0	3
MM-###	Elective-I	2	0	2	MM-416	Biomedical and Functional Materials	2	0	2
MM-414	Total Quality Management	3	0	3	IM-417	Health, Safety and Environment	2	1	3
MM-410	*Materials Engineering Project	0	3	3	MM-410	Materials Engineering Project	0	3	3
HSK-2	Chinese Language OR	-	-	NC	MM-402	Design and Selection of Materials	2	1	3
HS-232	Turkish Language-II	-	-	NC					

Elective – I (2 + 0) (to be chosen from the following)					Elective – II (3 + 0) (to be chosen from the following)				
MM-413	Nuclear Materials	2	0	2	MY-402	Advanced Materials	3	0	3
MY-411	Vacuum Metallurgy	2	0	2					
MY-412	Metallurgy of Advanced Steels	2	0	2					

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.14 Chemical Engineering

FIRST YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CH-104	Chemical Engineering Principles	3	1	4	CH-106	Applied Chemistry	2	1	3
ME-101	Engineering Mechanics	3	1	4	CH-107	Chemical Engineering Thermodynamics-I	2	1	3
ME-104	Workshop Practice	0	2	2	ME-111	Engineering Drawing	2	1	3
HS-104	Functional English	3	0	3	EE-118	Basic Electricity & Electronics	3	1	4
PH-122	Applied Physics	3	1	3	MT-114	Calculus	3	0	3
					HS-105	Pakistan Studies OR	2	0	2
					HS-127	Pakistan Studies (for Foreigners)			

SECOND YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CH-208	Analytical Chemistry	2	1	3	CH-213	Chemical Process Industries	2	0	2
CH-210	Chemical Engineering Thermodynamics-II	2	1	3	ME-209	Materials & Metallurgy	3	1	4
CH-209	Fluid Mechanics-I	2	1	3	CH-211	Fluid Mechanics-II	2	1	3
MM-205	Mechanics of Materials	3	1	4	MT-223	Differential Equation & Fourier Series	3	0	3
IM-207	Computer Programming & Drafting	2	1	3	HS-205	Islamic Studies OR	2	0	2
					HS-209	Ethical Behaviour			
					CH-212	Particulate Technology	2	1	3
					HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CH-310	Fuel & Energy	2	1	3	CH-302	Separation Processes	3	1	4
CH-307	Heat Transfer	3	1	4	CH-306	Chemical Process Control	3	1	4
CH-309	Chemical Reaction Engineering	3	1	4	HS-304	Business Communication & Ethics	3	0	3
CH-311	Mass Transfer	3	1	4	MT-331	Probability and Statistics	3	0	3
MT-332	Advanced Calculus & Linear Algebra	3	0	3	PF-303	Applied Economics for Engineers	3	0	3
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CH-401	Process Modelling & Simulation	3	1	4	CH-417	Industrial Safety & Maintenance Management	2	0	2
CH-414	Chemical Plant Design	2	0	2	CH-418	Industrial Organization & Management	2	0	0
CH-404	Chemical Process Optimization	3	1	4	CH-###	Elective Course	2	0	2
CH-416	Petroleum Refinery & Petrochemical	2	1	3	CH-413	Gas Engineering	2	0	2
MT-441	Advanced Mathematical Techniques	3	0	3	CH-415	Transport Phenomena	3	0	3
CH-499	Chemical Engineering Project	0	3	3	CH-499	Chemical Engineering Project	0	3	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Inter-Disciplinary Elective (to be chosen from the following)

CH-408	Polymer Technology
CH-410	Water Purification Process
CH-411	Environmental Pollution Control
CH-412	Biochemical Engineering

* Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.15 Metallurgical Engineering

FIRST YEAR

Fall Semester				Spring Semester			
Course Code	Course Title	Th	Pr	Total			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MY-101	Introduction to Metallurgical Engineering	2	1	3	EE-116	Principles of Electrical Engineering	3	1	4
HS-111	Functional English	3	0	3	ME-101	Engineering Mechanics	3	1	4
PH-122	Applied Physics	3	1	4	CY-109	Applied Chemistry	3	1	4
ME-111	Engineering Drawing	2	1	3	ME-104	Workshop Practice	0	2	2
MT-114	Calculus	3	0	3	HS-105	Pakistan Studies OR	2	0	2
					HS-127	Pakistan Studies (for Foreigners)			

SECOND YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-215	Differential Equation and Complex Variables	3	0	3	MY-210	Iron Making Processes	2	0	2
MY-211	Metallurgical Thermodynamics and Kinetics	3	0	3	MY-208	Mineral Processing	2	1	3
MM-201	Physical Metallurgy	3	1	4	IM-207	Computer Programming and Drafting	2	1	3
EE-221	Instrumentation	3	1	4	MY-207	Mechanical Behaviour of Materials	2	1	3
HS-205	Islamic Studies OR	2	0	2	MY-209	Metal Forming and Shaping Processes	2	1	3
HS-209	Ethical Behaviour				MY-206	Furnaces and Refractories	3	1	4
					HS-200	Community Service	-	-	NC

THIRD YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MM-303	Inspection and Testing of Materials	3	1	4	MY-304	Metallurgy of Welding	2	1	3
MY-308	Polymer & Composite Materials	2	1	3	MY-310	Non-Ferrous Extractive Metallurgy	3	0	3
MT-315	Mathematical Methods	3	0	3	HS-304	Business Communication and Ethics	3	0	3
MY-303	Foundry: Principles, Methods and Practice	3	1	4	MM-304	Heat Treatment of Materials	3	1	4
MG-481	Entrepreneurship	3	0	3	PF-303	Applied Economics for Engineers	3	0	3
					MY-309	Steel Making Processes	2	0	2
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MY-407	Design, Selection and Characterisation of Engineering Materials	3	1	4	MY-409	Metallurgical Plants and Quality Control	3	0	3
					MY-406	Powder Metallurgy	2	1	3
MY-410	Fracture Mechanics and Failure Analysis	2	1	3	CH-407	Industrial Organization & Management	2	1	3
MY-413	Corrosion Engineering	2	1	3	MY-###	Elective-II	3	0	3
MY-###	Elective-I	2	0	2	MY-411	Vacuum Metallurgy	2	0	2
IM-417	Health Safety and Environment	2	1	3	MY-408	Metallurgical Engineering Project	0	3	3
MY-408	Metallurgical Engineering Project	0	3	3					
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Elective – I (2 + 0) (to be chosen from the following)				Elective – II (3 + 0) (to be chosen from the following)			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MM-408	High Temperature Materials and Superalloys	2	0	2	MY-402	Advanced Materials	3	0	3
MM-413	Nuclear Materials	2	0	2	MM-411	Nanomaterials and Nanotechnology	3	0	3
MY-412	Metallurgy of Advanced Steels	2	0	2					

* Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.16 Polymer & Petrochemical Engineering

FIRST YEAR

Fall Semester					Spring Semester				
Course Code	**Course Title**	**Th**	**Pr**	**Total**	**Course Code**	**Course Title**	**Th**	**Pr**	**Total**
PP-105	Introduction to Petrochemicals	2	0	2	PP-104	Introduction to Polymers	3	1	4
PP-106	Thermodynamics-I	2	0	2	ME-101	Engineering Mechanics	3	1	4
HS-104	Functional English	3	0	3	ME-111	Engineering Drawing	2	1	3
PH-122	Applied Physics	3	1	3	HS-105	Pakistan Studies OR	2	0	2
MT-114	Calculus	3	0	3	HS-127	Pakistan Studies (for Foreigners)			
PP-103	Workshop Practice	0	1	1	EE-118	Basic Electricity and Electronics	3	1	4

SECOND YEAR

Fall Semester					Spring Semester				
Course Code	**Course Title**	**Th**	**Pr**	**Total**	**Course Code**	**Course Title**	**Th**	**Pr**	**Total**
PP-203	Principles of Chemical Processes	2	1	3	PP-202	Polymer Physics	3	0	3
PP-207	Fluid Mechanics	3	0	3	PP-205	Petroleum & Petrochemical Products	2	0	2
PP-209	Thermodynamics-II	3	0	3	PP-212	Polymeric Materials & Their Characterization	3	0	3
PP-211	Computer Programming and Application	2	1	3	MM-205	Mechanics of Material	3	1	4
MT-330	Applied Probability and Statistics	2	1	3	MT-215	Differential Equations & Complex Variables	3	0	3
HS-205	Islamic Studies OR	2	0	2	PP-222	Polymer & Petrochemical Lab-II	0	1	1
HS-209	Ethical Behaviour				HS-200	Community Service	-	-	NC
PP-221	Polymer & Petrochemical Lab-I	0	1	1					

THIRD YEAR

Fall Semester					Spring Semester				
Course Code	**Course Title**	**Th**	**Pr**	**Total**	**Course Code**	**Course Title**	**Th**	**Pr**	**Total**
PP-210	Polymer Processing	2	0	2	PP-301	Process Control & Instrumentation	3	0	3
PP-307	Polymer Composites	3	0	3	PP-305	Fuels & Combustion	2	0	2
PP-308	Heat Transfer	3	0	3	PP-310	Industrial Organization and Management	2	1	3
PP-309	Mass Transfer	3	0	3	PP-311	Chemical Reaction Engineering	3	0	3
MT-471	Applied Numerical Method	2	1	3	PF-303	Applied Economics for Engineers	3	0	3
PP-321	Polymer & Petrochemical Lab-III	0	1	1	HS-304	Business Communication and Ethics	3	0	3
PP-322	Polymer & Petrochemical Lab-IV	0	1	1	PP-323	Polymer & Petrochemical Lab-V	0	1	1
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Fall Semester					Spring Semester				
Course Code	**Course Title**	**Th**	**Pr**	**Total**	**Course Code**	**Course Title**	**Th**	**Pr**	**Total**
PP-402	Petrochemical Processes	3	1	4	PP-403	Plant Utilities & Safety	2	1	3
PP-406	Process Equipment Design	3	0	3	PP-409	Advanced Polymer Engineering	2	0	2
PP-410	Polymer Reaction Engineering	3	0	3	PP-414	Petroleum Refinery Engineering	2	1	3
PP-411	Separation Processes	3	1	4	PP-###	Elective Course	2/1	0/1	2
PP-413	Process Optimization	3	0	3	MG-481	Entrepreneurship	3	0	3
PP-421	Polymer & Petrochemical Lab-VI	0	1	1	PP-408	Polymer and Petrochemical Engineering Project	0	3	3
PP-408	*Polymer and Petrochemical Engineering Project	0	3	3					
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Elective Courses (to be chosen from the following)				
PP-412	Environmental Engineering	2	0	2
PP-425	Polymer Rheology	2	0	2
PP-427	Rubber Technology	2	0	2
PP-428	Process Modeling & Simulation	1	1	2
PP-429	Gas Engineering	2	0	2

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.17 Software Engineering

FIRST YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
CT-175	Programming Fundamentals	3	1	4	SE-201	Object Oriented Concepts & Programming	3	1	4
CT-174	Fundamentals of Information Technology	2	1	3	PH-122	Applied Physics	3	1	4
CT-162	Discrete Structures	3	0	3	SE-207	Software Engineering	3	0	3
HS-104	Functional English	3	0	3	HS-115	Academic Reading and Writing	3	0	3
MT-173	Calculus	3	0	3	HS-205	Islamic Studies OR	2	0	2
HS-105	Pakistan Studies OR	2	0	2	HS-209	Ethical Behaviour			
HS-127	Pakistan Studies (for Foreigners)				HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I			

SECOND YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
MT-273	Differential Equations & Linear Algebra	3	0	3	SE-204	Database Management Systems	3	1	4
HS-218	Business Communications	2	1	3	SE-206	Web Engineering	3	1	4
CT-157	Data Structure Algorithms & Applications	3	1	4	SE-308	Software Design & Architecture	2	1	3
SE-208	Software Requirement Engineering	3	0	3	MT-331	Probability & Statistics	3	0	3
CT-258	Financial & Cost Accounting	3	0	3	HS-219	Professional Ethics	2	0	2
HSK-2	Chinese Language OR	-	-	NC	HS-200	Community Service	-	-	NC
HS-232	Turkish Language-II								

THIRD YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
IF-301	Applied Economics for Engineers	3	0	3	CS-351	Computer Communication Networks	3	1	4
SE-302	Human Computer Interaction	3	0	3	SE-309	Software Quality Engineering	2	1	3
SE-303	Operating Systems	3	1	4	SE-310	Software Project Management	3	0	3
SE-312	Software Construction & Development	2	1	3	SE-311	E-Commerce	3	0	3
SE-313	Formal Method in Software Engineering	3	0	3	SE-###	Elective I	3	1	4

FINAL YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
CT-460	Network & Information Security	3	1	4	MG-481	Entrepreneurship	3	0	3
SE-405	Modeling & Simulation	3	0	3	SE-408	Design Patterns	3	0	3
SE-409	Software Re-Engineering	3	0	3	SE-410	Stochastic Processes	3	0	3
SE-###	Elective II	3	1	4	SE-###	Elective III	3	0	3
SE-499	Software Engineering Project	0	3	3	SE-499	Software Engineering Project	0	3	3

Elective – I & II (to be chosen from the following)	Elective – III (to be chosen from the following)
SE-202 Computer Graphics	SE-484 Software Testing Strategies & Techniques
CT-361 Artificial Intelligence & Expert Systems	SE-485 Software Reliability Engineering
SE-406 Distributed Computing	SE-486 Information Systems Engineering
SE-407 Data Warehouse & Mining	SE-489 Cloud Computing
SE-487 Mobile Application Development	
SE-488 Computer Vision Fundamentals	

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.18 Biomedical Engineering

FIRST YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-100	Introduction to Mathematics	4	0	4	MT-114	Calculus	3	0	3
BM-120	Introduction to Biology	3	1	4	EE-119	Fundamentals of Electrical Engineering	3	1	4
BM-101	Introduction to Biomedical Engg	1	0	1	BM-114	Anatomy	3	1	4
CY-110	Applied Chemistry for Engineers	2	1	3	BM-115	Physiology-I	2	1	3
PH-127	Applied Physics for Engineers	2	1	3	HS-105	Pakistan Studies OR	2	0	2
HS-111	Functional English	2	0	2	HS-127	Pakistan Studies (for Foreigners)			
CS-113	Introduction to Computing	1	1	2	BM-130	Computer Aided Engineering Graphics	1	1	2
MT-100	Introduction to Mathematics	4	0	4	HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
EE-217	Circuit Theory	2	0	2	BM-222	Engineering Mechanics for Biomedical Engineers	3	0	3
BM-209	Basic Electronics	3	1	4	MT-223	Ordinary Differential Equations & Fourier Series	3	0	3
CS-109	Computer Programming	2	1	3	BM-203	Cellular and Molecular Biology	2	0	2
MT-272	Linear Algebra & Geometry	3	0	3	TC-201	Digital Logic Design	2	1	3
BM-230	Biochemistry	2	1	3	HS-205	Islamic Studies OR	2	0	2
BM-116	Physiology-II	2	1	3	HS-209	Ethical Behaviour			
HSK-2	Chinese Language OR	-	-	NC	BM-208	Biomedical Electronics	3	1	4
HS-232	Turkish Language-II	-	-	NC	HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
BM-307	Bioinformatics	2	1	3	BM-310	Control Systems for Biomedical Engineers	2	1	3
BM-312	Biostatistics	2	1	3	BM-311	Bioinstrumentation & Measurements-II	3	1	4
EF-305	Engineering Economics and Management	3	0	3	HS-202	Business Communication	3	0	3
BM-306	Bioinstrumentation & Measurements-I	3	1	4	BM-313	Biomaterials	3	1	4
CS-430	Microprocessor Programming and Interfacing	3	1	4	EE-493	Digital Signal Processing	3	1	4

FINAL YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
BM-###	Electives-1	3/2	0/1	3	BM-413	Bio-Medical Engineering Project	0	3	3
BM-###	Electives-2	3/2	0/1	3	MG-481	Entrepreneurship	3	0	3
BM-401	Numerical Methods for Biomedical Engineering	3	0	3	BM-452	Modelling and Simulation for Biomedical Engineers	2	1	3
BM-406	Biomedical Imaging	2	1	3					
BM-451	Biosignal Processing	2	1	3	BM-###	Electives-3	3/2	0/1	3
BM-413	*Bio-Medical Engineering Project	0	3	3	HS-219	Professional Ethics	2	0	2
					BM-###	Electives-4	3/2	0/1	3

Elective Courses (to be chosen from the following)

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
BM-421	Genetic Engineering	3	0	3	BM-426	Ergonomics	3	0	3
BM-422	Biotechnology	2	1	3	BM-427	Product Design in Biomedical Engg	3	0	3
BM-423	Introduction to Robotics	2	1	3	BM-429	Tissue Engineering	2	1	3
BM-424	Fluid Dynamics	3	0	3	BM-430	Rehabilitation Engineering	2	1	3
BM-425	Telemedicine	3	0	3	BM-431	Biophotonics	3	0	3
BM-404	Biomechanics	2	1	3	BM-432	Neuroscience & Neural Networks	2	1	3
BM-435	Biophysics	3	0	3					

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.1.19 Food Engineering

FIRST YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
FD-104	Introduction to Food Engineering	2	0	2	CY-108	Analytical Chemistry	3	1	4
PH-127	Applied Physics for Engineers	2	1	3	EL-232	Electronics	3	1	4
CY-110	Applied Chemistry for Engineers	2	1	3	CS-103	Programming Languages	2	2	4
HS-104	Functional English	3	0	3	HS-105	Pakistan Studies OR	2	0	2
BM-108	Computer Aided Engineering Graphics	1	2	3	HS-127	Pakistan Studies (for Foreigners)			
MT-114	Calculus	3	0	3	FD-105	Food Engineering Principles	2	0	2

SECOND YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
FD-201	Thermodynamics	3	1	4	FD-208	Food Biochemistry	2	1	3
BM-201	Engineering Mechanics	3	1	4	FD-210	Fluid Mechanics-II	2	1	3
MT-223	Differential Equ. & Fourier Series	3	0	3	MM-205	Mechanics of Materials	3	1	4
FD-207	Food Chemistry	3	0	3	MT-332	Advance Calculus & Linear Algebra	3	0	3
FD-209	Fluid Mechanics-I	3	1	4	HS-205	Islamic Studies OR	2	0	2
					HS-209	Ethical Behaviour			
					HS-200	Community Service	-	-	NC

THIRD YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
FD-301	Unit Operations in Food Engg.-I	3	1	4	FD-304	Food Microbiology	3	1	4
FD-309	Machine Design for Food Engineers	3	0	3	FD-307	Heat & Mass Transfer	3	1	4
FD-306	Instrumentation & Measurement for Food Engineers	3	1	4	FD-308	Unit Operations in Food Engg.-II	3	1	4
					MT-442	Numerical Method	3	0	3
MT-330	Applied Probability & Statistics	2	1	3	BF-303	Applied Economics for Engineers	3	0	3
HS-304	Business Communications & Ethics	3	0	3	HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
FD-410	Food Processing	3	0	3	FD-408	Food Regulations and Legislation	2	0	2
FD-402	Food Quality Control	3	0	3	CH-###	Electives-III (Management Sciences)	3/2	0/1	3
FD-419	Process Control in Food Industry	2	1	3	HS/MG	Electives-IV (Social Sciences)	2	0	2
FD-###	Electives-I (Food Engineering)	2	1	3	FD-420	Fundamentals of Food Packaging	3	1	4
FD-###	Electives-II (Food Engineering)	2	1	3	FD-411	Food Plant Layout and Design	2	1	3
FD-430	*Food Engineering Project	0	3	3	FD-430	Food Engineering Project	0	3	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Elective-I and Elective - II (Food Engineering)

Code	Title	Th	Pr	Total	Code	Title	Th	Pr	Total
FD-403	Food Biotechnology	2	1	3	FD-414	Beverage Processing	2	1	3
FD-404	Sugar and Confectionery	2	1	3	FD-415	Meat, Poultry and Egg Processing	2	1	3
FD-409	Post Harvest Processing	2	1	3	FD-416	Food Product Development	2	1	3
FD-412	Dairy Processing	2	1	3	FD-417	Oil and Fats Processing	2	1	3
FD-413	Cereal Processing	2	1	3	FD-418	Food Plant Hygiene and Sanitation	2	1	3

Elective-III (Management Sciences) / Elective-IV (Social Sciences)

Code	Title	Th	Pr	Total	Code	Title	Th	Pr	Total
CH-405	Ind. Safety and Maintenance Management	2	1	3	HS-219	Professional Ethics	2	0	2
CH-407	Industrial Organisation and Management	3	0	3	MG-228	Sociology and Development	2	0	2

*** Duration one academic year: Requires literature survey and preliminary work during this Semester**

3.2 Bachelor of Science Programmes

3.2.1 Development Studies

FIRST YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
DS-131	Concept in Development Studies	3	0	3	DS-162	Sociology of Development	3	0	3
DS-141	Communication Skills for Development-I	2	2	4	MT-256	Macroeconomics	3	0	3
MT-253	Microeconomics	3	0	3	DS-143	Computer Applications in Development-I	1	2	3
HS-104	Functional English	3	0	3	DS-142	Communication Skills for Development-II	2	2	4
DS-104	Introduction to Sociology	3	0	3	DS-103	Introduction to Accounting	3	0	3
					HSK-I	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC
					HS-105	Pakistan Studies OR	2	0	2
					HS-127	Pakistan Studies (for foreigners)			

SECOND YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
DS-241	Introduction to Research Methodology-I	2	2	4	DS-245	Statistical Applications in Development-II	2	1	3
DS-231	Theory and Practice in Development Work	1	2	3	DS-246	Participatory Development	2	1	3
DS-243	Computer Applications in Development-II	1	2	3	DS-251	Theory and Management of Organisations	3	0	3
DS-244	Statistical Applications in Development-I	2	1	3	DS-242	Introduction to Research Methodology-II	2	2	4
DS-271	Development Economics	3	0	3	DS-203	Human Development	3	0	3
HSK-2	Chinese Language OR	-	-	NC	HS-205	Islamic Studies OR	2	0	2
HS-232	Turkish Language-II	-	-	NC	HS-209	Ethical Behaviour (for non muslims)			
					HS-200	Community Service	-	-	NC

THIRD YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
XX-###	Elective	3	0	3	DS-306	Public Administration	3	0	3
DS-316	Gender and Development	3	0	3	DS-334	Rural Planning and Development	2	1	3
DS-331	Development Planning Workshop-I	1	2	3	DS-332	Development Planning Workshop-II	1	2	3
DS-303	Legal Issues in Development	3	0	3	DS-371	Political Economy	3	0	3
DS-333	Urban Planning and Development	2	1	3	DS-XXX	Elective	3	0	3
DS-341	Mapping Applications in Planning and Development	1	2	3					

Elective Courses (to be chosen from the following)	
DS-310	Budgeting in Development Project
DS-356	Development Project Planning and Management
DS-312	Public Health
DS-314	Taraqiati Sargarmiyon Main Urdu Ka Istemal (Usage of Urdu in Development)

FINAL YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
DS-430	*Development Studies Project	0	3	3	DS-408	Sustainability in Development	3	0	3
DS-431	Development Planning Workshop-III	1	2	3	DS-410	Development Planning in Pakistan	3	0	3
DS-404	Entrepreneurship	3	0	3	DS-430	Development Studies Project	0	3	3
DS-406	Environmental Issues in Development	3	0	3	DS-471	Microfinance	3	0	3
DS-###	Elective	3	0	3	DS-###	Elective	3	0	3

Elective Courses (to be chosen from the following)	
DS-419	Case Studies in Development Project
DS-421	Corporate Social Responsibility and Application in Development
DS-422	Case Studies in Agricultural Development
DS-475	Public Finance
DS-476	Migration and Development

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.2.2 Management Sciences

FIRST YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-104	Functional English	3	0	3	EC-104	Financial Accounting	3	0	3
CT-158	Fundamental of I.T.	2	0	2	MT-153	Principles of Economics	3	0	3
MT-113	Business Mathematics	3	0	3	MG-112	Introduction to Sociology	3	0	3
MG-110	Fundamentals of Management	3	0	3	MG-114	Introduction to Business	3	0	3
MG-111	Principles of Marketing	3	0	3	HS-205	Islamic Studies OR	2	0	2
HS-105	Pakistan Studies OR	3	0	3	HS-209	Ethical Behaviour (for Non-Muslims)			
HS-127	Pakistan Studies (for foreigners)				HSK-I	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-201	Oral Communications	2	1	3	MT-214	Applied Statistics	3	0	3
MG-211	Strategic Management	3	0	3	MG-214	Human Resource Management	3	0	3
MG-212	Technology Management	3	0	3	MG-215	Business Law & Policy	3	0	3
MG-213	Introduction to Business Finance	3	0	3	MG-216	Managerial Accounting	3	0	3
EC-101	Microeconomics-I	3	0	3	EC-103	Macroeconomics-I	3	0	3
CT-153	Programming Languages	2	1	3	HS-200	Community Service	-	-	NC
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-301	Business & Organizational Communication	3	0	3	MT-355	Financial Risk Management	3	0	3
MG-311	Product & Brand Management	3	0	3	MG-317	Operations Research	2	1	3
MG-312	Business Research Methods	3	0	3	MG-315	Business & Economic Forecasting	2	1	3
MG-313	Business Ethics & Corporate Social Responsibility	3	0	3	MG-481	Entrepreneurship	3	0	3
IM-416	Management Information System	2	1	3	MG-318	Consumer Behaviour	3	0	3
IM-303	Production Management	3	1	4					

FINAL YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MG-4XX	Specialization-1	3	0	3	MG-4XX	Specialization-6	3	0	3
MG-4XX	Specialization-2	3	0	3	MG-4XX	Specialization-7	3	0	3
MG-4XX	Specialization-3	3	0	3	CT-461	E-Commerce	3	1	4
MG-4XX	Specialization-4	3	0	3	MG-480	Business Process Management	2	1	3
MG-4XX	Specialization-5	3	0	3	MG-499	Final Year Project	0	3	3
MG-499	*Final Year Project	0	3	3					

Specialization (to be chosen from the following)

MG-450	Principles of Supply Chain Management	MG-460	Marketing Strategy
MG-451	Green Supply Chain Management	MG-461	Global Entrepreneurial Marketing
MG-452	Information Technology for SCM	MG-462	Introduction to Advertising
MG-453	Supply Chain Inventory	MG-463	Corporation & Consumer Behaviour
MG-454	Supply Planning & Control Systems	MG-464	Personal Selling and Public Relation
MG-455	Business Process Simulation	MG-465	Trade and Consumer Promotions
MG-456	Procurement Management	MG-466	Advertising Management

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.2.3 Textile Sciences

FIRST YEAR

Fall Semester				Spring Semester			
Course Code	Course Title	Th	Pr	Total			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
TE-111	Textile Chemistry	3	1	4	TE-211	Textile Yarn Manufacturing Processes	3	1	4
ME-110	Basic Mechanical Engineering	2	0	2	MT-114	Calculus	3	0	3
HS-114	Functional English	2	0	2	HS-105	Pakistan Studies OR	2	0	2
TS-119	Introduction to Textiles	2	0	2	HS-127	Pakistan Studies (for foreigners)			
TE-234	Polymer & Fiber Science	2	1	3	PH-122	Applied Physics	3	1	4
HS-205	Islamic Studies OR	2	0	2	HS-115	Academic Reading and Writing	3	0	3
HS-209	Ethical Behaviour (for non muslims)								
MT-100	Introduction to Mathematics	-	-	NC					

SECOND YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
IM-207	Computer Programming & Drafting	2	1	3	MF-303	Applied Economics for Engineers	3	0	3
TS-209	Colour Science	2	1	3	TS-364	Knitting Technology	3	1	4
TS-341	Advanced Yarn Production Processes	3	1	4	TS-480	Technical Textiles	3	0	3
TE-322	Textile Fabric Manufacturing Processes	3	1	4	TS-245	Pre-treatment in Textiles	3	1	4
MT-225	Linear Algebra & Ordinary Differential Equations	3	0	3	TS-243	Textile Testing-I	2	1	3
					HS-200	Community Service	-	-	NC

THIRD YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
TS-465	Advanced Fabric Manufacturing Techniques	3	0	3	TE-318	Textile & Environment	2	0	2
TE-307	Utilities for Textile Industry	3	1	4	TE-453	Garment Manufacturing	3	0	3
TS-356	Textile Dyeing	3	1	4	TS-358	Textile Printing	3	1	4
TS-357	CAD/CAM in Apparel Industry	3	1	4	TS-371	Textile Testing-II	2	1	3
HS-304	Business Communication & Ethics	3	0	3	TS-359	Denim Manufacturing Process	3	0	3
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
T#-###	Elective-1	3	1	4	T#-###	Elective-2	3	1	4
TE-452	Textile Finishing	3	1	4	MG-481	Entrepreneurship	3	0	3
TE-305	Quality Control in Textiles	2	0	2	TE-454	Textile Merchandizing	3	0	3
TS-458	*Project	0	3	3	TE-406	Textile Production Management	3	0	3
MG-482	Organizational Behaviour	3	0	3	TS-458	Project	0	3	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Elective – I		Elective – II	
TE-455	Advanced Garment Manufacturing Process	TS-456	Industrial Engineering in Apparel
TS-460	Smart Textiles	TS-459	Protective Textiles
TS-462	Textile Composites	TS-457	Geo Textiles

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.2.4 Computer Science

FIRST YEAR

Course Code	Course Title (Fall Semester)	Th	Pr	Total	Course Code	Course Title (Spring Semester)	Th	Pr	Total
CT-175	Programming Fundamentals	3	1	4	CS-251	Logic Design & Switching Theory	3	1	4
CT-174	Fundamentals of Information Technology	2	1	3	CT-162	Discrete Structures	3	0	3
MT-171	Differential & Integral Calculus	3	0	3	CT-260	Object Oriented Programming	3	1	4
PH-122	Applied Physics	3	1	4	HS-104	Functional English	3	0	3
HS-205	Islamic Studies OR	2	0	2	HS-105	Pakistan Studies OR	2	0	2
HS-209	Ethical Behaviour				HS-127	Pakistan Studies (for Foreigners)			
MT-001	Mathematics - 1 (for Pre-Medical)	-	-	NC	HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC
					MT-002	Mathematics - 2 (for Pre-Medical)	-	-	NC

SECOND YEAR

Course Code	Course Title (Fall Semester)	Th	Pr	Total	Course Code	Course Title (Spring Semester)	Th	Pr	Total
CT-159	Data Structure Algorithms & Applications	3	1	4	CS-252	Computer Architecture & Organisation	3	1	4
MT-227	Differential Equations	3	0	3	CT-261	Database Management Systems	3	1	4
HS-115	Academic Reading and Writing	3	0	3	HS-218	Business Communications	2	1	3
HS-219	Professional Ethics	2	0	2	CT-258	Financial & Cost Accounting	3	0	3
CT-259	System Analysis & Design	3	0	3	MT-272	Linear Algebra & Geometry	3	0	3
HSK-2	Chinese Language OR	-	-	NC	HS-200	Community Service	-	-	NC
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Course Code	Course Title (Fall Semester)	Th	Pr	Total	Course Code	Course Title (Spring Semester)	Th	Pr	Total
CT-365	Software Engineering	3	0	3	CT-376	Computer Communication Networks	3	1	4
CT-353	Operating Systems	3	1	4	CT-361	Artificial Intelligence & Expert Systems	3	1	4
CT-363	Design and Analysis of Algorithms	3	0	3	CT-362	Web Engineering	3	1	4
MT-331	Probability & Statistics	3	0	3	CT-367	Theory of Programming Languages	3	0	3
CT-364	Theory of Automata and Formal Languages	3	0	3	MT-442	Numerical Methods	3	0	3

FINAL YEAR

Course Code	Course Title (Fall Semester)	Th	Pr	Total	Course Code	Course Title (Spring Semester)	Th	Pr	Total
CT-486	Network & Information Security	3	1	4	CS-428	Parallel & Distributed Computing	3	1	4
MG-482	Organisational Behaviour	3	0	3	CT-465	Compiler Design	3	0	3
CT-###	Elective I	3	0	3	MG-481	Entrepreneurship	3	0	3
CT-###	Elective II	3	1	4	CT-###	Elective III	3	1	4
CT-499	*Software Based Project	0	3	3	CT-499	Software Based Project	0	3	3

Elective – I (to be chosen from the following)	Elective – II & III (to be chosen from the following)
CT-366 E-Commerce	CT-352 Computer Graphics
CT-485 Natural Language Processing	CT-487 Visual Programming
CT-464 Modeling & Simulation	CT-488 Distributed Computing
	CT-463 Data Warehouse Mining
	CT-481 Wireless Network & Mobile Computing
	CT-484 Introduction to Cyber Security

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.2.5 Computational Finance

FIRST YEAR

Fall Semester				Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-151	Calculus-I	3	0	3	MT-152	Calculus-II	3	0	3
MT-153	Principles of Economics	3	0	3	MT-154	Computer Applications in Finance	1	2	3
HS-104	Functional English	3	0	3	CT-157	Data Structure Algorithm & Application	3	1	4
MT-155	Introduction to Financial Accounting	3	0	3	MT-156	Discrete Mathematics	3	0	3
HS-205	Islamic Studies OR				HS-105	Pakistan Studies OR			
HS-209	Ethical Behavior (Non-Muslim)	2	0	2	HS-127	Pakistan Studies (for Foreigners)	2	0	2
CT-153	Programming Languages	2	1	3	EC-202	Cost Accounting	3	0	3
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-272	Linear Algebra & Geometry	3	0	3	MT-254	Statistical Inference	3	0	3
MT-251	Multivariate Calculus	4	0	4	MT-255	Introduction to Mathematical Finance	3	0	3
MT-252	Introduction to Probability & Statistics	3	1	4	MT-227	Differential Equations	3	0	3
HS-201	Oral Communications	2	1	3	MT-256	Macroeconomics	3	0	3
MT-253	Microeconomics	3	0	3	MT-257	Stochastic Calculus	3	0	3
HSK-2	Chinese Language OR	-	-	NC	HS-200	Community Service	-	-	NC
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-351	Operations Research	3	0	3	MT-442	Numerical Methods	3	0	3
MT-352	Financial Management	3	0	3	SE-307	E-Commerce	3	1	4
MT-353	Discrete-Time Finance	3	0	3	MT-355	Financial Risk Management	3	0	3
MT-354	Financial Derivatives	3	0	3	MT-356	Stochastic Models in Finance	3	0	3
HS-301	Business and Organizational Communications	3	0	3	HS-311	Logic & Critical Thinking	3	0	3

FINAL YEAR

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MG-481	Entrepreneurship	3	0	3	MT-455	Econometrics	3	0	3
MT-451	Continuous-Time Finance	3	0	3	MT-456	Financial Engineering	3	0	3
MT-###	Elective-1	3	0	3	MT-###	Elective-3	3	0	3
MT-###	Elective-2	3	0	3	MT-###	Elective-4	3	0	3
MT-460	*Computational Finance Project	0	3	3	MT-460	*Computational Finance Project	0	3	3

Elective Courses (to be chosen from the following)

MT-452	Financial Modelling	MT-457	Numerical Computing in Finance
MT-453	Organizational Design and Implementation	MT-458	Islamic Banking & Financial System
MT-454	Fuzzy Sets and Fuzzy Logic	MT-459	Actuarial Science

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.2.6 Applied Physics

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CS-101	Introduction to Computer	2	1	3	MT-227	Differential Equations	3	0	3
MT-173	Calculus	3	0	3	EL-255	Programming Language	2	1	3
PH-101	Mechanics & Properties of Matter	3	0	3	PH-104	Waves & Oscillations	2	0	2
PH-102	Heat & Thermodynamics	2	0	2	PH-105	Electricity & Magnetism	3	0	3
CY-115	General Chemistry-I	2	1	3	PH-106	Physics Lab-II	0	1	1
PH-103	Physics Lab-I	0	1	1	CY-116	General Chemistry-II	2	1	3
HS-105	Pakistan Studies OR	2	0	2	HS-104	Functional English	3	0	3
HS-127	Pakistan Studies(for Foreigners)				HSK-1	Chinese Language OR	-	-	NC
MT-100	Introduction to Mathematics	-	-	NC	HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-201	Oral Communication	2	1	3	PH-205	Classical Mechanics	3	0	3
PH-201	Optics	2	0	2	PH-204	Introduction to Material Science	3	0	3
PH-202	Modern Physics	3	0	3	MT-331	Probability & Statistics	3	0	3
PH-203	Physics Lab-III	0	1	1	MT-228	Complex Variables & Fourier Transforms	3	0	3
MT-272	Linear Algebra & Geometry	3	0	3	EL-238	Digital Electronics	3	1	4
EL-232	Electronics	3	1	4	PH-206	Physics Lab-IV	0	1	1
HS-205	Islamic Studies OR				HS-200	Community Service	-	-	NC
HS-209	Ethical Behaviour (for Non-Muslims)	2	0	2					
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
PH-301	Quantum Mechanics-I	3	0	3	PH-307	Mathematical Physics-II	3	0	3
PH-302	Laser Engineering	3	0	3	PH-308	Quantum Mechanics-II	3	0	3
PH-303	Mathematical Physics-I	3	0	3	PH-309	Electromagnetic Theory-II	3	0	3
PH-304	Electromagnetic Theory-I	3	0	3	PH-310	Solid State Physics-I	3	0	3
PH-305	Vacuum Science	2	0	2	PH-312	Physics Lab-VI	0	1	1
HS-301	Business & Organizational Communication	3	0	3	PH-313	Cosmology and Theory of Relativity	3	0	3
PH-311	Physics Lab-V	0	1	1					

FINAL YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
PH-401	Computational Physics	2	0	2	EL-344	Power Electronics	3	1	4
PH-409	Atomic & Molecular Physics	2	0	2	##-###	Elective-2			
PH-403	Solid State Physics-II	3	0	3	PH-407	Applied Physics Project	0	3	3
PH-417	Nuclear Physics	2	0	2	PH-412	Introduction to Nanoscience and Nanotechnologies	2	0	2
PH-407	*Applied Physics Project	0	3	3	PH-413	Surface Science	2	0	2
##-###	Elective-1								
PH-408	Physics Lab-VII	0	1	1					
PH-415	Statistical Mechanics	2	0	2					

Elective Course (Materials Group) (to be chosen from the following)				Elective Course (Electronics Group) (to be chosen from the following)			
MM-401	Material Characterization Techniques	3	1	4	EL-484	Optoelectronics and Microwave Systems	3	1	4
MY-402	Advance Materials	3	0	3	EL-333	Integrated Circuits	2	1	3

Elective Course (Space Group) (to be chosen from the following)			
PH-416	Space Physics	3	1	4
PH-411	Applications of Space Physics	3	0	3

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.2.7 Industrial Chemistry

FIRST YEAR

Fall Semester				Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total

Fall Semester

Course Code	Course Title	Th	Pr	Total
CY-113	Inorganic Chemistry-I	3	0	3
CY-114	Organic Chemistry-I	3	0	3
CY-118	Industrial Chemistry Lab-I	0	1	1
HS-104	Functional English	3	0	3
PH-123	General Physics-I	2	1	3
MT-100	Introduction to Mathematics (for Pre-Medical)	-	-	NC
CT-158	Fundamental of Information Technology	2	0	2
HS-105	Pakistan Studies OR			
HS-127	Pakistan Studies (Foreigners)	2	0	2

Spring Semester

Course Code	Course Title	Th	Pr	Total
CY-120	Analytical Chemistry-I	3	0	3
CY-117	Physical Chemistry-I	3	0	3
CY-119	Industrial Chemistry Lab-II	0	1	1
EE-119	Fundamentals of Electrical Engineering	3	1	4
MT-173	Calculus	3	0	3
PH-124	General Physics-II	2	1	3
HSK-1	Chinese Language OR	-	-	NC
HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester

Course Code	Course Title	Th	Pr	Total
CY-205	Inorganic Chemistry-II	3	0	3
CY-208	Organic Chemistry-II	3	0	3
CY-206	Industrial Chemistry Lab-III	0	1	1
HS-205	Islamic Studies OR	2	0	2
HS-209	Ethical Behavior (for Non-Muslim)			
MT-223	Ordinary Differential Equations & Fourier Series	3	0	3
MT-331	Probability & Statistics	3	0	3
CT-153	Programming Languages	2	1	3
HSK-2	Chinese Language OR	-	-	NC
HS-232	Turkish Language-II	-	-	NC

Spring Semester

Course Code	Course Title	Th	Pr	Total
CY-209	Analytical Chemistry-II	3	0	3
CY-210	Physical Chemistry-II	3	0	3
CY-207	Industrial Chemistry Lab-IV	0	1	1
HS-201	Oral Communication	2	1	3
CH-202	Fluid Mechanics-I	3	1	4
EL-102	Basic Electronics	3	1	4
HS-200	Community Service	-	-	NC

THIRD YEAR

Fall Semester

Course Code	Course Title	Th	Pr	Total
HS-301	Business & Organizational Communication	3	0	3
CH-206	Thermodynamics	3	1	4
CY-312	Spectroscopy	3	0	3
CY-313	Polymer Science	3	0	3
CY-305	Industrial Stoichiometry	3	0	3
CY-310	Industrial Chemistry Lab V	0	1	1

Spring Semester

Course Code	Course Title	Th	Pr	Total
CY-404	Separation Techniques	3	0	3
CY-303	Reaction Kinetics	3	0	3
CY-308	Unit Processes	3	0	3
CY-311	Industrial Chemistry Lab VI	0	1	1
CY-314	Natural Products	3	0	3
CY-315	Nuclear & Radiation Chemistry	3	0	3
CH-203	Chemical Process Industries	3	0	3

FINAL YEAR

Fall Semester

Course Code	Course Title	Th	Pr	Total
CY-402	Environmental Chemistry	3	0	3
CH-405	Industrial Safety & Maintenance Management	2	1	3
##-###	Elective-1	3/2	0/1	3
##-###	Elective-2	3/2	0/1	3
CY-415	*Industrial Chemistry Project	0	3	3

Spring Semester

Course Code	Course Title	Th	Pr	Total
CY-417	Quality Assurance for Chemists	3	0	3
##-###	Elective-3	3/2	0/1	3
##-###	Elective-4	3/2	0/1	3
CY-415	Industrial Chemistry Project	0	3	3

Elective Courses (to be chosen from the following)

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CH-406	Petroleum Refining & Petrochemicals	3	0	3	CY-413	Surfactants and Cosmetics	3	0	3
CY-403	Beverage Technology	3	0	3	CY-414	Pharmaceutical Chemistry	3	0	3
CY-406	Fat & Oil Processing	3	0	3	CH-407	Industrial Organization & Management	2	1	3
CY-408	Polymer Technology	3	0	3	CY-416	Nanotechnology	3	0	3
CY-411	Surface Coatings	3	0	3					

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.2.8   English Linguistics

FIRST YEAR

Fall Semester				Spring Semester			
Course Code	Course Title	Th	Pr	Total			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-104	Functional English	3	0	3	HS-115	Academic Reading & Writing	3	0	3
HS-105	Pakistan Studies OR	2	0	2	HS-119	Islamic Studies OR	2	0	2
HS-127	Pakistan Studies (for Foreigners)				HS-209	Ethical Behaviour (for non muslims)			
HS-116	Anthropology	3	0	3	CT-173	Introduction to Computer Applications	2	1	3
HS-117	Foundation of Education	3	0	3	HS-118	Media Studies	3	0	3
HS-120	Introduction to English Literature-I	3	0	3	HS-122	History of English Literature-I	3	0	3
HS-121	Introduction to Linguistics	3	0	3	HS-123	Phonetics & Phonology	3	0	3
					HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-201	Oral Communication	2	1	3	HS-202	Business Communication	3	0	3
HS-210	Philosophy	3	0	3	HS-203	Organizational Behaviour	3	0	3
EC-211	Principles of Economics	3	0	3	HS-204	Human Rights & Citizenship	3	0	3
HS-217	Visionary Discourse	3	0	3	HS-213	History of English Literature-II	3	0	3
HS-211	Morphology & Syntax-I	3	0	3	HS-215	Semantics	3	0	3
HS-212	Introduction to English Literature-II	3	0	3	HS-200	Community Service	-	-	NC
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
MT-337	Introduction to Statistics	3	0	3	HS-319	Introduction to Research	3	0	3
HS-305	Morphology & Syntax-II	3	0	3	HS-308	Lexical Studies	3	0	3
HS-306	Sociolinguistics	3	0	3	HS-309	Discourse Analysis	3	0	3
HS-307	Pedagogical Grammar	3	0	3	HS-310	Psycholinguistics	3	0	3
HS-###	Elective-I	3	0	3	MG-317	Human Resource Management	3	0	3
HS-###	Elective-II	3	0	3	HS-###	Elective-III	3	0	3

Elective Courses (to be chosen from the following)

HS-312	Translation Studies	HS-316	English for Specific Purposes
HS-313	Media Discourse Analysis	HS-317	Language & Gender
HS-314	World Englishes	HS-318	Anthropological Studies
HS-315	Language in Education		

FINAL YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
HS-402	Research Methods in Linguistics	3	0	3	HS-406	Stylistics	3	0	3
HS-411	Second Language Acquisition	3	0	3	HS-407	Language, Culture & Identity	3	0	3
HS-412	Language Teaching Methodologies	3	0	3	HS-408	Genre Analysis	3	0	3
HS-418	Pragmatics	3	0	3	HS-421	Syllabus Designing & Testing	3	0	3
HS-401	*Project	0	3	3	HS-401	Project	0	3	3

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.2.9   Economics & Finance

FIRST YEAR

Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
EC-101	Microeconomics-I	3	0	3	EC-103	Macroeconomics-I	3	0	3
MT-100	Introduction to Mathematics	-	-	NC	EC-104	Financial Accounting	3	0	3
EC-102	Principles of Accounting	3	0	3	EC-105	Information Technology in Business Economics	2	1	3
CT-173	Introduction to Computer Applications	2	1	3	HS-115	Academic Reading & Writing	3	0	3
HS-104	Functional English	3	0	3	EC-106	Principles of Management	3	0	3
HS-105	Pakistan Studies OR				HSK-I	Chinese Language OR	-	-	NC
HS-127	Pakistan Studies for Foreigners	2	0	2	HS-231	Turkish Language-I	-	-	NC

SECOND YEAR

Fall Semester					Spring Semester			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
EC-201	Microeconomics-II	3	0	3	EC-204	Macroeconomics-II	3	0	3
MT-230	Statistics & Probability	3	0	3	EC-205	Development Economics	3	0	3
EC-202	Cost Accounting	3	0	3	EC-206	Economy of Pakistan	3	0	3
EC-203	Computer Application to Business & Finance	2	1	3	MT-231	Statistics Inference	3	0	3
HS-201	Oral Communication	2	1	3	EC-207	Managerial Accounting	3	0	3
HS-205	Islamic Studies OR				EC-208	Introduction to Business Finance	3	0	3
HS-209	Ethical Behavior (for Non-Muslim)	2	0	2	HS-200	Community Service	-	-	NC
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Fall Semester					Spring Semester			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
EC-301	Political Economics	3	0	3	EC-305	Comparative Economic System	3	0	3
EC-302	Mathematical Economics-I	3	0	3	EC-306	Mathematical Economics-II	3	0	3
EC-303	Econometrics-I	3	0	3	EC-307	Econometric-II	3	0	3
EC-304	Money and Banking	3	0	3	EC-308	Business Research Methods	3	0	3
HS-301	Business and Organizational Communication	3	0	3	EC-309	Financial Management	3	0	3

FINAL YEAR

Fall Semester					Spring Semester			

Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
EC-401	Public Finance	3	0	3	EC-404	Islamic Economics	3	0	3
EC-402	International Trade Theory	3	0	3	EC-###	Elective-III (Economics)	3	0	3
EC-403	Applied Economics	2	1	3	EC-###	Elective-IV (Finance)	3	0	3
EC-###	Elective-I (Economics)	3	0	3	EC-###	Elective-V (Economics / Finance)	3	0	3
EC-###	Elective-II (Finance)	3	0	3	EC-405	Project	0	3	3
EC-405	*Project	0	3	3	EC-404	Islamic Economics	3	0	3

Inter-Disciplinary Elective (to be chosen from the following)

Economics					Finance			
EC-406	Urban Economics	3	0	3	EC-410	Labor Economics	3	0	3
EC-407	Industrial Economics	3	0	3	EC-411	International Finance	3	0	3
EC-408	Transport Economics	3	0	3	EC-412	Corporate Finance	3	0	3
EC-409	Environmental Economics	3	0	3	EC-413	Project Appraisal & Investment Analysis	3	0	3

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.3 Bachelor of Architecture

FIRST YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
AR-101	Basic Design-I	1	3	4	AR-102	Basic Design-II	1	3	4
AR-121	Introduction to Environmental Studies	2	1	3	AR-111	Introduction to History, Theory and Culture	2	1	3
AR-143	Communications and Allied Skills-I	1	2	3	AR-144	Communication and Allied Skills-II	1	2	3
HS-104	Functional English	3	0	3	HSK-1	Chinese Language OR	-	-	NC
MT-112	Mathematics for Architects	3	0	3	HS-231	Turkish Language-I	-	-	NC
PH-111	Basic Physics for Architects	1	1	2	AR-151	Construction and Materials-I	1	2	3
CY-111	Basic Chemistry for Architects	1	1	2	CE-112	Fundamentals of Statics	2	0	2
					HS-105	Pakistan Studies OR	2	0	2
					HS-127	Pakistan Studies (for Foreigners)			

SECOND YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
AR-201	Architectural Design-I	1	4	5	AR-202	Architectural Design-II	1	4	5
AR-211	History and Theory-I	2	1	3	AR-212	History and Theory-II	2	1	3
AR-243	Communication and Allied Skills-III	1	2	3	AR-221	Development Studies	2	1	3
AR-251	Construction and Materials-II	1	2	3	AR-231	Environmental Design and Systems-I	2	1	3
CE-113	Surveying for Architects	2	1	3	AR-244	Communication and Allied Skills-IV	1	2	3
HS-205	Islamic Studies OR	2	0	2	CE-252	Structure for Architects-I	2	0	2
HS-209	Ethical Behaviour (for Non-Muslims)				HS-200	Community Service	-	-	NC
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
AR-301	Architectural Design-III	1	5	6	AR-302	Architectural Design-IV	1	5	6
AR-381	Introduction to Landscape Architecture	1	2	3	AR-312	History and Theory-IV	2	1	3
AR-311	History and Theory-III	2	1	3	AR-321	Housing and Community Development	2	1	3
AR-331	Environmental Design and Systems-II	2	1	3	AR-342	Communication and Allied Skills-V	1	2	3
AR-351	Construction and Materials-III	1	2	3	AR-352	Construction and Materials-IV	1	2	3
AR-361	Introduction to Architectural Conservation	2	1	3	CE-352	Structure for Architects-II	2	0	2

FOURTH YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
AR-401	Architectural Design-V	1	5	6	AR-402	Architectural Design-VI	1	5	6
AR-403	Introduction to Interior Design	1	2	3	AR-421	Urban Planning and Design	2	1	3
AR-411	History and Theory-V	2	1	3	AR-431	Environmental Design and Systems-III	2	1	3
AR-442	Communication and Allied Skills-VI	1	2	3	AR-461	Research Methodologies	2	1	3
AR-451	Construction and Materials-V	1	2	3	AR-XXX	Elective	-	-	3

Elective Courses (to be chosen from the following)

AR-472	Documentation Techniques in Architecture	1	2	3	AR-473	Studies in Critical Regionalism	2	1	3

FINAL YEAR

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
AR-503	Architectural Design Project*	0	4	4	AR-503	Architectural Design Project*	2	8	10
AR 522	Comprehensive Environmental Design	1	5	6	AR-561	Professional Practice	2	1	3
AR-552	Construction and Materials-VI	2	1	3					

* Duration one academic year: Requires literature survey and preliminary work during this Semester

3.4 Thar Institute of Engineering, Sciences and Technology (TIEST)

3.4.1 Civil Engineering

FIRST YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-107	Engineering Drawing-I	1	2	3	CE-109	Engineering Surveying-I	2	1	3
CE-102	Statics and Dynamics	3	1	4	CE-110	Chemistry for Civil Engineers	1	1	2
CE-108	Engineering Materials	2	1	3	CE-111	Introduction to Computing for Civil Engineers	1	2	3
EE-123	Basic Electrical Engineering	2	0	2	ME-110	Basic Mechanical Engineering	2	0	2
MT-114	Calculus	3	0	3	HS-111	Functional English	2	0	2
HS-106	Pakistan Studies OR	1	0	1	MT-221	Linear Algebra & Ordinary Differential Equations	3	0	3
HS-127	Pakistan Studies (for Foreigners)								

SECOND YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-201	Engineering Surveying-II	3	1	4	CE-222	Engineering Drawing-II	1	2	3
CE-205	Mechanics of Solids-I	3	1	4	CE-221	Structural Analysis-I	3	0	3
CE-223	Geology for Engineers	2	0	2	CE-219	Fluid Mechanics-I	3	1	4
HS-205	Islamic Studies OR	2	0	2	MT-331	Probability & Statistics	3	0	3
HS-209	Ethical Behaviour (for Non-Muslims)				HS-219	Professional Ethics	2	0	2
HS-218	Business Communication	2	1	3	CF-303	Applied Economics for Engineers	3	0	3
					HS-200	Community Service	-	-	NC

THIRD YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-320	Reinforced Concrete Design-I	3	0	3	CE-302	Transportation Engineering-I	3	1	4
CE-321	Construction Engineering	3	0	3	CE-305	Soil Mechanics-I	3	1	4
CE-323	Quantity & Cost Estimation	3	0	3	CE-314	Structural Analysis-II	3	0	3
CE-319	Fluid Mechanics-II	3	1	4	CE-322	Mechanics of Solids-II	3	0	3
AR-309	Architecture and Town Planning	3	0	3	CE-424	Essentials in Construction Project Management	3	0	3
MT-443	Numerical Analysis	3	0	3	HSK-1	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC

FINAL YEAR

	Fall Semester					Spring Semester			
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CE-403	Soil Mechanics-II	3	1	4	CE-421	Design of Steel Structures	3	0	3
CE-432	Transportation Engineering-II	2	0	2	C#-###	Civil Engineering Elective	3/1/2	0/2/1	3
CE-418	Hydraulic and Water Resources Engineering-I	3	1	4	C#-###	Management Sciences Elective	3	0	3
CE-420	Reinforced Concrete Design-II	3	0	3	##-###	Social Sciences Elective	2	0	2
EN-301	Environmental Engineering-I	2	1	3	EN-401	Environmental Engineering-II	2	1	3
CE-409	*Civil Engineering Project	0	3	3	CE-409	Civil Engineering Project	0	3	3
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

Civil Engineering Elective Courses (to be chosen from the following)

CE-419	Applied Hydraulics	3	0	3	CE-431	Geoinformatics Applications	2	1	3
CE-422	Structural Design & Drawing	3	0	3	CE-433	Coastal and Harbour Engineering	3	0	3
CE-423	Masonry Structures	3	0	3	CE-438	Hydraulics and Water Resource Engineering-II	3	0	3
CE-426	Building Information Modeling	1	2	3	CN-424	Environmental Issues in Construction	3	0	3
CE-429	Geosynthetics and their Applications	3	0	3	CN-430	Disaster and Reconstruction Management	3	0	3

Management Sciences Elective Courses (to be chosen from the following)

CN-423	Management and marketing of Construction Services	3	0	3	CE-434	Procurement Management	3	0	3
CN-432	Leadership and Human Skills in Management	3	0	3	CE-435	Construction Contract Management	3	0	3
CE-425	Modern Aspects of Construction Project Management	3	0	3	CE-434	Procurement Management	3	0	3

Social Sciences Elective Courses (to be chosen from the following)

CE-427	Introduction to Entrepreneurship & Opportunity Assessment	2	0	2	MG-228	Sociology and Development	2	0	2
CE-439	Engineer and Society	2	0	2					

Duration one academic year: Requires literature survey and preliminary work during this Semester

3.4.2 Computer Science

FIRST YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
CT-175	Programming Fundamentals	3	1	4	CS-251	Logic Design & Switching Theory	3	1	4
CT-174	Fundamentals of Information Technology	2	1	3	CT-162	Discrete Structures	3	0	3
PH-122	Applied Physics	3	1	4	CT-251	Object Oriented Programming	3	1	4
HS-104	Functional English	3	0	3	HS-115	Academic Reading and Writing	3	0	3
HS-105	Pakistan Studies OR	2	0	2	HSK-1	Chinese Language OR	-	-	NC
HS-127	Pakistan Studies (for Foreigners)				HS-231	Turkish Language-I	-	-	NC
MT-001	Mathematics - 1 (for Pre-Medical)	-	-	NC	MT-171	Differential & Integral Calculus	3	0	3
					MT-002	Mathematics - 2 (for Pre-Medical)	-	-	NC

SECOND YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
CT-157	Data Structure Algorithms & Applications	3	1	4	CS-252	Computer Architecture & Organisation	3	1	4
MT-227	Differential Equations	3	0	3	CT-257	Database Management Systems	3	1	4
HS-218	Business Communications	2	1	3	HS-219	Professional Ethics	2	0	2
CT-259	System Analysis & Design	3	0	3	CT-258	Financial & Cost Accounting	3	0	3
HS-205	Islamic Studies OR	2	0	2	MT-272	Linear Algebra & Geometry	3	0	3
HS-209	Ethical Behaviour				HS-200	Community Service	-	-	NC
HSK-2	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					

THIRD YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
CT-365	Software Engineering	3	0	3	CS-351	Computer Communication Networks	3	1	4
CT-353	Operating Systems	3	1	4	CT-361	Artificial Intelligence & Expert Systems	3	1	4
CT-363	Design and Analysis of Algorithms	3	0	3	CT-362	Web Engineering	3	1	4
MT-331	Probability & Statistics	3	0	3	CT-367	Theory of Programming Languages	3	0	3
CT-364	Theory of Automata and Formal Languages	3	0	3	MT-442	Numerical Methods	3	0	3

FINAL YEAR

Course Code	Fall Semester Course Title	Th	Pr	Total	Course Code	Spring Semester Course Title	Th	Pr	Total
CT-460	Network & Information Security	3	1	4	CS-428	Parallel & Distributed Computing	3	1	4
MG-482	Organisational Behaviour	3	0	3	CT-465	Compiler Design	3	0	3
CT-###	Elective I	3	0	3	MG-481	Entrepreneurship	3	0	3
CT-###	Elective II	3	1	4	CT-###	Elective III	3	1	4
CT-499	Software Based Project	0	3	3	CT-499	Software Based Project	0	3	3

Elective-I (to be chosen from the following)

CT-366   E-Commerce
CT-485   Natural Language Processing
CT-464   Modeling & Simulation

Elective-II & Elective-III (to be chosen from the following)

CT-352	Computer Graphics		CT-463	Data Warehouse Mining
CT-360	Visual Programming		CT-481	Wireless Network & Mobile Computing
CT-462	Distributed Computing		CT-484	Introduction to Cyber Security

* Duration one academic year: Requires literature survey and preliminary work during this Semester

CHAPTER **4**

Mode of Application for Admission

4.1 GENERAL GUIDANCE

4.1.1 The prospectus is available on NED University website at "www.neduet.edu.pk/admission".

4.1.2 Candidates shall be required to apply online for admission:

a) They will be required to get the print-out of Application Form, sign it and submit along with other documents as mentioned in 4.1.4 at the time of submission of original documents.

b) Candidates desirous for taking admission at Thar Institute of Engineering, Sciences and Technology (TIEST), will also be required to fill admission form as mentioned above. Criteria for such applicants will be the same as of NED University.

c) Application processing fee of Rs. 4,300/- is required to be paid in designated branches of banks.

d) Candidates may apply under more than one category through the same online admission process. Admission categories have been specified in Chapter 5.

e) Candidates will be required to upload the scanned copy of their HSC Mark Sheet / IBCC Equivalency Certificate (as the case may be) on the Admission Portal of the University.

4.1.3 Applications received in one category shall not be transferred to another category.

4.1.4 All such candidates whose name appeared in merit list and are called for admission should submit the following documents:

i. **Original Documents (to be retained by the University)**
   a) Domicile of Sindh Province
   b) Affidavit of non-political activities Original
   c) H.S.C. / DAE Marks Sheet or Equivalent Marks Sheet
   d) Equivalence Certificate from IBCC for foreign examinations and Grade Sheets, if applicable
   e) Hafiz-e-Quran Certificate, if applicable
   f) Migration Certificate in case of having passed H.S.C. examination from a Board other than Karachi Board

ii. **Other Documents (Two Attested Photocopies)**
   a) All the documents mentioned in para 4.1.4(i)
   b) S.S.C. or Equivalent or DAE Examination Mark sheet and Certificate
   c) Admit Card of Pre-Admission Entry Test
In addition, Passport Size Photographs (08 Nos.).

Original documents retained by the University will be returned after the completion or termination of the studies at this University.

Applicants are advised that they should retain sufficient number of attested photocopies of their documents/ certificates as the originals are not likely to be returned during their period of study at the University.

4.1.5 Candidates for admission under following categories are required to submit documents as mentioned below in addition to those mentioned in Para 4.1.4:-

a) R-6 i.e., Resident of Rural Areas of Karachi, should submit original School Leaving Certificate.

b) SF-9(a) i.e., Real Sons / Daughters of Professional Engineers of Sindh, should submit copy of Engineering Degree of the parent and proof of valid registration with Pakistan Engineering Council (PEC).

c) SF-9(b) i.e., Real Sons / Daughters of Professional Architects & Planners, should submit copy of Architecture & Planners Degree of the parent and proof of valid registration with Pakistan Council of Architects and Town Planners (PCATP).

d) R-9 i.e., Outstanding Sportsmen, should submit sports testimonials as mentioned in Para R-9 (iv) in Chapter 5.

e) Candidates having passed qualifying examination from Foreign Boards must submit relevant document(s) to establish their date of birth.

4.1.6 Application form, all fee and documents attached with the application form shall not be returnable as per Para 8.6.

4.1.7 Incomplete applications shall not be considered.

4.1.8 The complete online application along with proof of payment of processing fee must reach to the Admission Office of the University on the date notified for the submission of Admission Form by the University in the Press and Website. Any application received after this date or found deficient in any respect will be summarily rejected. Any certificate or matter in addition to the specified requirement shall be treated as irrelevant and discarded.

4.1.9 Candidates are directed to write their names, Father Name & Date of Birth in Online Admission Application as mentioned on their SSC/Equivalent Certificate.

4.2 ELIGIBILITY CONDITIONS

4.2.1 Applicant should be domiciled in Sindh Province, except for reserved categories.

4.2.2 He/She must have passed either Higher School Examination (HSC) from any authorised Board of Education in Pakistan OR an Equivalent Foreign Examination recognized as such by the University OR have appeared in any such examination and waiting for final results. In this case A-level candidates will be required to submit the A Level Grade Sheet along with IBCC Equivalency Certificate latest by Mid-January 2023. All Candidates should fulfill the following conditions (after announcement of respective results):

a) The year of passing the examination held should not be earlier than the three years immediately prior to submission of application.

b) i) Each applicant should have obtained at least 60% marks in aggregate.
   ii) Candidates having obtained at least 55% marks in aggregate are eligible to apply for admission in all BS programmes except in BS(CS).

c) i) For admission in any undergraduate Programme, subjects examined at the HSC level must include Pre- Engineering subjects of Mathematics, Physics and Chemistry.

   ii) Any applicant who has passed HSC or Equivalent Examination with subjects of Mathematics, Physics, and Computer Science shall however be considered for admission only in BE Electronics, Telecommunication, Computer Systems, Software Engineering programmes, BS in Computer Science, Management Sciences, Development Studies, English Linguistics and Computational Finance, Economics & Finance, and Bachelor of Architecture.

   iii) Any applicant who has passed their HSC or Equivalent Examination with Mathematics, Statistics and Computer Science will be considered for admission only in BS Management Sciences, English Linguistics, Development Studies, Computational Finance and Economics & Finance.

   iv) Any applicant who has passed HSC Commerce or Equivalent Examination shall be considered for admission in BS Management Sciences, English Linguistics, Development Studies, and Economics & Finance only.

   v) Any applicant who has passed HSC Arts or Equivalent Examination shall be considered for admission in BS English Linguistics, Development Studies, Economics & Finance and Management Sciences only.

   v) Any applicant who has passed HSC or Equivalent Examination with Pre-Medical subjects of Physics, Chemistry and Biology shall however be considered for admission only against allocated seats in Biomedical Engineering, and all BS Programmes except Computational Finance.

N.B: Admission to such candidates [as mentioned in Para 4.2.2.c(ii), (iii) (iv) & (v)] shall only be offered in above disciplines subject to availability of seats in these disciplines. Such candidates, if admitted, shall however, not to be considered for Change of Discipline after First Year.

   vi) Any applicant who has passed DAE in relevant discipline from SBTE shall be considered for admission against allocated seats as prescribed by PEC.

N.B: i) An applicant who has passed HSC Part I from one Board of Examinations and HSC Part II from any other Board of Examinations shall not be considered for admission.
   ii) No students, already enrolled in this university can be considered for the admission again until the current enrolm-ent is cancelled.

4.2.3 An applicant should have either passed Pre-admission Entry Test of this University with at least 50% marks OR have scored at least 800 in SAT-I and also secured at least 1500 in SAT-II with subjects of Physics / Statistics, Chemistry / Computer Science and Mathematics / Biology. **(Applicants with Commerce / Arts background will have SAT scores in the relevant subjects as notified by the University separately).**

N.B: All these tests have validity of one year. Hence, the current year result will only be considered.

4.2.4 Any such nominee applying under category R-11(a) or R-11(b) or R-12(a) or R-12(b) or R-12(c) or R-12(d) or R-12(e) or R-13(a) or R-13(b) or 13(c) or 13(d) may produce documentary evidence of having passed Pre-Admission Entry Test conducted by any university / authority acceptable as such by this University.

4.3 EQUIVALENCE OF FOREIGN EXAMINATIONS

4.3.1 An applicant who has passed A-Level or any two-year Pre-University Examination at 11th and 12th grades or 12th and 13th / OAC Grades (or similar Examinations) with subjects of Physics/Statistics, Chemistry/Computer Science and Mathematics/Biology or Commerce & Arts must submit an Equivalence Certificate (obtained from Inter-Board Committee of Chairmen) along with his/her Application

Form for admission. All such candidates will be dealt for admission as per clause 4.2.2.

4.3.2 All such applicants having passed / appeared in any foreign examination as mentioned in 4.3.1 must also submit an Equivalence Certificate (obtained from Inter-Board Committee of Chairmen) of their earlier qualification i.e. O-level / 10th Grade along with his/her Application Form for admission.

4.4 DETERMINATION OF MERIT POSITION

4.4.1 (a)(i) The overall merit in respect of candidates for admission shall be determined according to the following criteria:

Merit Score = 50% (HSC Part I/ O-level Marks/ Equivalent)*

+ 50 % weightage to Entry Test

   * *For candidates already completed HSC/A-level/Equivalent examinations will be dealt as per policy*

(ii) Candidates having appeared in any Equivalent Examination / Foreign Examination including A-Level and 12th Grade shall have their O-level / 10th Grade equivalent marks (As mentioned in respective IBCC Equivalency Certificate) to be considered with 50% weightage in place of HSC-I.

(iii) Candidates having passed their HSC/Equivalent Examination during earlier years will have 50% weightage to their complete result of HSC / Equivalent Examination.

(iv) Entry Test Marks indicate marks obtained in University Pre-Admission Entry Test or equivalent marks as obtained in any other tests as recognized by NED University under Para 4.2.3.

4.4.1 (b) The admission offered based upon above merit shall remain provisional till the submission and subsequent verification (from relevant authorities) of final HSC or Equivalent Mark Sheet or IBCC Equivalency Certificate (for foreign exams only) with minimum 60 % marks obtained (55% marks for certain disciplines). In any case the final Mark Sheet for HSC must be submitted before 30th November, 2022 as otherwise the admission will be liable to be cancelled.

4.4.2 For applicants who have passed their qualifying examination in 2019, 2020 or in 2021 their merit positions for the purpose of admission shall be determined after deduction of 0.91% marks from the total obtained in their respective qualifying examinations. The same deduction shall apply in case of improvement. **(Including applicants who have taken improvement examination in the same calendar year as that of the HSC / Qualifying Examinations)**.

4.4.3 In case of tie for merit position in the selection for admission, the tie shall be resolved by the following criteria:

a) Aggregate marks obtained in NED University Pre-Admission Entry Test shall be the criterion for resolving the merit.

b) Any further tie shall be resolved by considering the following criteria:

   i) For applicants with Pre-Engineering / Pre-Medical/Computer Science: marks obtained in sections of Mathematics (or Biology as the case may be), then Physics/Statistics and then Chemistry/ Computer Science of NED University Pre-Admission Entry Test.

   ii) For applicants with Commerce: marks obtained in sections of Accounting, then Economics and then Business Mathematics of NED University Pre-Admission Entry Test

   iii) For applicants with Arts: marks obtained in sections of English (Combination of Vocabulary & Grammar and Reading Comprehension) and then General Knowledge and then Mathematics (General) of NED University Pre-Admission Entry Test.

4.5 MARKS FOR HAFIZ-E-QUR'AN

Any applicant who is Hafiz-e-Quran and has pass NED entry test shall have 1.82% of marks added to the HSC / equivalent marks obtained by the candidate. He/She shall have to provide the original Sanad of Hafiz-e-Quran from Wafaq-ul-Madaris and be prepared to appear and qualify in a test as notified by the University.

4.6 REJECTION OF APPLICATION

4.6.1 The Vice Chancellor of the University will be the competent authority to reject any application and to cancel admission without assigning any reason.

4.6.2 The application shall be rejected summarily in case the applicant is found guilty of any suppression or misrepresentation of material facts at any stage. The Vice Chancellor can further debar him from seeking admission in the University and its affiliated colleges.

4.7 DISPLAY OF MERIT LIST

The Merit list for each category under Regular and Self Finance schemes will be notified and displayed on the University Website.

CHAPTER **5**

Admission Category

5.1 REGULAR SCHEME.

5.1(i)   Distribution of Seats

Category	CE	CE (UE)	PE	CE (CN)	ME	TE	IM	AU	EE	TC	CS	EL	CH	MY	MM	PP	FD	BM	SE	CT	AP	IC	CF	DS	TS	MG	B. Arch	EG	EC	TCT	TCE	CT (AI)	CT (DS)	CT (CY)	Total
R-1(a)	HSC (Pre-Engineering/Computer Science) from Board of Intermediate Education, Karachi.																																		
	103	42	26	25	132	47	72	34	124	54	88	92	42	32	37	37	22	36	55	40	46	47	49	3	48	36	18	6	42	2	2	19	18	19	1495
R-1(b)	HSC (Pre-Medical) from Board of Intermediate Education, Karachi.																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	1	3	3	0	2	3	3	3	3	3	0	0	1	1	1	37
R-1(c)	HSC (Commerce) from Board of Intermediate Education, Karachi.																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	2	9	0	0	0	0	0	0	0	0	0	0	16
R-1(d)	HSC (Arts) from Board of Intermediate Education, Karachi.																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	2	2	0	0	0	0	0	0	7
R-1(e)	DAE from Sindh Board of Technical Edcuation (SBTE)																																		
	0	1	1	0	1	0	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	10
R-1(f)	Differently-abled Person																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
R-2(a)	HSC (Pre-Engineering/Computer Science) from Board of Intermediate Education, Hyderabad																																		
	2	1	1	1	1	1	1	0	2	1	1	1	1	1	1	0	0	0	2	1	1	1	2	0	1	1	1	0	2	3	3	1	1	0	36
R-2(b)	HSC (Pre-Engineering) from Board of Intermediate Education, Mirpurkhas																																		
	2	1	0	1	2	0	1	0	2	1	1	0	1	1	1	0	0	0	1	1	1	2	1	0	2	2	1	0	3	10	6	0	0	0	44
R-2(c)	HSC (Pre-Engineering) from Board of Intermediate Education, Sukkur																																		
	2	0	0	1	1	0	1	0	2	1	1	1	1	1	0	0	0	0	1	1	1	1	1	2	1	2	1	0	1	3	3	0	0	0	30
R-2(d)	HSC (Pre-Engineering) from Board of Intermediate Education, Larkana																																		
	2	1	0	1	1	0	1	0	1	1	1	1	1	1	0	0	0	0	1	1	1	2	2	1	1	1	1	0	1	3	3	0	0	0	30
R-2(e)	HSC (Pre-Engineering/Computer Science/Commerce/Arts) from Board of Intermediate Education, Nawabshah																																		
	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	1	0	1	1	1	0	0	1	3	3	0	0	0	17
R-3(a)	HSC (Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts) from Federal Board of Education, Islamabad																																		
	4	2	1	0	3	1	1	0	3	1	3	3	2	2	0	0	1	0	2	5	2	2	2	1	2	1	2	1	3	1	0	1	1	1	54
R-3(b)	HSC (Pre-Engineering/Computer Science) from Aga Khan Board																																		
	2	2	0	0	5	1	3	1	3	2	1	2	2	1	0	2	2	0	2	6	2	1	1	1	2	2	1	1	2	2	1	3	3	3	62
R-3(c)	HSC (Commerce/Arts) from Aga Khan Board																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	1	1	0	0	5
R-3(d)	HSC (Pre-Medical) from Aga Khan Board																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	1	1	1	0	0	0	1	1	0	8
R-3(e)	HSC (Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts) from Ziauddin Board																																		
	1	1	1	0	1	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	2	2	0	1	1	23

Category	CE	CE (UE)	PE	CE (CN)	ME	TE	IM	AU	EE	TC	CS	EL	CH	MY	MM	PP	FD	BM	SE	CT	AP	IC	CF	DS	TS	MG	B. Arch	EG	EC	TCT	TCE	CT (AI)	CT (DS)	CT (CY)	Total
R-4(a)	A-Level (Pre-Engineering/Computer Science) Institutions located in Pakistan																																		
	2	3	3	2	8	4	5	1	8	3	6	4	4	1	2	3	3	3	11	6	6	5	6	4	5	2	3	1	2	1	0	3	3	3	126
R-4(c)	12th Grade & Equivalent (Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts)																																		
	1	1	0	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	1	0	0	1	0	1	0	1	0	0	0	0	1	20
R-4(d)	A-Level (Pre-Medical)																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	1	1	1	0	0	0	1	1	1	11
R-4(e)	A-Level (Commerce) Institutions located in Pakistan																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	4
R-4(f)	A-Levels (Arts) Institutions located in Pakistan																																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
R-5	HSC(Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts) from Board other than Karachi, Aga Khan Hyderabad, Mirpurkhas, Sukkur, Larakana, Federal & Foreign Exam																																		
	1	1	1	0	1	1	0	0	1	0	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	12
R-6	Rural Areas of City Division Karachi HSC(Pre-Engineering) from Board of Intermediate Education, Karachi																																		
	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	6
R-7(a)	Real Son/Daughter of University Teachers																																		
	1	1	1	0	2	1	2	0	2	1	2	1	1	1	1	1	1	2	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	35
R-7(b)	Real Son/Daughter of University Non-Teaching Staff																																		
	1	1	1	0	2	1	2	0	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	34
R-9	Outstanding Sportsmen																																		
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
R-10(a)	Nominees of Dinshaw Family																																		
	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
R-10(b)	Nominees of LEJ Foundation																																		
	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
R-11(a)	Nominees of UET Lahore/Taxila																																		
	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
R-11(b)	Nominees of UET Peshawar																																		
	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
R-12(a)	Nominees of Government of Balochistan																																		
	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
R-12(b)	Nominees of FATA																																		
	4	0	0	0	2	0	0	0	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2	0	0	1	0	0	0	18
R-12(c)	Nominees of Government of Kashmir																																		
	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4

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Category	CE	CE (UE)	PE	CE (CN)	ME	TE	IM	AU	EE	TC	CS	EL	CH	MY	MM	PP	FD	BM	SE	CT	AP	IC	CF	DS	TS	MG	B. Arch	EG	EC	TCT	TCE	CT (AI)	CT (DS)	CT (CY)	Total
R-12(d) Nominees of Government of Gilgit Baltistan	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	3	0	0	0	0	10
R-12(e) Nominees of Ministry of Education Govt. of Pakistan	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
R-12(f) Nominees of Indian Occupied Kashmir (IOK)	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
R-13(a) Nominees of G.H.Q (Army)	2	0	0	0	2	1	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
R-13(b) Nominees of N.H.Q (Navy)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
R-13(c) Nominees of P.A.F (Air Force)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
R-13(d) Nominees of Sindh Rangers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
R-13(e) Nominees of Airport Security Forces (ASF)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0	0	4
R-14 Foreign Candidates Economic Affairs Division (Ministry of Finance), Islamabad	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	5
TOTAL	144	59	36	31	173	60	91	36	164	68	113	112	59	45	47	45	33	62	83	67	69	70	70	25	70	70	37	25	80	39	30	32	32	32	2209

Key for abbreviations:

CE	Civil Engineering	CH	Chemical Engineering	AP	Applied Physics
CE(UE)	Civil Engineering (Specialization in Urban)	MY	Metallurgical Engineering	EG	English Linguistics
PE	Petroleum Engineering	PP	Polymer & Petrochemical Engineering	EC	Economics & Finance
CE(CN)	Civil Engineering (Specialization in Construction)	SE	Software Engineering	TCT	Computer Science at TIEST
ME	Mechanical Engineering	BM	Biomedical Engineering	TCE	Civil Engineering at TIEST
TE	Textile Engineering	FD	Food Engineering	CT (AI)	Computer Science (Specialization in Artificial Intelligence)
IM	Industrial & Manufacturing Engineering	CT	Computer Science		
AU	Automotive Engineering	B. Arch	Architecture	CT (DS)	Computer Science (Specialization in Data Science)
EE	Electrical Engineering	TS	Textile Sciences		
CS	Computer Systems Engineering	DS	Development Studies	CT (CY)	Computer Science (Specialization in Cyber Security)
EL	Electronic Engineering	MG	Management Sciences		
TC	Telecommunications Engineering	CF	Computational Finance		
MM	Materials Engineering	IC	Industrial Chemistry		

NB:
   I) Applicants for admission in Biomedical Engineering should have interest in Natural and Basic Sciences as they will be studying Biology, Physiology, Anatomy and Biochemistry.

   ii) Applicants for admission in Architecture Programme should have skill and interest in free hand sketching drawing and communication.

5.1(ii) Description of Categories

R-1(a) Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examinations from Board of Intermediate Education, Karachi.

R-1(b) Candidates having passed H.S.C.(Pre-Medical) Part I & II Examinations from Board of Intermediate Education, Karachi.

R-1(c) Candidates having passed H.S.C.(Commerce) Part I & II Examinations from Board of Intermediate Education, Karachi.

R-1(d) Candidates having passed H.S.C.(Arts) Part I & II Examinations from Board of Intermediate Education, Karachi.

R-1(e) Candidates having passed DAE from Sindh Board of Technical Education (SBTE).

R-1(f) Candidates having disability (excluding the disability of deafness, dumbness, and blindness) and passed HSC (Pre-Engineering/Pre-Medical/Computer Science) Part I and II from any Board of Intermediate of Education situated in province of Sindh and having certificate of disability from Department of Empowerment of Persons with Disabilities (DEPD), Government of Sindh. Such candidates may be required to appear before medical board.

R-2(a) Candidates having passed HSC (Pre-Engineering/Pre-Medical/ Computer Science/Commerce/Arts) Part I & II Examinations from Board of Intermediate & Secondary Education, Hyderabad.

R-2(b) Candidates having passed HSC (Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts) Part I & II Examinations from Board of Intermediate & Secondary Education, Mirpurkhas.

R-2(c) Candidates having passed HSC (Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts) Part I & II Examinations from Board of Intermediate & Secondary Education, Sukkur.

R-2(d) Candidates having passed HSC (Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts) Part I & II Examinations from Board of Intermediate & Secondary Education, Larkana.

R-2(e) Candidates having passed HSC (Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts) Part I & II Examinations from Board of Intermediate & Secondary Education, Nawabshah.

R-3(a) Candidates having passed HSC (Pre-Engineering/ Pre-Medical/Computer Science/Commerce/Arts) Part I & II Examinations from Federal Board of Intermediate & Secondary Education, Islamabad.

R-3(b) Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examinations from Aga Khan Board.

R-3(c) Candidates having passed H.S.C.(Commerce) Part I & II Examinations from Aga Khan Board.

R-3(d) Candidates having passed H.S.C.(Pre-Medical) Part I & II Examinations from Aga Khan Board.

R-3(e) Candidates having passed H.S.C. (Pre-Engineering/ Pre-Medical / Computer Science / Commerce/ Arts) Part I & II Examinations from Ziauddin University Education Board.

R-4(a) Candidates having passed Foreign Examination (A-Level, Cambridge/London/Oxford) equivalent to H.S.C. (Pre-Engineering/Computer Science) Examination.

R-4(c) Candidates having passed Foreign Examination (12th Grade or Others) equivalent to H.S.C. (Pre-Engineering/ Pre-Medical / Computer Science / Commerce/ Arts) Examination.

R-4(d) Candidates having passed foreign Examination (A Level, Cambridge/London/Oxford) equivalent to H.S.C. (Pre-Medical) Examination.

R-4(e) Candidates having passed Foreign Examination (A Level, Cambridge/ London/Oxford) equivalent to H.S.C. (Commerce) Examinations from Educational Institution located in Pakistan.

R-4(f) Candidates having passed Foreign Examination (A Level, Cambridge/ London/Oxford) equivalent to H.S.C. (Arts) Examinations from Educational Institution located in Pakistan.

N.B: **The seats between sub-categories R-4(a) to R-4(f) are inter-transferable, whenever considered necessary by the University.**

R-5 Candidates having passed HSC (Pre-Engineering/Pre-Medical /Computer Science/Commerce/Arts) Part I & II Examinations from any Board other than Karachi, Aga Khan, Ziauddin, Hyderabad, Mirpurkhas, Sukkur, Larkana, Nawabshah, Federal Board and Foreign Examinations.

R-6 Candidates who are residents Rural Area of the Karachi and have passed HSC (Pre-Engineering/ Computer Science/Commerce) Part-I & Part-II Examination from the Board of Intermediate Education, Karachi and have passed Pre-Admission Entry Test of this University with at least 50% marks or any other such test as described in Para 4.2.3. Candidates having passed Matriculation / SSC from any school located in any Rural Area of the Karachi shall be given the preference.

R-7(a) Candidates – Real Sons/Real Daughters of the NED University Teachers are eligible for admission provided that:

i) The candidate has passed HSC/Equivalent Examination (Pre-Engineering / Pre-Medical / Computer Science / Commerce/Arts) and have passed Pre-Admission Entry Test of this University with at least 50% marks or any other such test as described in Para 4.2.3.

ii) His/her real father/mother is serving in the University and has put in a minimum of three years continuous regular service in the University; or has retired from the service of the University after satisfactory completion of a minimum qualifying service or has expired after completion of minimum of three years continuous service in this University.

R-7(b) Candidates- Real Sons / Real Daughters of the NED University employees other than teachers are eligible for admission provided that:

i) The candidate has passed HSC/Equivalent Examination (Pre-Engineering / Pre-Medical / Computer Science / Commerce/ Arts) and have passed Pre-Admission Entry Test of this University with at least 50% marks or any other such test as described in Para 4.2.3.

ii) His/her real father/mother is serving in the University and has put in minimum of three years continuous regular service in the University; has retired from the service of the University after satisfactory completion of minimum qualifying service or has expired after completion of minimum of three years continuous regular service in this University.

N.B: **The seats between the sub-categories R-7(a) and R-7(b) are inter-transferable, whenever considered necessary by the University.**

R-9 The candidates who are outstanding Sportsmen are eligible for admission under this category provided that:

(i) They are domiciled in Sindh province and have passed HSC/Equivalent Examination (Pre-Engineering). Such candidates must fulfill the criteria given in para 4.2.2.

(ii) They have passed Pre-Admission Entry Test of this University with at least 50% marks or any other such test as described in Para 4.2.3.

N.B. **The following are the approved sports and games for admission under this category:**

Sports: athletics, boxing, swimming, and rowing.
Games: basketball, cricket, hockey, football, volleyball, badminton, tennis, table tennis and squash.

(iii) Subject to the conditions that the candidate has represented any sports Organizations/ Institutions/ Universities/ Board or Colleges of Sindh Province for the last three years to be calculated from the last date of submission of application form, the order of priority for selection under sports category shall be as follows:

Priority Order:
1. Member of National Team
2. National Champion (Individual/Team)
3. Member of National Junior Team
4. Member of Pakistan Universities Team/ Pakistan Boards Team
5. National Junior Champion (Individual/Team)
6. Inter University/Inter Board Champion (Individual/Team)
7. National Youth Champion (Individual/Team)
8. Member of Sindh Provincial Team
9. Sindh Champion (Individual/Team)

(iv) The criteria for selection for admission under this category shall be:

a. Amongst candidates who qualify, not more than two sportsmen shall be selected for any individual sport/game. The merit list will be prepared considering the highest order of achievement in sports.

b. Based on the order of achievements if there is a tie between two or more candidates, their lower order achievements will be considered, and they will be subsequently rated in the light of the order of priority list. In case of further tie a candidate with achievement in individual event will get preference over a candidate with achievement in team event. If still the tie is not resolved the older candidate will get the preference over the younger candidate.

c. The information about event, name of team and distinction achieved by the team as well as by the candidate shall be supplied on the application form along with attested copies of other certificates issued by appropriate authorities listed in Para 9(iv-f). The achievement certificates must be in printed form.

d. The membership certificate of each sport team should contain the name of the player, sport, team represented and the year of representation.

e. The Championship certificate of one sports team should contain the name of player, sport, team represented, name of event/category/class in which player secured championship, year of championship and position.

N.B: **For priority order Nos. 1 & 4, only senior teams will be considered. Any team without mentioning age group, will be considered as senior team. Normally teams with age groups are as under:**
   • Senior Team (without age limit)
   • Junior Team (under 20 years age)
   • Youth Team (under 16 years age)

f. For the purpose of selection of the candidates under sports category, only those achievements should be considered, the events of which have taken place before the last date of submission of application form for admission. Attested copies of all certificates are to be enclosed with the application form. Original certificates must be shown at the time of interview for selection. At the time of interview only those original certificates will be accepted for consideration whose photocopies have already been provided with the application form. The Sports Certificates must be furnished by the sports authorities mentioned below:

   • For priority order Nos. 1, 2, 3 & 5 Secretary of concerned Sports Federation.

- For priority order No. 4 & 6 Director Sports Higher Education Commission/ Secretary Inter Boards Tournament Committee as the case may be.

- For priority order No.7 Director General Pakistan Sports Board and Coordinator/ Director Sindh Sports Board.

- For priority order No. 8 & 9 Secretary concerned provincial Sports Association.

- For membership of Pakistan Board Team, Secretary of Inter Boards Tournaments Committee.

- For Inter-University Championship, Secretary of Pakistan University Sports Board.

- For Inter-Board Championship, Secretary of Inter-Board Tournament Committee

g. Selection of applicants will be made by Sports Admission Committee constituted by the Vice-Chancellor. The merit documents of applicants will be verified by the nominees of the Committee from the authorities and/or sources which Committee considers appropriate.

h. Applicants admitted under this category i.e. Outstanding Sportsmen will be required to produce an affidavit to the effect that they will represent the University in their respective games/sports whenever called upon to do so and that they would not play as professional or represent any other public/private institute on part time/full time basis. The required affidavit will be produced on stamp paper of Rs.100/- duly signed by the Notary Public.

Reserved Categories for Nominees

Each nominee under the reserved categories of any nominating agency / body must have passed HSC / Equivalent Foreign Examination as recognized by this University and also eligible as per Clause 4.2.2.

R-10(a) Nominees who belong to Parsi/ Minority Communities and whose names are recommended by Dinshaw Family.

R-10(b) Nominees who are recommended by Latif Ebrahim Jamal (LEJ Foundation).

R-11(a) Nominees of UET Lahore/Taxila under reciprocal basis through Education Department, Govt. of Punjab.

R-11(b) Nominees of UET Peshawar under reciprocal basis through Education Department, Govt. of Khybar Pakhtoonkhwa.

R-12(a) Nominees from Baluchistan whose names are forwarded by Education Department, Government of Baluchistan

R-12(b) Nominees from Former FATA Region whose names are forwarded by Home & Tribal Affairs Department.

R-12(c) Nominees from Azad Kashmir whose names are forwarded by Nomination Board, Azad Jammu and Kashmir.

R-12(d) Nominees from Gilgit Baltistan whose names are forwarded by Kashmir Affairs and Northern Affairs Division, Government of Pakistan.

R-12(e) Nominees from Federal Capital Area whose names are forwarded by Cabinet Division, Government of Pakistan, Islamabad.

R-12(f) Nominees who are Indian Occupied Kashmir (IOK) whose names are forwarded by Ministry of Finance, Revenue, Economic Affairs Division.

R-13(a) Nominees who are children of Army Personnel and whose names are forwarded by Welfare Rehabilitation Directorate, GHQ, Rawalpindi.

R-13(b) Nominees who are children of Navy Personnel and whose names are forwarded by the Director Personal Services, Naval Headquarters.

R-13(c) Nominees who are children of Air Force Personnel and whose names are forwarded by the Directorate of Education, Air Headquarters.

R-13(d) Nominees who are children of Rangers Personnel and whose names are forwarded by the Director General, Pakistan Rangers (Sindh).

R-13(e) Nominees who are children of Airport Security Force (ASF) and whose names are forwarded by the Directorate of Education, ASF.

R-14 Nominees who are foreign nationals and whose names are forwarded by the Economic Affairs Division Government of Pakistan, Islamabad.

5.1(iii) Transfer of Seats

(a) If the number of candidates in Arts, Commerce and Pre- Medical groups selected for admission under categories from R-1 to R-4 falls short of the allocated number of seats, after admission and waiting lists have been considered, the balance number of seats in each of these categories will be transferred to respective categories reserved for pre- engineering group. Any further balance seats from categories R-1 to R-4 as well as all balance seats in other categories R-5 to R-14 will be transferred to R-1(a).

(b) Any seat remaining vacant from any category at Thar Institute of Engineering, Sciences and Technology (TIEST) will be transferred to Mirpurkhas Board. Any further vacant seat will be inter-transferable with other categories wherever considered necessary by the University administration.

5.2 SELF FINANCE SCHEME.

5.1(i) Distribution of Seats

Category	CE	CE (UE)	PE	CE (CN)	ME	TE	IM	AU	EE	TC	CS	EL	CH	MY	MM	PP	FD	BM	SE	CT	AP	IC	CF	DS	TS	MG	B. Arch	EG	EC	TCT	TCE	CT (AI)	CT (DS)	CT (CY)	Total
SF-1(a)	**HSC (Pre-Engineering/Computer Science) from Board of Intermediate Education, Karachi.**																																		195
	4	6	0	2	25	1	15	2	31	5	25	22	5	2	1	2	2	2	12	15	0	0	0	0	0	0	2	0	0	1	1	4	4	4	
SF-1(b)	**HSC (Pre-Medical) from Board of Intermediate Education, Karachi.**																																		14
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SF-2(a)	**HSC (Pre-Engineering) from Board of Intermediate Education, Hyderabad**																																		18
	5	0	0	0	1	1	1	0	2	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	1	0	1	
SF-2(b)	**HSC (Pre-Engineering) from Board of Intermediate Education, Mirpurkhas**																																		16
	4	0	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	2	0	1	1	
SF-2(c)	**HSC (Pre-Engineering) from Board of Intermediate Education, Sukkur**																																		14
	4	0	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	
SF-2(d)	**HSC (Pre-Engineering) from Board of Intermediate Education, Larkana**																																		14
	4	0	0	0	1	1	0	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	
SF-2(e)	**HSC (Pre-Engineering/Computer Science/Commerce/Arts) from Board of Intermediate Education, Nawabshah**																																		9
	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	
SF-3(a)	**HSC (Pre-Engineering) from Federal Board of Education, Islamabad from an institute located in Pakistan**																																		20
	1	0	0	0	2	0	1	0	1	0	1	2	0	1	0	0	1	0	0	4	0	0	0	0	0	0	1	0	0	1	1	1	1	1	
SF-3 (b)	**HSC (Pre-Engineering) from Aga Khan Board**																																		19
	1	0	0	0	2	0	1	0	2	0	1	0	1	1	0	0	1	0	0	3	0	0	0	0	0	0	1	0	0	1	1	1	1	1	
SF-3(e)	**HSC (Pre-Engineering/Pre-Medical/Computer Science/Commerce/Arts) from Ziauddin Board**																																		5
	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
SF-4(a)	**A-Level (Pre-Engineering) Institutions located in Pakistan**																																		71
	2	3	2	2	8	2	4	0	7	2	2	4	2	1	2	3	3	2	1	8	0	0	0	0	0	0	4	0	0	1	0	2	2	2	
SF-4(b)	**12th Grade & other Institutions located in Pakistan**																																		8
	1	0	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	
SF-5	**HSC(Pre-Engineering) from Board other than Karachi, Aga Khan Hyderabad, Mirpurkhas, Sukkur, Larakana, Federal & Foreign Exam**																																		3
	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
SF-6(a)	**A-Level (Pre-Engineering) Institutions located Overseas**																																		7
	1	0	0	0	1	1	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SF-6(b)	**12th Grade Institutions located outside Pakistan**																																		3
	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SF-6(c)	**HSC (Pre-Engineering) from Federal Board Islamabad located outside Pakistan**																																		9
	1	0	1	0	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Category	CE	CE (UE)	PE	CE (CN)	ME	TE	IM	AU	EE	TC	CS	EL	CH	MY	MM	PP	FD	BM	SE	CT	AP	IC	CF	DS	TS	MG	B. Arch	EG	EC	TCT	TCE	CT (AI)	CT (DS)	CT (CY)	Total
SF-7(a)	Foreign Candidates whose names are forwarded by Higher Education Commission, Pakistan																																		9
	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
SF-7(b)	Afghan Candidates whose names are forwarded by Higher Education Commission																																		6
	3	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
SF-8	Real Sons and daughters of NEDAN Life Members																																		13
	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	13
SF-9(a)	Son/Daughter of Professional Engineers																																		4
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
SF-9(b)	Son/Daughter of Professional Architectures & Town Planners																																		2
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
SF-9(c)	Real Sons and daughters of Expatriate Pakistanis																																		11
	1	0	0	0	1	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	11
SF-10(a)	Nominees of Dinshaw Family																																		4
	1	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
SF-10(b)	Nominees of S. S. International																																		2
	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
SF-11	Sponsors Seats																																		155
	40	0	0	0	40	0	0	0	40	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	155
TOTAL	85	10	4	4	88	10	29	4	97	12	39	39	31	5	3	5	7	19	19	33	0	0	0	0	0	0	13	0	0	11	10	18	18	18	631

Key for abbreviations:

CE	Civil Engineering	CH	Chemical Engineering	AP	Applied Physics
CE(UE)	Civil Engineering (Specialization in Urban)	MY	Metallurgical Engineering	EG	English Linguistics
PE	Petroleum Engineering	PP	Polymer & Petrochemical Engineering	EC	Economics & Finance
CE(CN)	Civil Engineering (Specialization in Construction)	SE	Software Engineering	TCT	Computer Science at TIEST
ME	Mechanical Engineering	BM	Biomedical Engineering	TCE	Civil Engineering at TIEST
TE	Textile Engineering	FD	Food Engineering	CT (AI)	Computer Science (Specialization in Artificial Intelligence)
IM	Industrial & Manufacturing Engineering	CT	Computer Science		
AU	Automotive Engineering	B. Arch	Architecture	CT (DS)	Computer Science (Specialization in Data Science)
EE	Electrical Engineering	TS	Textile Sciences		
CS	Computer Systems Engineering	DS	Development Studies	CT (CY)	Computer Science (Specialization in Cyber Security)
EL	Electronic Engineering	MG	Management Sciences		
TC	Telecommunications Engineering	CF	Computational Finance		
MM	Materials Engineering	IC	Industrial Chemistry		

NB:

i) Applicants for admission in Biomedical Engineering should have interest in Natural and Basic Sciences as they will be studying Biology, Physiology, Anatomy and Biochemistry.

ii) Applicants for admission in Architecture Programme should have skill and interest in free hand sketching drawing and communication.

5.2(ii)   Description of Categories

SF-1(a)   Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examinations and improvement, if any, from Board of Intermediate Education, Karachi.

SF-1(b)   Candidates having passed H.S.C. (Pre-Medical) Part I & II Examinations and improvement, if any, from Board of Intermediate Education, Karachi,

SF-2(a)   Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examination and improvement, if any, from Board of Intermediate & Secondary Education, Hyderabad.

SF-2(b)   Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examination and improvement, if any, from Board of Intermediate & Secondary Education, Mirpurkhas.

SF-2(c)   Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examination and improvement, if any, from Board of Intermediate & Secondary Education, Sukkur.

SF-2(d)   Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examination and improvement, if any, from Board of Intermediate & Secondary Education, Larkana.

SF-2(e)   Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examination and improvement, if any, from Board of Intermediate & Secondary Education, Nawabshah.

SF-3(a)   Candidates having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examination and improvement, if any, from Federal Board of Intermediate & Secondary Education, Islamabad.

SF-3(b)   Candidate having passed H.S.C. (Pre-Engineering/ Computer Science) Part I & II Examinations and improvement if any, from Aga Khan Board Karachi.

SF-3(e)   Candidates having passed H.S.C. (Pre-Engineering / Computer Science) Part I & II Examinations from Ziauddin University Education Board.

SF-4(a)   Candidates having passed Foreign Examination (A Level, Cambridge/ London/Oxford) equivalent to H.S.C. (Pre-Engineering/Computer Science) part I & II Examinations. Located in Pakistan.

SF-4(b)   Candidates having passed Foreign Examination (12th Grade or Others) equivalent to H.S.C. (Pre-Engineering/ Computer Science) part I & II Examination. Located in Pakistan.

SF-5   Candidates having passed HSC (Pre-Engineering/ Computer Science) Part I & II Examinations from any Board other than Karachi, Aga Khan, Ziauddin, Hyderabad, Mirpurkhas, Sukkur, Larkana, Nawabshah Federal Board and Foreign Examinations.

N.B: **Rs.775,000/- (Rupees Seven Hundred Seventy-Five Thousand only) + 5% Tax* shall be required to be deposited in designated branch of the banks as Self Finance Fee for admission in all disciplines under above categories (SF-1 to SF-5).**

   * *Advance Tax on Payment of Fee for Educational Institutions [Section 236(i)]*
   As per newly inserted Section 236(i) of Finance Act every Educational Institution is required to collect advance income tax at the rate of 5% on the amount of fee paid to an educational institution. The person responsible for preparing monthly, bimonthly or quarterly fee voucher or challan shall also charge withholding tax in case the fee exceeds Two Hundred Thousand Rupees annually.

SF-6(a)   Candidates having passed Foreign Examination (A Level, Cambridge/London/Oxford) equivalent to H.S.C. (Pre-Engineering/Computer Science), located Overseas.

SF-6(b)   Candidates having passed Foreign Examination (12th Grade or Others) equivalent to H.S.C. Pre-Engineering/ Computer Science), located outside Pakistan.

SF-6(c)   Candidates having passed HSC (Pre-Engineering/ Computer Science) Part I & II Examination from Federal Board of Intermediate & Secondary Education, Islamabad, located outside Pakistan.

SF-7(a)   Foreign candidates whose names are forwarded by the Higher Education Commission Government of Pakistan, Islamabad must have passed HSC (Pre-Engineering/ Computer Science) Examination or an Equivalent Foreign Examination.

SF-7(b)   Afghan Candidates whose name are forwarded by the Higher Education Commission Government of Pakistan, Islamabad must have passed HSC (Pre-Engineering/ Computer Science) Examination or an Equivalent Foreign Examination.

SF-8   Candidates who are Real Sons / Daughters of NED University Alumni Network (NEDAN) Life Members.

SF-9(a)   Candidates who are Real Sons/ Daughters of Professional Engineers of Sindh Province and have passed HSC (Pre-Engineering) Part I & II Examinations from Board of Intermediate Education or equivalent foreign examination as recognised by the University.

N.B: The candidate's real parent must have valid registration with Pakistan Engineering Council.

SF-9(b)   Candidates who are Real Sons/ Daughters of Professional Architects/Planners of Sindh Province and have passed HSC (Pre-Engineering/Pre-Medical/Computer Science) Part I & II Examinations from Board of Intermediate Education or equivalent foreign examination as recognised by the University.

N.B: The candidate's parent must have valid registration with the Pakistan Council of Architects and Town Planners (PCATP).

SF-9(c)   Candidates who are Real Sons/ Daughters of Expatriate Pakistanis and have passed HSC (Pre-Engineering/ Computer Science) Examinations or equivalent foreign examination as recognised by the University.

SF-10(a)   Nominees who belong to Parsi / Minority Communities and whose names are recommended by Dinshaw Family.

SF-10(b)   Nominees who are recommended by S.S. International.

SF-11   Candidates who are residents of Pakistan and have passed HSC (Pre-Engineering) Part I & II Examinations from Board of Intermediate Education or equivalent foreign examination as recognized by the University.

N.B: si)   Rs. 975,000/- (Rupees Nine Hundred Seventy-Five Thousand only) + 5% Tax shall be required to be deposited in designated branch of the banks as Self Finance Fee for admission under the above categories (SF-6 to SF-11).

   ***   Advance Tax on Payment of Fee for Educational Institutions [Section 236(i)]***

   As per newly inserted Section 236(i) of Finance Act every Educational Institution is required to collect advance income tax at the rate of 5% on the amount of fee paid to an educational institution. The person responsible for preparing monthly, bimonthly or quarterly fee voucher or challan shall also charge

withholding tax in case the fee exceeds Two Hundred Thousand Rupees annually.

ii)   **The seats between sub-categories SF-4(a), SF-4(b), SF-6(a), SF-6(b) and SF-9(c) are inter-transferable, whenever considered necessary by the University.**

5.2(iii)   Admission Under More Than One Categories

Candidates applying against more than one category under Self Finance Scheme may only deposit Self Finance Fee for any one category. In case of difference in amount of Self Finance, the highest amount needs to be deposited.

5.2 (iv)   Transfer of Seats

(a)   If the number of candidates in Arts, Commerce and Pre- Medical groups selected for admission under categories from SF-2 to SF-4 falls short of the allocated number of seats, after admission and waiting lists have been considered, the balance number of seats in each of these categories will be transferred to respective categories reserved for pre-engineering group. Any further balance seats from categories SF-2 to SF-4 as well as all balance seats in other categories SF-5 to SF-11 will be transferred as under:
(i)   All BE and BS (CS) seats to SF-1(a).
(ii)   All remaining BS and B. Arch seats to R-1(a).

(b)   Any seat remaining vacant from any category at Thar Institute of Engineering, Sciences and Technology (TIEST) will be transferred to Mirpurkhas Board. Any further vacant seat will be inter-transferable with other categories wherever considered necessary by the University.

CHAPTER 6

Mode of Admission

6.1 ADMISSION IN FIRST SEMESTER

6.1.1. Reporting in Person

Applicants whose names appear in the Merit list should personally report for Submission of documents and Medical Fitness Test at Admission Office on the date and time specified for reporting, according to the schedule, provided by the University.

6.1.2 Documents Required

Candidate for admission must submit the following documents to the Admissions Office:

i. Original Documents (to be retained by the University)

a) Domicile of Sindh Province
b) Affidavit of non-political activities Original
c) H.S.C. / DAE Marks Sheet or Equivalent Marks Sheet
d) Equivalence Certificate from IBCC for foreign examinations and Grade Sheets, if applicable
e) Hafiz-e-Quran Certificate, if applicable
f) Migration Certificate in case of having passed H.S.C. examination from a Board other than Karachi Board

ii. Other Documents (Two Attested Photocopies)

a) All the documents mentioned in para 4.1.4(i)
b S.S.C. or Equivalent or DAE Examination Mark sheet and Certificate
c) Admit Card of Pre-Admission Entry Test
   In addition, Passport Size Photographs (08 Nos.).

Original documents retained by the University will be returned after the completion or termination of the studies at this University.

Applicants are advised that they should retain sufficient number of attested photocopies of their documents/ certificates as the originals are not likely to be returned during their period of study at the University.

The name of applicants who do not submit the original documents on the specified scheduled dates for each category, shall stand deleted from the Merit List. No plea whatsoever shall be acceptable in case any applicant fails to appear on the scheduled date.

6.1.3 Medical Fitness Test

Each candidate shall be examined for Medical Fitness being offered admission in this University. For Medical Fitness Test candidates shall have to:

a) Deposit Medical Fee along with Admission Fee at the time of interview.

b) Produce Bank deposit slip to the Office of Principal Medical Officer (PMO) of the University along with Chest PA view X-Ray, two passport size photographs and attested photocopy of Matriculation Certificate. In case of foreign examinations candidate's proof of date of birth should be produced.

NB: The applicants, who fail to appear for medical examination on the specified scheduled dates as notified for the respective category, shall stand deleted from the Merit List. No plea whatsoever shall be acceptable in case any candidate fails to appear on the scheduled date.

6.1.4 Medical Fitness

a) The eyesight, aided or unaided, should not be poorer than 6/9 in one eye and 6/12 in other eye while near vision should be N5 at least with glasses.

b) The chest expansion should not be less than 4cm and X-ray of chest should be satisfactory.

c) The limbs, including the feet and toes, should be well formed and developed with perfect and unrestricted movement of all joints.

d) The candidate should not suffer from any remarkable skin disease.

e) Colour blindness–even if vision is otherwise normal– will disqualify applicants for the disciplines of Mechanical, Electrical, Computer & Information Systems, Textile, Industrial & Manufacturing, Electronics and Telecommunications Engineering. Candidates may, however, be considered for other disciplines.

6.1.5 Interview & Admission

(i) Candidates would then be required to appear for Interview before the Admission Committee to choose the discipline from the available seats in their respective category. The selection of Discipline/ Programme is based on a computerized interactive process. **The choice of available seats would decrease as one goes down in the order of merit** and each candidate will have to make "on-the-spot" choice from the seats available. **To assist the candidate in making the decision he/she may bring his/her parents (or guardian) on the day of interview.**

(ii) If the candidate decides to get admission, then he / she shall be required to

a) Pay the following amount either in cash or through Pay Order in favour of Director of Finance, NED University, which should have been acquired earlier.

- Rs.72,000/- for all Engineering programmes and BS (Computer Sciences)

- Rs. 73,500/- for candidates being admitted in Architecture Department

- Rs. 72,000/- for candidates being admitted in all remaining BS programmes. Those admitted in BS (Industrial Chemistry) shall be required to pay Rs. 73,000/- (including Rs.1000/- as Bench Fee)

- Rs. 77,000/- for candidates being admitted in BS computer Science Programme offered at TIEST.

NB: Merit/Need Scholarship shall be awarded to the deserving newly admitted students by the University.

b) Submit a declaration of non-participation in political activities and non-indulgence in unwanted activities on Stamp Paper of Rs.100/.

(iii) If the candidate is unable to attend the interview in case of 'exceptional circumstances' he/she may authorise any person, **preferably a parent,** to come on the interview day and take decision on behalf of candidate. The person so authorized shall have to complete all formalities required by the University regarding admission process. Candidates who expect to face 'exceptional circumstances' should contact the Chairman Admission Committee before interview.

iv) A Candidate applying under more than one category- once admitted in any category will automatically forego his / her preference and candidature under other categories.

(v) The name of candidates who do not appear for medical, do not submit the original documents and/ or fail to appear for interview / Admission on the specified scheduled dates for each category, shall be deleted from the Merit List. The candidate may, however, appeal, giving justification for non-appearance on the scheduled date for consideration about inclusion in subsequent Merit List to be issued.

6.1.6 University Identity Card

Candidates who are admitted shall be issued University Identity Cards. All students are required to carry and produce original University Identity Cards whenever required.

6.2   EMPLOYMENT / SIMULTANEOUS ENROLMENT

All undergraduate degree programmes are regular full-time day programmes. No student admitted in this University shall be allowed to engage himself/ herself in employment or maintain simultaneous enrolment in any other course of studies in other educational institutions. Violation of above may lead to cancellation of admission.

6.3   CANCELLATION / WITHDRAWAL OF ADMISSION

The Vice Chancellor will be competent authority to cancel or withdraw admission of any candidate.

6.4   MEDIUM OF INSTRUCTIONS

The medium of instructions and examinations shall be English.

6.5   ADMISSIONS IN SUBSEQUENT SEMESTER/ YEARS OF STUDY

6.5.1   Registration in any Semester shall be allowed only during first three weeks after commencement of classes of that Semester. Registration shall be confirmed after payment of semester fee.

6.5.2   Registration shall however be subject to the conditions laid down in clauses 6.5.3(d) and 6.5.4(c)

6.5.3(a)   In a semester, a student shall be registered in any such courses prescribed in that Semester which the student has not passed earlier, subject to clause 6.5.4(c).

6.5.3(b)   Registration in any course(s) offered other than the prescribed courses of that Semester/Session may also be allowed by the Chairman of the Department concerned in the following cases subject to payment of prescribed fees:

i)   If the student has been admitted in Second Year Fall Semester on migration basis and consequently required to pass (additional) course(s) of First Year in which he/she is not eligible for exemption.

ii)   The student having been allowed change of discipline is required to pass such course(s) in which either transfer of credit has not been allowed or the student has not studied the course(s) earlier.

iii)   The student requests being allowed to either register in any course(s) in which he/she had failed earlier or any course(s) as permissible under Para 6.10.1 for grade improvement. Sessional marks shall be revised for which the student shall be required to appear in tests and submit assignments for sessional marks.

iv)   The student having short of attendance during previous semester(s).

v) The student shall have to attend at least 75% classes in courses where he/she has not met this requirement earlier.

6.5.3(c) In any case, the number of registered courses in any semester including all prescribed courses of a semester, should not exceed the maximum prescribed limit.

6.5.3(d) In any Semester, the student shall be allowed to register in maximum of seven theory courses in total, excluding non-credit courses and FYDP. However, in B.Arch. Programme students will not be allowed to register for more than one design studio course in any one semester.

6.5.3(e) Students on Withdrawal shall not be eligible for registration.

6.5.4(a) Any student who fails to obtain at least 2.00 CGPA in First year Fall Semester shall remain on probation during First year Spring Semester. In any case, if such student still has less than 2.00 CGPA at the time of registration in Second year Fall Semester, he/she shall proceed to second (and last) probation during that semester. During the probation period(s) such student shall be allowed to register for the regular courses as well as any backlog courses within the maximum limit defined in clause 6.5.3(d).

6.5.4(b) Admission of any such student shall be cancelled, who after being on second probation during Second Year Fall Semester fails to obtain 1.00 CGPA on completion of that semester.

6.5.4(c) In any semester, the student shall ONLY be allowed to register in course(s) of which he/she has studied/ qualified the relevant pre-requisite course(s). In any case the maximum number of courses shall be in accordance to clause 6.5.3(d).

6.5.4(d) Any such students who after being in second probation have obtained more than 1.00 CGPA but less than 2.00 CGPA shall not be allowed to register in subsequent semester. He/She will be required to improve his/her CGPA up to 2.00 before being allowed to register in subsequent semester.

6.5.5 Any student having discontinued his/her studies after official permission due to any reason, shall be allowed registration in any semester, subject to fulfillment of condition laid down in clause 6.5.4 (c).

6.5.6(i) Any student registered in any additional course(s) may request the chairperson for change or withdrawal from such course(s). However, such change/ withdrawal shall be allowed only during first three weeks of the semester. In such case, the fee for the withdrawn courses will ONLY be adjusted towards subsequent semester.

6.5.6(ii) Any student may be allowed to withdraw from a course up to the 8th week of the semester. However, in such case, the fee of the course shall not be refunded/ adjusted and the transcript shall record the enrolment with a grade 'W'.

6.5.6(iii) No request for withdrawal shall be accepted after 8th week of the semester, and in case of non-appearance in examination, the student shall be awarded 'WU' against that subject.

6.5.7 All such students who are interested to avail any Mobility Programmes need to register themselves in the subsequent semester (before proceeding abroad) by paying 40% of the Semester Fee. Furthermore, following conditions shall be fulfilled:

a) Such students shall be given exemption in the courses which they had studied in the institutions abroad provided that:
   i) Such mobility was availed with the approval of the University
   ii) Courses studied abroad are having more than 75% equivalency with the courses for which exemption is requested.
   iii) Exemption will be allowed for courses with 'B' grade and above.
   iv) Request for exemption should be submitted to concerned department within two weeks after returning from the mobility.

b) Mobility shall be allowed in second year and onwards only.
c) Clause 6.5.4(c) shall also be applied to such students.

6.6 ADMISSION ON MIGRATION BASIS

Admission on migration shall be allowed in relevant discipline under extra ordinary circumstances subject to the following conditions:

a) Seat(s) is available in relevant discipline.
b) Applicant must have passed First Year of studies completely in the institution where he/ she was initially admitted.
c) Admission shall only be offered in Second Year (Fall Semester).
d) Applications for migration shall be called in the month of September on prescribed form which is required to be submitted along with processing fee of Rs. 1,500/-
e) Candidates offered migration shall be required to pay non-refundable migration fee of Rs. 775,000/- (Rupees Seven Hundred Seventy-Five Thousand Only) + 5% Tax* through pay order in favour of Director Finance, NED University.

* Advance Tax on Payment of Fee for Educational Institutions [Section 236(i)]

As per newly inserted Section 236(i) of Finance Act every Educational Institution is required to collect advance income tax at the rate of 5% on the amount of fee paid to an educational institution. The person responsible for preparing monthly, bimonthly or quarterly fee voucher or challan shall also charge withholding tax in case the fee exceeds Two Hundred Thousand Rupees annually.

f) Student admitted on migration shall be given exemption in all such courses of First and Second Year which he/ she has passed during study in previous institution. However, he/ she shall be required to register and pass all such courses of the discipline in which he/ she is offered admission which he/ she has not studied in previous institution.

6.7 DURATION OF PROGRAMME

6.7.1 Courses of studies leading to the degree of Bachelor of Engineering and Science shall be of four (4) academic years' duration.

6.7.2 Courses of studies leading to degrees of Bachelor of Architecture shall however be of five (5) academic years' duration.

6.7.3 Any student who fails to complete all requirements for his/her degree in the prescribed time may continue study for further three academic years. Consequently, including the academic year of his/her first admission;

a) Maximum seven academic years shall be allowed for each Four-year degree programme.
b) Maximum eight academic years shall however be allowed for each Five-year degree programme.
c) i) Any student admitted in Second Year on migration basis shall have one year reduced from maximum allowable period.
   ii) Any student admitted in Third Year on the basis of Associate Degree Programme shall have two years reduced from maximum allowable period.

6.8 CANCELLATION OF ADMISSION/ENROLMENT

6.8.1 Admission of any such student of First Year of Studies in any discipline shall be cancelled who is not a candidate for the Fall Semester Examination.

6.8.2 Admission of any such student of any Year/ Semester who has been rusticated from the University on account of serious breach of discipline for any specified period shall be cancelled and notified. However, after expiry of the period the student may be allowed readmission in the same Year/ Semester with junior batch, if otherwise eligible.

6.8.3 Admission and enrolment of any such student of any Year/ Semester who has been expelled from the University on account of major breach of discipline shall be cancelled after due process and subsequently notified. The student shall not be eligible for any subsequent admission in the University.

6.8.4 Admission of any such student shall be cancelled who fails under clause 6.5.4(b).

6.8.5 Admission of any such student shall be cancelled, who without information fails to register in any Semester even after passing of the permissible registration duration.

6.9 WITHDRAWAL FROM SEMESTER/PROGRAMME

6.9.1 Withdrawal from any semester or programme may be allowed only in extra-ordinary circumstances.

6.9.2 The student shall be required to apply for withdrawal through concerned Chairperson along with evidence supporting his/her request for withdrawal.

6.9.3 Any such student(s) seeking readmission after withdrawal shall only be considered for readmission with junior batch provided that:

a) The applicant has officially withdrawn earlier from the semester or programme.

b) The period of discontinuation of his studies does not exceed three academic years.

c) He / She produces an Affidavit on Stamp Paper of prescribed amount declaring that during the period of his/her discontinuation of studies he/she was neither on the roll of any other Educational Institution nor was convicted by any Court of law.

d) The student shall be able to complete his / her degree with in time limit prescribed under Para 6.7.3.

6.10 GRADE IMPROVEMENT

6.10.1 (a) Any student may be allowed by the Chairman of the Department concerned to repeat course(s) offered in that semester subject to the following conditions:

(i) A compulsory course which the student is required to repeat for obtaining a passing grade or a course selected by the student for improvement of his/her CGPA.
(ii) Any other elective course of a particular stream in lieu of an elective course.

(b) The student shall be allowed to repeat courses as per the maximum limit defined in clause 6.5.3 (d).

(c) The students may however repeat the course(s) as and when offered.

(d) Better grades in course(s) shall be considered for determining his/her GPA/CGPA.

6.10.2 Any student who is eligible for award of degree under clause 7.7 (Chapter 7) but still desires to improve CGPA for any reason may be allowed by the Chairman of the Department concerned, subject to the following conditions:

(a) No provisional certificate/degree has been issued to his/her.

(b) Duration of completion for the degree does not exceed the maximum limit described under Clause 6.7.3.

(c) The student requests registration in desired courses within two weeks after announcement of his/her result.
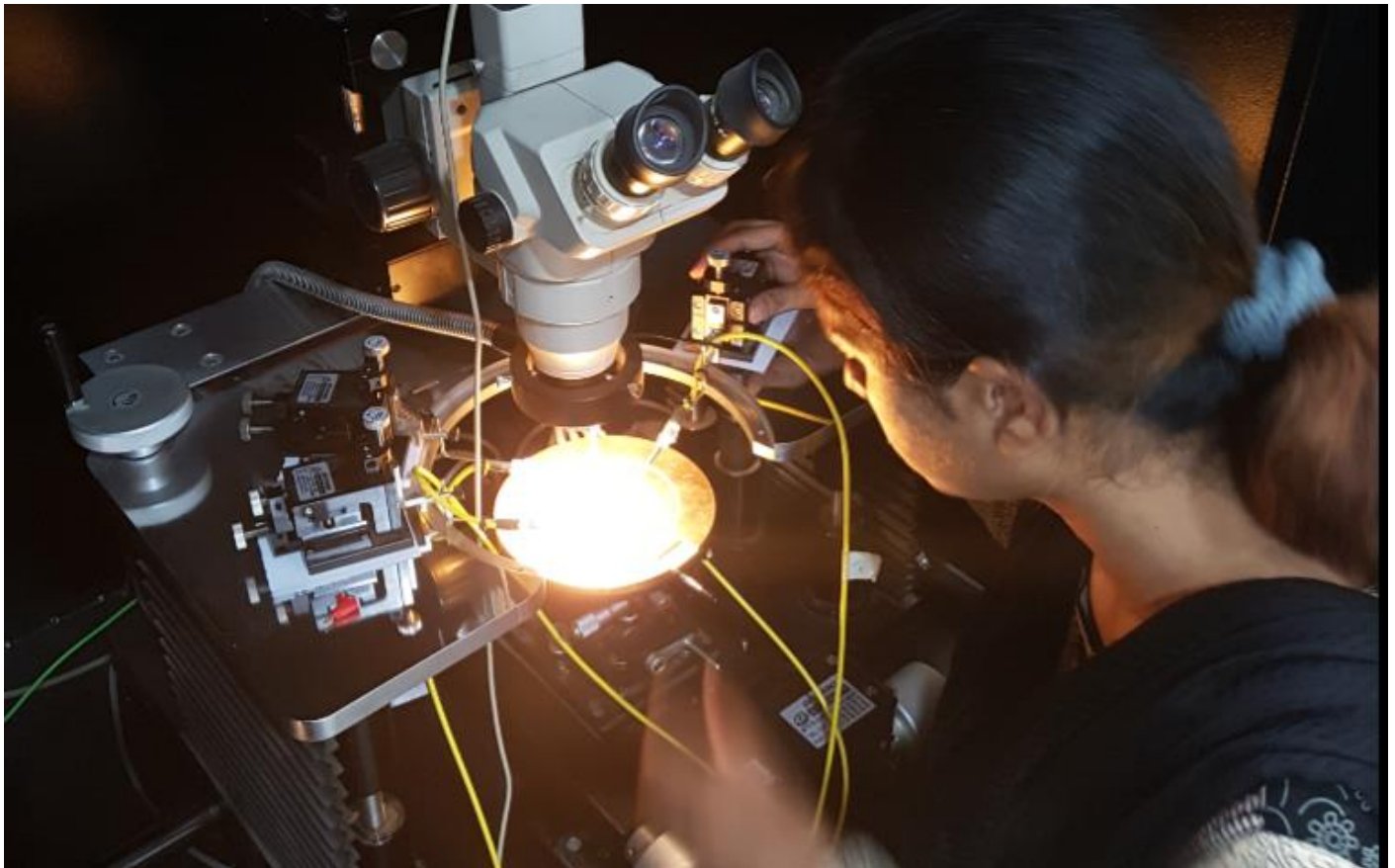
CHAPTER 7

Examinations

7.1 SEMESTER EXAMINATION

Semester Examinations are held followed by each semester. Schedule of such examinations shall be as notified by the Examinations Department.

7.2 CLASS ATTENDANCE

7.2.1 Any candidate, who registered during the semester, will be allowed to appear only in such course(s) in which his/her attendance is at least 75% during the semester.

7.2.2 Any candidate, who registered during the semester, will be allowed to appear in all such courses of the semester provided his/her aggregate attendance in all such courses is at least 75% of the total of all classes held in the courses during the semester.

7.3 ADMIT CARD

7.3.1 Admit Card for the examination shall be issued to any candidate who is eligible / allowed to appear in the course(s) as mentioned on his/ her Card.

7.3.2 The Admit Card must be in possession of the candidate while appearing in the examination for any course for which he / she has been allowed.

7.4 GRADE POINTS

Grade / grade point equated with percentage of marks and other grades shall be as follows:

Grade	Grade Point	% Marks	Remarks
A+	4.0	94–100	Extra Ordinary
A	4.0	85–93	Excellent
A-	3.7	80–84	Very Good
B+	3.4	75–79	Very Good
B	3.0	70–74	Good
B-	2.7	67–69	Above Average
C+	2.4	64–66	Average
C	2.0	60–63	Satisfactory
C-	1.7	57–59	Adequate
D+	1.4	54–56	Pass
D	1.0	50–53	Pass
F	0.	Below 50	Fail
P	–	50–100	Pass in Non-Credit Course
IP	–	–	In Progress*
X	–	–	Exempted
I	–	–	Incomplete
W	–	–	Withdrawal
WU	–	–	Withdrawal Un Officially

* To be evaluated in Spring Semester for Final Year project or any specified Design course

7.5 GRADE POINT AVERAGES

Grade Point Average (GPA) for any semester and Cumulative Grade Points Average (CGPA) for more than one semester shall be calculated as under:

$$\text{CPA / CGPA} = \frac{\Sigma\,(\text{credit hours of a course} \times \text{grade point})}{\text{Total Credit hours of the courses}}$$

7.6. MARKS DISTRIBUTION

Marks distribution for each final examination and sessional evaluation shall be as under:

Each theory paper, practical, design course (studio work) and Final Year project shall have 60% marks for final examination and 40% marks for sessional evaluation.

7.7. AWARD OF DEGREE

7.7.1 Any student who was admitted in First Year and has passed all courses as prescribed for his/her Discipline with CGPA of at least 2.0 shall be eligible for the award of Degree in that Discipline.

7.7.2 Any student who was admitted directly in Second Year on migration from any recognized Institution and has passed all courses as prescribed for that Discipline with CGPA of at least 2.0 shall be eligible for award of a Degree in that Discipline. The course(s), if any, in which the student was allowed exemption on the basis of having studied the course(s) in the former Institution shall not however be counted for determining his/her GPA/CGPA.

7.7.3 Any student who was admitted directly in Third Year, Bachelor of Mechanical Engineering Programme on the basis of Associate Degree in Marine Engineering Programme of this University and has passed all courses of Third Year onwards as prescribed for Mechanical Discipline with CGPA of at least 2.0 shall be eligible for the award of Degree in that Discipline.
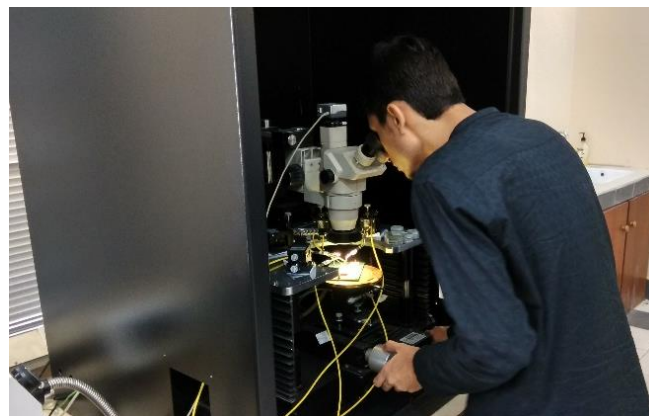
CHAPTER **8**

Fee Structure

8.1 FEE AND CHARGES (NON-REFUNDABLE)

8.1.1. For Main Campus, LEJ and City Campus

a) Admission Fee to be paid once at the time of Admission
   For locals

In BE, BS (CS) and B. Arch	Rs. 39,000/-
In all remaining BS Programmes	Rs. 35,500/-
For Foreigners	Rs. 314,180/-

b) Following fee and charges to be paid at the start of each semester:

   i) Semester (Tuition & Examination) Fee:
   - For all BE, BS (CS) and B Arch programme   *Rs.27,310/-
   - For all remaining BS programmes   *Rs.30,810/-

   NB: **All deserving candidates are paid scholarship against tuition fee from Merit/Need based Scholarship subject to the availability of funds.**

   ii) Students Facilitation Charges   *Rs.5,690/-

   iii) Studio Fee (For Architecture Department only)   *Rs.1,500/-

   iv) Bench Fee (For BS Industrial Chemistry only)   *Rs.1000/-

c) If applicable, fee (Tuition and Examination) for one course *Rs. 6,000/- (*subject to revision).

8.1.2. For Thar Institute of Engineering, Sciences and Technology (TIEST)

a) Admission Fee to be paid once at the time of Admission: Rs. 40,500/-

b) Following fee and charges to be paid at the start of each semester:

   i) Semester (Tuition & Examination) Fee   *Rs.28,065/-

   NB: **All deserving candidates are paid scholarship against tuition fee from Merit/Need based Scholarship subject to the availability of funds.**

   ii) Students Facilitation Charges   *Rs.8,435/-

c) If applicable, fee (Tuition and Examination) for one course *Rs. 5,600/- (*subject to revision).

8.2 CHARGES UNDER SELF-FINANCE SCHEME

a) Self-Finance Fee must be paid in designated branches of the bank and copy of receipt/ challan enclosed with application form; which shall not be refunded if admitted under the scheme on payment of Fee and Charges mentioned in Para 8.1 above.

   i) Categories SF-1 to SF-5   Rs. 775,000/- + Tax* for all disciplines.

   ii) Categories SF-6 to SF-11   Rs. 975,000/- + Tax*

NB: **+ 5% Tax* shall be required to be deposited in designated branch of the banks as Self Finance Fee for admission.**

   * *Advance Tax on Payment of Fee for Educational Institutions [Section 236(i)]*
   As per newly inserted Section 236(i) of Finance Act every Educational Institution is required to collect advance income tax at the rate of 5% on the amount of fee paid to an educational institution. The person responsible for preparing monthly, bimonthly or quarterly fee voucher or challan shall also charge withholding tax in case the fee exceeds Two Hundred Thousand Rupees annually.

   iii) **Candidates applying against more than one category under Self Finance Scheme may only deposit Self Finance Fee for any one category. In case of difference in amount of Self Finance, the highest amount needs to be deposited.**

8.3 SECURITY DEPOSIT

Security deposit** of Rs.12,800/- is included in the admission fee to compensate breakage and or any other damage, if any, caused by the student. This deposit or such balance as may be available out of it, shall be refunded to the student whenever he/she ceases to be student of the University.
*** For TIEST Rs 12,050/-*

8.4 MISCELLANEOUS FEE

Document	Ordinary	Urgent
a) Mark Certificate	Rs. 600/-	Rs. 1000/-
b) Transcript	Rs. 700/-	Rs.1,500/-
c) Degree	Rs.2,000/-	Rs.4,000/-
d) Duplicate Degree	Rs.6,000/-	Rs.12,000/-
e) Provisional Certificate	Rs.1,500/-	
f) Re-totaling of Answer Book (per script)	Rs. 800/-	

8.5   HOSTEL CHARGES

(No boarding will be provided by the University; however, canteen facilities are available. Karachi resident are not eligible)

1.   **Muhammad Bin Qasim Hostel I & II & Girls Hostel**

   (a) Room Rent
   i)   Cubicle   Rs.900/- per month
   ii) Dormitory   Rs.700/- per month

   (b) Service Charges   Rs.900/- per month

   (c) Hostel Security Deposit (Refundable):
   i)   For Locals   Rs.3,000/-
   ii) For Foreigners   Rs.15,000/-

   NB: All hostel charges will be taken in advance on semester basis.

2.   **International Hostel**

   Dormitory   Rs.6,500/- per month

8.6 FEE REFUND POLICY

8.6.1 Admission Fee

Any student after being admitted requests for cancellation of admission shall have refund of his/her paid fee dealt as under:
 i.   In case of applying for cancellation of admission and refund of fee before commencement of classes shall have all fee refunded except of Admission and Medical Examination Fee.
 ii. In case of applying for cancellation of admission and refund of fee during first week of commencement of classes shall have 50% of the rest of fee refunded whereas the security deposit will be completely refunded; however, his/her Admission and Medical Examination Fee shall be forfeited.
 iii. In case of applying for cancellation of admission after first week of commencement of classes shall ONLY have the security deposit refunded.

8.6.2 Self-Finance Fee

Any student after being admitted under self-finance category requests for cancellation of admission shall have refund of his/her self-finance fee dealt as under:
 i.   In case of applying for cancellation of admission and refund of fee before commencement of classes shall have all self-finance fee refunded.
 ii. In case of applying for cancellation of admission after commencement of classes shall have 10% of self-finance amount deducted. In any case, the request for the cancellation of admission should reach to Registrar Office before commencement of Mid-term Examination of First Year – Fall Semester.

8.7   OTHER EXPENSES

The student may find it convenient to own some books of fundamental nature which help him not only in the First Year but throughout his/her stay at the University and even beyond. Judicious purchase of such books with the guidance of his/her teachers is recommended. An outlay of about Rs. 10,000/- in the first instance for books and stationery should generally be adequate. In addition, he is expected to own drawing instruments, scientific calculator and sets of tools which may require additional Rs.6,000/-.

CHAPTER **9**

Scholarships
Stipends
And Awards

9.1 ASSISTANCE SCHOLARSHIP

a) The Assistance Scholarship is awarded subject to availability of funds to provide monetary assistance to needy students and is of the value of Rs.5000/-per annum.

b) The Vice-Chancellor shall have the discretion to select students for award of Assistance Scholarship by taking into consideration the financial and other circumstances, the academic record and conduct of the students.

9.2 SCHOLARSHIPS

Various Scholarships are available for the meritorious and deserving students of this University. Previous year, approximately 1500 Scholarships (Higher Education Commission (HEC) / Private / Government Funded Scholarships) have been disbursed to the students of different disciplines.

NB: **Absence from or failure in a University Examination, lack of progress and assiduity in studies, breach of discipline or reprehensible conduct shall entail the loss of scholarships granted to any student.**

9.3 MERIT GOLD MEDALS & CERTIFICATES

i) A Merit Gold Medal will be awarded by the University to each student securing the first position, in order of merit at the final B.E. Civil, Civil (specialization in Construction), Urban, Petroleum, , Mechanical, Textile, Industrial & Manufacturing, Automotive, Electrical, Electronics, Telecommunications, Computer Systems, Chemical, Material, Metallurgy, Polymer & Petrochemical, Software, Biomedical and Food Engineering.

ii) A Merit Gold Medal will be awarded by the University to such student securing the first position, in order of merit, at the final BS Management Sciences, Textile Sciences, Computer Science, Computational Finance, Industrial Chemistry, Applied Physics, Development Studies, English Linguistics and Economics and Finance Examination.

iii) A Merit Gold Medal will be awarded by the University to such student securing the first position, in order of merit, at the final B. Arch. Examination.

CHAPTER **10**

Supporting Infrastructure and Students Facilities

10.1 ENGR. ABUL KALAM LIBRARY

Since its inception in the City Campus, Engr. Abul Kalam Library http://www.neduet.edu.pk/library has grown to become one of the leading academic libraries particularly focusing engineering, sciences and technology of the country. The library devotes considerable efforts and resources to the development of an outstanding library collection to meet the needs of the students, faculty members and researchers of the University. Services and facilities of the library are governed by the library regulations.

Engr. Abul Kalam Library comprises of two buildings adjacent to each other. The reference and administrative building consists of three floors having numerous seating capacity for the library users. The building adjacent to this comprises of two floors with Circulation Section on the ground and Book Bank on the first floor. Departmental libraries have also been setup in remote campuses, City Campus, LEJ Campus, TIEST Campus as well as selected teaching departments at main campus.

Library collection is the impressive blend of traditional information resources and scholarly electronic resources. The collection includes:

- Textbooks of common interests.
- Reference books including encyclopedias, handbooks, dictionaries, manuals etc.
- Periodicals on current lists of subscription as well as volumes of back issues of local and international scholarly journals; magazine and newspapers.
- Government documents & Archive material including Acts and Ordinances, Services Rules, Statistical reports, Census reports, Survey reports, Planning reports and Budgets etc.
- Non book materials, CD-ROMs, DVDs etc.
- Digital contents including databases of e-books, e-journals and e-thesis and e-dissertations etc.

Reference Section provides reading / reference services to library members and users. Textbooks and reference materials including audio visual material, periodicals and government documents are restricted to be used within the premises. The collection is secured against theft using state-of-the-art security system. Library has a separate bag deposit room at the main entrance which is monitored through CCTV.

The library provides book lending services through the Circulation Section to students, faculty members, researchers and other employees of the University as per rules laid down. The section also comprises of Anila Azam Reading Room. However, the Book Bank caters undergraduate students only and provides text books on rental basis for entire semester. The library also conducts Library Orientation to new comers and organizes Book Fair annually.

The library keeping pace with emerging technologies has its own Computerized Library Management System, Website, OPAC and Portal Services. Wi-Fi access points and Digital Notice Board are also available to facilitate library users.

A computing facility comprising of latest configuration computers provides digital services to its users such as access to e-books and e-journals through the National Digital Library Program of HEC. Internet facilities, Laser Printing, Scanning facility including copying facility of e-contents of non-book material are also available in the library.

The library is committed to providing a pleasant, user-oriented learning environment for its users. Its endeavors are to make its resources available and useful to its users and to sustain and preserve a universal collection of knowledge for future generations.

10.2 INFORMATION TECHNOLOGY (IT) DEPARTMENT

The University has its own Internet facility managed by its Information Technology (IT) Department (formerly Internet Centre) established in 1998-99. The Information Technology (IT) Department since its establishment has played a pivotal role in developing the varsity's I.T. infrastructure by providing robust Internet facility to its users within and outside of its campuses. The department is equipped with the state of the art networking equipment and acts as a central IT hub providing services like Internet, CMS, Web, Network Operations and Support Services round the clock. Continuing the expedition in producing the best in the Country, this Department also hosts corporate training for its faculty and staff along with the video conferencing facility enabling its Faculty and Students to join the rest of the Engineering and Technological hubs of the world.

10.2.1 NETWORK & HARDWARE
Internet Facility

Internet as the sole of research and education is also considered the bedrock of learning by NED. Coping up with the ever growing technology standards, the university continuously extends its services and infrastructure. Currently the university boasts a bandwidth of over 750Mbps along with highlighted infrastructure and services as under;

- **Data Centre:** NED University has transformed its network and data services by establishing its state of the art Data Centre. The data Centre comprises of 5 server racks along with 3 network racks. Capable to host 90 servers with 4.8Gbps bandwidth connectivity per rack. The sole aim is to provide efficient services while ensuring high standards.

- **FO LAN:** State of the art Optical Fibre LAN to every facility in the university.

- **Broadband connectivity:** Robust high bandwidth connectivity for every connected user (upto 8 mbps).

- **Smart University:** HEC Smart University campus wide WiFi giving robust secure Broadband connectivity to the users (students, faculty and staff) to all users of Main campus, LEJ and City Campus.

- **Inter Campus connectivity:** All remote campuses (LEJ, City) and the constituent college TIEST are all connected over VPN to the Main Campus thus providing all Extranet/Intranet facilities as in the Main campus.

- **NEDUET VPN**: VPN for researchers and students giving secure access to HEC Digital Library and NEDUET Portal services.

10.2.2   Online Learning Management System

Pioneering the policy for online higher education; NED has not only transformed its teaching mechanism for online delivery but also played a pivotal role in devising the overall online teaching strategy at the national level through HEC. During the pandemic, turning the problem in to an opportunity the NED had transformed its education system and policies according the demanding situation of online distance learning. A well-orchestrated plan of technology deployment (termed as NEDUET LMS combining GSuite, NED Portal, NED VPN etc.), training and adoption by faculty while focusing on the development quality digital content, its timely delivery in addition to modified examination policies enabled quality education to the students, their proper participation and analysing the overall outcome in terms of examination.

10.2.3   Hardware Maintenance and Inventory

Department also provides hardware and software support services in addition to managing hardware inventory and technical feasibility services.

10.2.4   Video Conferencing Facility

This University has a centrally located Video Conferencing Facility Centre through which NEDUET connects to any part of the world, locally and Internationally to connect and communicate with video and voice facility for the arrangement of virtual classes (online classes), conferences, seminars, Internet meetings (video conferences) among multiple locations, as and when required. This facility is available round the clock.

10.2.5   Information Systems and Software Section

The IT Department focuses on delivering state-of-the-art software using Agile Methodology with Faster Development time and uncompromising integrity, some of them are as follows; Undergraduate and Postgraduate Students Management System, Human Resource Management System, Attendance Information System, Shuttle Pass System, Hostel Management System, LTV Management System, Security Operations Management System, Statutory Bodies Management System, Academic Performance Monitoring System, Scholarships Management System and Internship management system. A part from MIS several web based applications are also developed by IT department which are playing vital role in automation of some core university processes e.g. Online semester registration of undergraduate and postgraduate, online feedback collection of undergraduate and

postgraduate and Online Admissions. This comprehensive and sophisticated development effort as a whole is termed as NEDUET Campus Management System (NEDUET-CMS).   To access information contained within CMS, Every employee and student on Intranet uses a front end interface known as NEDUET Campus Portal. NEDUET Portal is a 24/7 service. Portal works on the principle of Single sign on for multiple applications with personalized, secure, and robust and role based access management.

With the aim of facilitating Undergraduate students, Portal dedicated online Students Interface is enriched with the following features:

- Availability of Personal and Academic Profile
- Subject wise to-date Attendance Status
- Classes and Examination Schedules
- Special announcements from course Teachers
- Access to study material uploaded by course teacher
- Access to Personal letters issued from Registrar Office
- Availability of Portal Notice Board showing recent notifications and announcements from Registrar Office.
- Option to apply/track/withdraw online for the posted internships
- Semester registration details of regular and backlog courses
- Online feedback of course, teacher and learning resources
- Availability of Admit card and Transcript by integrations with Examination portal.

10.2.6   Research & Development Section

The Research & Development Section of IT Department working with main objective of providing a centralized high performance parallel computing facility to the entire University in particular and to the universities of Pakistan in general, for Research and Development in any of the Engineering disciplines. The facilities are primarily meant to be utilized at the postgraduate and PhD level. It has, therefore, been facilitated with the most advanced hardware and software keeping in view the Research and Development needs of the country in virtually all the engineering disciplines. High-end workstations with excellent graphics support and computational power are available for the researchers to assist them in their research work.

The University has the distinction of being the first Public Sector University of configuring and developing its own Linux based 50 nodes cluster with the technical assistance of its own IT force. The system was developed in the year 2003 and became functional in 2004. The State-of-the-art hardware that includes Intel Xeon processors, Gigabit Ethernet connectivity, high-tech system as well as management software has been used for Cluster development that provides tremendous increase in performance and throughput. The System is capable of executing complex engineering problems efficiently and with great accuracy. This facility has enabled researchers and creative professionals to exploit heavy computational and bandwidth-conscious software like Fluent, Ansys, MATLAB, Cadence, OPNET etc., and perform heavy simulations and modelling exercises with ease. Recently,

one new high performance computing cluster based on 64-bit architecture has been developed. The latest core processors technologies with branded high tech systems are procured. This cluster is now fully functional. With storage capacity of these systems reaching terabyte (TB) and memory capacity in gigabyte (GB), the computation on these are producing fast results.

All facilities available at the Centre can be accessed on campus over the University LAN and it can also be accessed from remote locations. The centre also extends its service to the engineering industry and other professional organizations involved in Research and development work.

The section also has a very large database of multidisciplinary software with a high number of licenses for some distinct software. Several of these softwares have the feature of executing tasks in parallel and utilizing the computing power of our clusters. The software repository will attract the research to pursue their academics research using these softwares under the terms and conditions of NED University. In addition, Research & Development section also has a training facility where seminars and workshops related to different software are conducted throughout the year for the faculty and students of the University.

10.3 INSTRUMENTATION CENTRE

A state-of-the-art Instrumentation Centre is functioning at the University which was established under a grant provided by the Higher Education Commission (HEC). Its capabilities include calibration of multi-meters, energy meters, circuit breaker testing, pressure/ temperature gauges, water quality, etc. The Centre has well equipped facilities and the necessary expertise for performing calibration activities, testing and analysis service, corporate training related to instrumentation, and design services for the local industry as well as other academic institutions in the country. Services of the instrumentation centre are subscribed by multinational and national companies operating in Karachi as well as other universities present across Pakistan. It also provides training to undergraduate and postgraduate students, and assists Undergraduate students in undertaking final year projects of various disciplines. In addition, it assists other University departments in their R&D activities as well. The Centre comprises of various well-equipped Laboratories such as Electronics and Signals Lab, Pressure and Temperature lab, Equipment Testing Lab, Water Quality and Weight Lab and a Virtual Instrumentation Lab. In particular, the Virtual Instrumentation Lab is equipped with world renowned National Instruments' (NI) LabVIEW system which helps engineers in basic data acquisition and signal processing as well as more complex embedded monitoring and control applications. The NED University lays emphasis on efforts in contribution towards research and improvement in quality of its human resource by providing good and up-to-dated facilities for utilisation by its student, academicians and researchers. The Instrumentation Centre is one such effort.

The Centre comprises of various well-equipped Laboratories such Electronics and Signals Lab, Pressure and Temperature Lab, Equipment Testing Lab, Water Quality and Weight Lab and a Virtual Instrumentation Lab.

In particular, the Virtual Instrumentation Lab is equipped with world renowned National Instruments' (NI) Labview system which helps engineers in basic data acquisition and signal processing as well as more complex embedded monitoring and control applications. For formal classroom lectures, a small but well-equipped Training Facility also exists.

The NED University lays emphasis on efforts in contribution towards research and improvement in quality of its human resource by providing good and up-to-dated facilities for utilisation by its student, academicians and researchers. The Instrumentation Centre is one such effort.

10.4 NED ACADEMY

With the rapid pace of development of knowledge, skills, tools and techniques in engineering, applied sciences and other professions, continuing education of working professionals in industry has become a vital need. To cater educational and professional training needs for continuous upgrading of working professionals, NED University established NED Academy initially as Centre for Continuing Engineering Education (CCEE) in 1998. The initial purpose of CCEE was to provide applied engineering education so as to comprehensively cater the needs of technical work force in their career progression. However, with the changing paradigms of knowledge, education, learning as well as integration of engineering knowledge with managerial & leadership skills, professional ethics, societal harmony, and the goals of sustainability and socio-economic development, a need was felt to form a much larger umbrella of outreach education and training at NED and thus NED Academy was established in 2008 with CCEE working as one of its Centres. Since then, aiming at the goal of professional excellence, NED Academy has embarked on a remarkable journey which promises ambitious learners belonging to any educational background and at any professional level a chance to choose, broaden and enhance their careers. We endeavour to develop profiles in line with the hiring criteria of leading organizations. This aim is achieved with dedicated efforts, planning and execution by the human resources associated with this initiative.

Where NED University stands for quality, NED Academy stands for polishing this quality further on with additional credentials and skills. The opportunities provided through the courses offered by NED Academy ensure professional excellence for anyone who is ambitious with his life goals. NED Academy serves as a symbol of excellence regardless of the field that anyone chooses because it stands for not only technically sound education but also believes in creating profiles which are multi-talented and have the flexibility and depth to be oriented easily toward the ever-changing dynamics of professional deliverance.

The vision of NED Academy has been "Empowering for Professional Excellence" by developing and offering more and more market-based capacity-building trainings for different cadres

of audience with continuous updating/ improvements as well as an integration with entrepreneurial spirit.

Having a clear goal of "Grooming Professional Leaders for Tomorrow" NED Academy has shown dedicated efforts to provide a platform to engineers and other professionals to learn to be more competent in their fields and to build a capacity to work with techno-managerial skills along with leadership skills to achieve their career goals and organizational development.

The objectives of NED Academy have been as follows:

- Updating professionals with state-of-the-art developments in engineering/sciences / technology/ engineering management / leadership skills/ Digital skills/ soft skills/ CAD & CAE skills/ linguistic/ entrepreneurship etc.
- Providing learning opportunities for working engineers and other professionals to enhance their exposure to knowledge, skills, tools and techniques with the objective of improving their career growth and making them globally competitive.
- Providing hands-on learning opportunities for vocational and technical trainings so as to improve industry employability and growth.
- Offering structured courses, certification programmes, international exam preparations, diploma programmes, postgraduate diplomas, nanodegrees and other programmes in market-oriented disciplines for creation as well as sustainable development of globally competitive human capital.

Key Domains of NED Academy

NED Academy, a name of guaranteed excellence, is well aware of the challenges faced by graduates and professionals in real world. To assist them in conquering these hurdles, NED academy conduct series of programmes in various domains. Some of those are as follows:

- Leadership Trainings
- Managerial Trainings
- Executive Trainings
- Postgraduate Diplomas
- Undergraduate Diplomas
- Short Courses
- Professional / International Certifications
- Software Based Training / CAD / CAE
- Technical Courses /Hands-On Trainings / Diplomas / Vocational Trainings
- Youth Engagement and Development Programmes
- Entrepreneurial Development Trainings
- Undergraduate Trainings
- Soft Skills Trainings
- Corporate (In-House) Trainings

Future Plans of NED Academy

- One of the master plant of NED academy is to incorporate a new wing, a new domain that would enable easy and convenient access to facilities of NED academy. With the advancement of technology, NED academy plan to develop NED Online. NED Online will highlight the reach of NED Academy beyond its boundaries and reach a wider audience by initiating online courses.
- NED Academy is looking forward to collaborate international certifications and skills testing agencies such as PMI, AACE, APICX, etc., in order to have indigenously designed certifications and skills testing mechanisms.
- NED Academy is endeavoring to create career awareness and guidance among youth and young professionals and various level of their professional journeys in order to develop a sustainable and meaningful impact on national economy by generating career insight as per the changing paradise both locally as well as globally.

10.4.1 Centre of Continuing Engineering Education (CCEE)

Centre for Continuing Engineering Education, the most active wing of NED Academy enables professionals to attain higher levels of research, teaching and industrial cooperation for technical leaders for constant learning by empowering them with the relevant knowledge, skills, techniques and technology base to help them outshine in their careers. It brings together new practitioners, new technologies and new experiences for the mutual benefits of all concerned. CCEE regularly conducts short courses to update engineers, professionals with recent development in engineering, management, IT, Sciences. It provides opportunities for working engineers to improve their qualification to meet professional body's registration level after successful completion and to enhance their skills with the objective of improving employability.

10.4.2 Centre of Professional Excellence – CoPE

Centre of Professional Excellence is another wing of NED Academy which has been already very active for the last 2 years and is serving graciously next to CCEE. It has shown great initiative by launching various successful certification programs, seminars and workshops. Initiated in 2016 on the premise that engineers and other professionals are getting challenged to be promoted to senior positions in their organizations because of lack of certain key skills, expertise and knowledge much needed to attain and sustain professional excellence particularly at leadership positions; since then, CoPE has been working to bridge this gap and make professionals equally competent for C- level positions. CoPE has mainly been focusing on accommodating professionals with International Certifications and In-house local Certifications in various disciplines. A large part of this Centre's focus is on providing high quality in-house certifications for those professionals who can't afford international certifications.

In addition to CCEE and CoPE, NED Academy is now taking initiatives in other pitches which include postgraduate diploma programs, professional certifications, entrepreneurship, vocational and technical trainings, skill-based courses, market-based short courses, industry-academia collaborative courses, thematic workshops and international seminars for enhancement of professional knowledge, skills and capacity in engineering and other fields for career enhancement.

10.5 COWASJEE EARTHQUAKE STUDY CENTRE

Cowasjee Earthquake Study Centre (CESNED) was established in 2001 after the devastating Bhuj earthquake. The Centre is currently administered by the Department of Earthquake Engineering. The objectives of this centre include (a) housing national and global data pertaining to earthquake; (b) to act as a centre for disseminating accumulated knowledge; (c) to respond to the emergency needs; and (d) be able to providing guiding principles for pre and post disaster earthquake mitigation. It has become a hub of the earthquake related activities with time. The vital role played by CESNED after the 2005 Kashmir earthquake led to its recognition as one of the two earthquake study centres in the Country.

10.6 SHAKE TABLE TESTING FACILITY

The Shake Table laboratory is a state-of-the-art facility which is available in the Department of Earthquake Engineering. The facility is used to simulate real time earthquake ground motion to record the dynamic response of a given structure placed on the table.

10.7 ADVANCED MATERIAL TESTING FACILITY

The Advanced Material Testing laboratory is a state-of-the-art facility which is administered by the Department of Earthquake Engineering. The facility is used to conduct full scale static and pseudo dynamic testing of various structural components of buildings and bridges.

10.8 PCB FABRICATION LABORATORY

A PCB fabrication Laboratory is available in the Department of Electronic Engineering. This is primarily for training under-graduate students in PCB fabrication technology. The laboratory is supported by PCB layout design software and auto routing software. The graduating students with this experience are expected to benefit in their professional field. The Laboratory is being used for fabrication of PCB for local requirement and possibilities of taking orders for external agencies is being examined.

10.9 PRODUCT DEVELOPMENT CENTRE

Additive manufacturing technologies, more commonly known as "Rapid Prototyping" or "3D Printing" have been used by design and manufacturing organizations for concept modeling and prototyping as well as for various applications such as jigs, fixtures, check gauges, and even as a bridge-to-tooling and low-volume end-use parts. Emergence of these technologies have led manufacturing organizations to reduce their product development cycle time and improve product quality and customization. Global acceptance and application of these technologies have put the manufacturing industries of Pakistan to face strong challenges in terms of high-quality product development processes.

The Product Development Centre (PDC) of NED University has been equipped with state-of-the-art equipment and tools that enable complete reverse engineering and additive manufacturing of products. The equipment available at PDC includes a Faro Arm and a Laser Scanner for reverse engineering of products and a Fused Deposition Modeling (FDM) machine alongwith a vacuum casting equipment to build parts directly from CAD data (i.e. tool-less manner). Different CAD packages are also used to complete the process of product development.

10.10. DIRECTORATE OF INDUSTRIAL LIAISON

The Directorate of Industrial Liaison (DIL) was established at NED University of Engineering & Technology in 1997. The prime objectives of DIL are to create and enhance the required University-industry Linkages in the form of various activities like activities like internships, study visits, final year projects and job placements.

DIL is since then involved in arranging internships opportunities in vacations for students in different organizations/ industries. Cooperative Education program a combination of classroom-based education with practical work experience. The conventional educational education system has a lack of correlation between the academia curriculum and industrial practices. Many employers train students before hiring as graduate trainee for a specific period of time before of time before they could start their jobs. Proper implementation of the 'Co-op' helps in bridging this gap. Students will be able to undergo industrial training during their studies thereby make a smoother education-to-work transition. As a part of Co-op education program, nominated students from the university on the basis of merit has completed 1st phase of internship successfully & will be doing internships in their (spring/fall) semester breaks from first year till the time of their graduation.

In addition, DIL arranges on perpetual basis study visits for the students and faculty at various industries and organizations to get the practical exposure of the industry. DIL also provides assistance to the organizations/ industries in

respect of Research and Expert engineering services through teaching faculty to address their technical problems.

DIL is engaged in collecting the topics of final year projects and arranging technical / practical help from the industries related with the projects. In a number of cases the industries have assigned projects to the University students with competent advisor from their organizations to help the students.

DIL encourages the prospective employers for on-campus hiring and facilitate them to conduct Presentations. Tests and interviews for recruitment. Many multi-national companies, some overseas employers, local business groups and small and medium Enterprises (SME) are availing such facilities on need basis. DIL has explored new ways to minimize the gap between by academia and industry by developing LinkedIn page to facilitate the students by creating a bridge between university with various companies / industries. This online platform will be helpful for both professional networking and career developmentthat allows job seekers to post their CVs and employers to post jobs. DIL also shares Graduate Directories with employers, arranging career fairs and pre-employment orientation programs and online faculty wise in-house / online career counseling session that meets the need of the diverse groups university students by providing, engaging their communication and presentation skills according to their prospective career.

To foster and promote the engineering profession, the Directorate of Industrial liaison represents NED on the Standing Committee on Science Technology of the Federation of Pakistan Chamber of Commerce & Industry (FPCCI) and the Think Tank Committee of the Institution of Engineers Pakistan (IEP).

DIL has also signed Memorandum of Understanding with various Industries organizations, Purpose of these MoU's is to create a long term framework of collaboration, cooperation and development of strong linkage between industry and NED on training, consultancy, research and development or any other activity which is in the interest of both 'Parties'. The industrial collaboration and linkage would provide opportunity to students and faculty of NED for training, consultancy, R&D and exposure of professional practices while industry would be benefited in resolving their technical / managerial issues through local solutions. The collaboration would bring positive impact on environment and society.

10.11 OFFICE OF RESEARCH, INNOVATION AND COMMERCIALIZATION (ORIC)

The Office of Research, Innovation and Commercialization (ORIC) at NED University was established with an aim to provide strategic vision and operational support to the University's research activities. From its inception, ORIC is committed to play an active role in facilitating the University's research and encourage the faculty and students to contribute and share in promoting goal-oriented research

activities. ORIC also aims to act as a catalyst for the transformation of knowledge towards invention and innovation and its subsequent commercialization leading to a positive impact on the welfare and well-being of our nation.

10.11.1 Objectives

Since its inception, ORIC has adopted its mandate to enhance the environment for all research commercialization and innovation activities: Following are the core objectives of ORIC:
1. Developing the university's strategic research directions and policies
2. Increasing and diversifying research funding
3. Improving integration of research and education at all levels
4. Strengthening university-industry relationships
5. Promoting entrepreneurship and technology commercialization
6. Protecting University's intellectual property

10.11.2 Initiatives and Activities

In pursuance of the Vice Chancellor's directives for the management of research initiatives and programs, ORIC has worked to re-enforce the existing research and development activities at NED University. Many activities were planned and successfully executed for sustaining and improving the research, innovation and commercialization having an impact for the improvement of areas concerning economic, industrial and academic development and their accelerated advancements for achieving the national objectives. Some of these activities are outlined below:

10.11.3 Organizational Support

In order to maintain an environment conducive for the generation of knowledge and to provide recognition to individual inventors, encouraging the development and dissemination of useful inventions to society, ORIC has prepared drafts of University's Intellectual Property Policy and Collaborative Research Policy. Besides, ORIC has also developed a comprehensive NED-Research Eco System draft which presents a holistic overview of the NEDUET research and innovation activities and provides a guideline for technology development and its subsequent commercialization.

10.11.4 Lab Commercialization

For the commercialization of the laboratory facilities available within NED University, ORIC has launched a Lab Commercialization Program. Under this program ORIC is closely working research labs across the university such as High-Performance Computing Center, Research Center for Artificial Intelligence RCAI, 3D Printing Facility Lab. ORIC has also recently commercialized Scanning Electron Microscope for service provision to industry and students for research purposes.

1) National Center for Artificial Intelligence (NCAI)
2) National Center for Robotics and Automation (NCRA)
3) National Center for Cyber Security (NCCS)
4) National Center for Big Data and Cloud Computing (NCBC)

BIC has been selected in top 5 across the Universities/ Institutes of the country to be the part of National Idea Lab.

10.11.5 Entrepreneurship Development

NED Entrepreneurship Society is operating under the umbrella of ORIC as a student wing that is dedicated to discover, engage and foster creativity and to bring up true entrepreneurial leaders from the university. Several activities took place in the previous year fueling of the entrepreneurial eco system to fully permeate our campus. A renowned campaign "The undiscovered entrepreneurs of NED University" brought NED's silent entrepreneurs into limelight. "From Silicon Valley to NED University", a talk was given by Mr. Idrees Kothari, an NEDian and serial entrepreneur from Silicon Valley. DICE Virtual Innovation Competition is being organized for the last two years in collaboration with DICE Foundation, USA. Various promising projects came up during this event which is now in the process of development and commercialization. TEDx NED University was organized on the themes of capacity building of young innovators and entrepreneurship for Engineers with PEC in 2021 and several workshops and trainings organized within the same lines for the entrepreneurial Development.

10.11.6 Workshops & Training

ORIC organizes several courses and trainings for the students and faculty members. ORIC with its collaborative partners INJAZ Pakistan offered Entrepreneurial Masters classes. ORIC also hosted Unilever Foundry for students offering them opportunities to partner with Unilever brands and functions and help them solve some exciting challenges. Dr. Umar Saif gave a lecture on "Role of Technology in Improving Governance & Entrepreneurial Landscape of Pakistan" and a notable NED's alumni Safwan Shah gave a lecture on Entrepreneurship and explored principles and methods for initiating an entrepreneurial venture. To prepare young engineers with the time management skills, ORIC have been organizing workshops by Time Lenders to improve general skills of organizational behavior. Several workshops and courses are also planned for this year.

10.11.7 Industry Linkages

It is a strong belief of ORIC that Industry-University collaboration can be mutually beneficial by combining the best academic thinking with the expertise of industry. There is a strong intent in the NED faculty and students to participate extensively in collaborative research programs with the industries. In order to establish and strengthen University-Industry collaborations to stimulate industrial research, ORIC has been engaged with different industries, organization and companies bringing projects in the university as per the industry needs for locally manufactured R&D solution and offering students with project apprenticeship.

10.11.8 Business & Technology Incubation

To enhance innovative and entrepreneurial prowess of young graduates and to accelerate and encourage the successful development of entrepreneurial companies, ORIC has established a Business Incubation Center by the name of CINETIC - Center of Innovation, Entrepreneurship, Technology Incubation & Commercialization. Almost 8 startups graduated in the previous year and 11 startups and 6 campus companies operating currently at CINETIC. First batch has been successfully graduated while second batch of startups are in the middle of their process. This strategic step is aimed to facilitate new breed of young entrepreneurs to ensure their participation in the positive economic activities through pursuing startup companies. In addition to generating a higher value addition for the nation's economy, this step will help addressing the rising trends of unemployment and its threat to political stability, social unity and economic growth of our nation.

CINETIC provides its startup incubates with infrastructural support that includes office space, PCs, internet, telephone services apart from the basic printing, scanning and photocopier services. It also provides great networking opportunities, means to the access of financers and lab access services. Excessive mentoring from the board of advisors on matters relating finance, marketing, legal and related matters are the part of the incubation program.

Upon realization of importance of protecting Intellectual Property rights not only for researchers but also for startups, ORIC has its own IP Office that provides consultancy to students and faculty in protect and processing their ideas and research legally.

10.11.9 Campus Companies

Campus Companies is an initiative under ORIC that enables students to operate and establish their businesses in the boundaries of NED University, whilst providing services and products on-campus. In this regard, Cycle Yaari has been operating as an on-campus venture that provides smart and green transportation solution in the premises of NED University in the form of cycles. Open Mic, is another social venture that aims at fostering the culture of public dialogue and social inclusion amongst engineers. Book Cafe is an online bookstore also function as a novel reading library based out of CINETIC building, Students can buy books or take novels on rent. DIYNED Club and Being Student are recent campus companies operating vibrantly adding value to the student life at the campus.

NED UNIVERSITY
OF ENGINEERING & TECHNOLOGY

KARACHI
1921-2021

UNDERGRADUATE PROSPECTUS
2022

10.11.10 Maker Studio

To provide a platform for thinkers and creators and to facilitate collaboration and sharing of ideas across boundaries of disciplines, ORIC has launched Maker Studio. The initiative aims at creating an environment that fosters creative exploration of ideas. Inspired by MIT's Fab Labs, Maker Studio enables multidisciplinary learning and development for students and faculty alike. The facility is available in the ground floor, CINETIC Building.

10.11.11 Research Internship Program

This is a selective program that provides the interns with the opportunity to work on a research project with NED's leading faculty and researchers in various engineering research domains as well as social sciences.

ORIC seeks outstanding a`pplications for the Research Internship Program in early start of the semester. The student's research interests and competencies are matched with the faculty's research internee need. The program is for a 100 days long period by the end of which ORIC Research Internship experience certificate is awarded to the accomplished internees as well as the supervisors.

10.12 DIRECTORATE OF UNIVERSITY ADVANCEMENT & FINANCIAL ASSISTANCE

Directorate of University Advancement & Financial Assistance was established at NED University of Engineering & Technology in May 2013. This Directorate is housed in Old VC Office (Second Floor). The basic objectives of establishing this Directorate were to:

- Achieve financial stability through fund raising
- Strengthen University Advancement Programme
- Strengthen the quality of academic programme
- Increase and enhance the visibility and awareness of the University to the community at large and to all stakeholders

In addition to above, the UA & FA seeks to help the students, faculty, staff, alumni and friends of the University to have pride and satisfaction in having connections to the University – today, tomorrow and in fact for lifetime.

10.13 MEDICAL DEPARTMENT

Medical Department is located next to Humanities Department of this University. It is administered by Principal Medical Officer, accompanied by a Senior Medical Officer. A Male Medical Officer and a Lady Medical Officer are also performing their duties at Main Campus. Paramedical services are also being provided by one male and two female nurses in the Medical department.

A colony resident qualified female nurse and ambulance service 24/7 are available for students residing in hostels. Two peripheral medical sub centres are located at LEJ City Campuses. Paramedical coverage is available at both campuses.

There are numerous diagnostics & therapeutic modalities available in Medical Department. Emergency / routine Outpatient Department Service (OPD), Pathological, Radiological and Electrocardiographic tests as well as ambulance facilities are available, These services are free of charges for students.

Similarly, therapeutic support in the form of Airway, Breathing and Circulatory (ABC) assistance as well as Outpatient facilities are available at peripheral Medical Sub Centres, i.e. City and LEJ Campus.

10.14 STUDENT AFFAIRS DEPARTMENT

The Department of Student Affairs (DSA) is situated at first floor of Students Facilitation Centre with the aim to facilitate the students throughout their stay at this academia through a wide range of activities, services and resources that are provided to students related with their academic, co-curricular and professional pursuits. DSA offers following services to the students:

- Provides scholarships to the deserving students through Private Funded Donors, HEC and Ehsaas Scholarship, Government Funded Scholarship, etc as mentioned in Chapter 9.
- Student societies working under this department which organizes numerous activities and events as mentioned in chapter 11.
- Organizes various sports activities as mentioned at 10.15.4.
- Students are facilitated with bus passes on nominal charges as well as with concession on travelling fare for train and plane.
- Eight Canteens, six Photostat shops and one stationary shop are functioning under the supervision of this department to provide hygienic and quality food, photocopies and general stationary items on reasonable rates.
- Girls Common Room facilities (GCR) are maintained and furnished with necessary comfort for female students.
- DSA issues Clearance Certificate to outgoing students, and also facilitates the students by attesting academic documents of the students for PEC Registration and Higher Studies.

10.15 OTHER STUDENTS FACILITIES

10.15.1 Duty Society

The Society gives interest free loans to the students in need of financial help. The terms of such loans and application forms may be obtained from the Secretary of the Society..

10.15.2 Plain Paper Copiers

Copies of documents can be obtained from PPC at nominal cost.

10.15.3 NED Stationery Shop

There is a NED Stationary Store on the Campus for meeting the general stationary requirements of the students. It works on a no-profit basis under the supervision of Department of Students Affairs via tender process from concerned department of this University.

10.15.4 Sports Facilities

Sports Section was established at NED University in 1978, that is functioning under the Control of Students' Affairs Department. The facilities provided by the section are:

- Boys' Gymnasium
- Girls' Gymnasium (with Fitness Centre)
- Boys' Fitness Centre
- Squash Complex
- Out Door Basketball Courts
- Tennis Court
- Cricket Ground (with Turf & Fled Light)
- Synthetic Football Ground
- International Standard Synthetic Athletic Track

The Sports Section also organizes NED Interdepartmental Games and Inter Faculty Games every year for the Student of NED University, while, NED University teams participate in Intervarsity Championships that are scheduled under auspices of Higher Education Commission, Islamabad i.e. (Badminton, Basketball, Cricket, Table Tennis, Football, Volleyball, Squash & etc.).

10.15.5 Hostel Facilities

The University has following residential Hostels for Boys / Girls situated adjacent to the Main Campus:

1. Muhammad Bin Qasim Hostel I & II and one Hostel for girls situated adjacent to the Staff Colony in Main Campus with the capacity of 35 Dormitory rooms and 20 cubicle rooms in MBQ-I Hostel and 72 Dormitory rooms and 48 Cubicle rooms in MQB-II Hostel whereas 20 dormitory rooms are in Girls Hostel.
2. International Hostel with the capacity of 55 Dormitory Rooms.

The hostel has the following common facilities: Common Room, Prayer Hall, Warden's Office. The accommodation in the residential Hostels is mainly for non-residents of Karachi and is allocated on first come-first-serve basis.

Fresh entrant for accommodation in the Hostel is required to apply online submission of application for Hostel admission is NOT Guarantee for allotment in the Hostel. Resident students are required to comply with all conditions of residence as prescribed by the University.

10.15.6 Boys' Common Room

The Boys' Common Room is provided with the facilities of indoor games, telephone and necessary reading material.

10.15.7 Girls' Common Room

A Girls' Common Room is also available. It is properly furnished with necessary comforts such as attached bath / powder room. A maid servant is also provided to the girls' common room.

10.15.8 Transport

Shuttle Bus transport may be provided by the University from convenient points. The places and charges are determined by the University and notified as such.

CHAPTER **11**

Students' Activity

11.1 STUDENTS' SOCIETIES

The extra and co-curricular activities of students function under following societies:

i)   Society for the promotion of Science, Engineering and Technology (SENTEC)
ii) Literary and Publication Society (LPS)
iii) Debating Society (DS)
iv) Member of Society of Arts and Intellectual Creativity (MOSAIC)
v)   Pakistan Society (PS)
vi) Green Society (GS)
vii) Girls Affairs Society (GIFT)
viii) NED Photography Society (NPS)
ix) NED SMS Alert (NSA)
X)   The NEDians Forum Society (TNF)

Each society is supervised by a teacher as adviser. In addition, University sports are managed through Manager Physical Education.

11.2 STUDENT CHAPTERS OF PROFESSIONAL BODIES

Student chapters of following Professional Bodies are also established which organise events throughout the year:

i)   American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE)
ii)   American Society of Mechanical Engineers (ASME)
iii) Society of Manufacturing Engineers (SME)
iv)   Society of Petroleum Engineers (SPE)
v)   American Concrete Society (NED University Chapter)
vi)   Institute of Mechanical Engineers (IMechE)
vii) NED Materials Society (NMS)
viii) Metallurgical Engineering Society (MES)
ix)   Society for Chemical Engineering (SCHEME)
x)   Society of Polymer & Petrochemical Engineers (SPPE)

CHAPTER **12**

Discipline

12.1 GENERAL RULES

i) All students of the University shall conform to the Rules and Regulations of the University and are under overall disciplinary control of the Vice-Chancellor.

ii) Breach of rules, misconduct, irregularity in time keeping, idleness, lack or un-reasonable progress in studies etc., will render a student liable to disciplinary action including expulsion or rustication from the University. In this regard, the Vice-Chancellor is the sole and final authority.

iii) Students who abstain themselves (for seven days at a stretch without notice) either from lectures or from laboratory work will not be allowed to resume their study until satisfactory explanation is submitted and accepted.

iv) A student desirous of leaving the University must apply in writing and such application must be countersigned by the student's parent or guardian. Admission once cancelled shall not be restored.

v) Students are strictly forbidden from forwarding applications, appeals or any other communication direct to any authority other than the Chairman of the Department or Vice-Chancellor and any contravention of this rule shall make the student liable for disciplinary action.

vi) Students may be permitted to form or carry on only such associations or clubs as are provided under the Rules. Such associations or clubs must be open for membership regardless of religion, community or political opinion. In no circumstances will any association, the object or membership of which is directly or indirectly sectarian, ethnic or political, be permitted. No member of the association or club can invite any outsider in University without prior permission in writing from the Vice-Chancellor.

vii) No functions are permitted to be held by the students in the University without prior permission in writing from the Vice-Chancellor.

viii) The following among others, shall constitute acts of indiscipline for which action may be taken against the student or students.

a) Involvement in any political/ ethnic/religious disputes within University premises.

b) Creating law and order situation in the University premises.

c) Threatening /pressurising Faculty Members and/or Officers of the University inside or outside the University premises.

d) Damaging or destroying University property.

e) Teasing or harassing or molesting of students inside or outside Campus especially so in those of the opposite sex.

f) Creating disturbances in Class Rooms/ Laboratories

g) Attempting to bring any external pressures for passing examinations, exemption from attendance or any other purpose.

NB: Indulgence in any of the above acts, can result in appropriate disciplinary action which may be rustication or expulsion from the University either for specified period or for good or fines up to the maximum of Rs.20,000/=

ix) Every student must be hanging their Identity Cards at the prominent place from where it can be visible all the time when they are in the premises.

No student will be admitted to the University unless he is in possession of the Identity Card. Duplicate Identity Card will be issued on a written request on the prescribed form on reasonable grounds, after payment of the prescribed fee.

x) Vice-Chancellor's decision in all matters shall be final.

12.2 APPEAL AGAINST CANCELLATION OF ADMISSION

Candidates who are rusticated from the University on account of submission of forged documents at the time of their admission in this University may file appeals against such orders with the Vice Chancellor of the University within 15 days from the date of Notification alongwith a fee of Rs. 500/- (refundable in case the appeal is upheld). This provision is applicable to all students studying in this University or affiliated colleges irrespective of their First Year Batches.

12.3 LEAVE OF ABSENCE

i) Under exceptional circumstances, students may apply for leave of absence to the Chairman of the Department who may sanction such leave for short periods but the grant of such leave will not be acceptable as a plea for not putting in 75% of the attendance which is a pre-requisite for being eligible to appear in the University examinations.

ii) No student is eligible to sit for the University Examination unless he/she has at least 75% attendance at the Courses, Laboratory and Practical classes.

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

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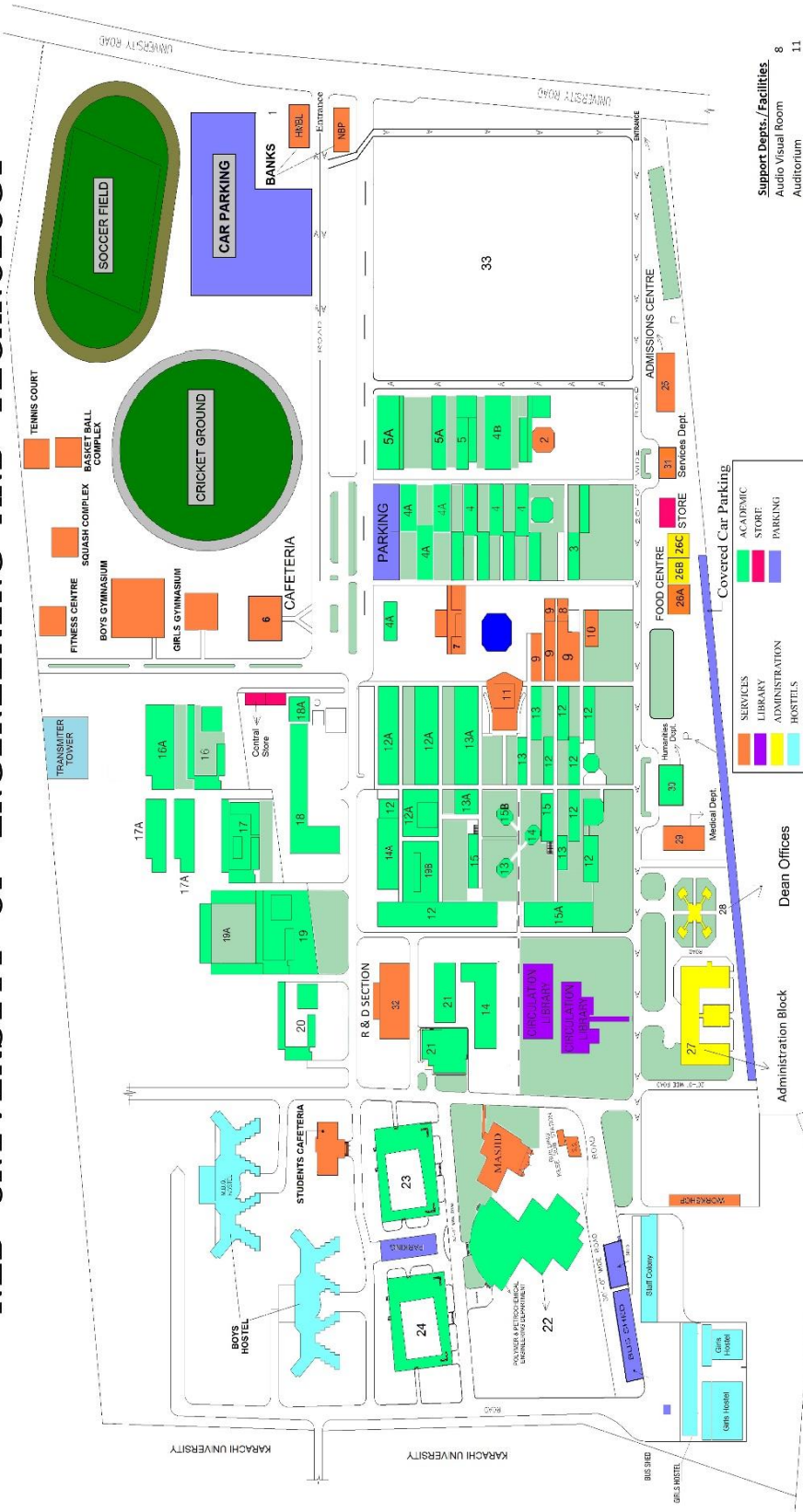
Support Depts./Facilities

Audio Visual Room	8
Auditorium	11
Banks	1
Cafeteria	6
Convocation Ground	33
Food Centre	26A
Students Affairs Department	26B
Director Industrial Liaison	26C
Girls Common Room	7
IT Department	9
Medical Dept.	29
R & D Section (IT Dept.)	32
Services Dept.	31
Staff Centre	10
Video Conferencing Hall	2

IMD Labs	14A			
MED Labs	12A			
PED Labs	16A			
Telecom Labs	19B			
Textile Labs	17A			

Laboratories.

Adv. Mat. Testing Lab.	4B
ATD Labs.	18A
CED Labs.	4A
CIS Labs.	15A
CSIT Labs.	5A
EED Labs	13A
Electronics Labs	19A

Mech. Engg. Dept.	12
Metallurgical Eng. Dept.	21
Petroleum Engg. Dept.	16
Physics Dept.	5
Polymer & Petrochemical Engg. Dept.	22
Humanities Dept.	17
Urban Engg. Dept.	3

Administrative Depts.

Administration Block	27
Admission Centre	25
Dean Offices	28

Academic Depts.

Automotive & Marine Engg. Dept.	18
Chemical Engg. Dept.	24
Chemistry Dept.	5
CIS Lecture Hall	15B

Civil Engg. Dept.	4
Comp. & Info. Sys. Engg. Dept.	15
Comp. Sc. & I.T Dept.	5
Elect. Engg. Dept.	13
Electronic Engg. Dept.	19
Environmental Engg. Dept.	20
Ind. & Mfg. Engg. Dept.	14
Materials Engg. Dept.	23
Mathematics Dept.	5

Covered Car Parking

- SERVICES
- LIBRARY
- ADMINISTRATION
- HOSTELS
- ACADEMIC
- STORE
- PARKING

Map labels: UNIVERSITY ROAD, SOCCER FIELD, CAR PARKING, BANKS, HBL, NBP, Entrance, CRICKET GROUND, TENNIS COURT, BASKET BALL COMPLEX, SQUASH COMPLEX, FITNESS CENTRE, BOYS GYMNASIUM, GIRLS GYMNASIUM, CAFETERIA, TRANSMITER TOWER, PARKING, Central Store, FOOD CENTRE, Services Dept., ADMISSIONS CENTRE, STORE, Humanities Dept., Medical Dept., Dean Offices, Administration Block, R & D SECTION, CIRCULATION LIBRARY, MASJID, STUDENTS CAFETERIA, BOYS HOSTEL, Staff Colony, Girls Hostel, WORKSHOP, POLYMER & PETROCHEMICAL ENGINEERING DEPARTMENT, BUS SHED, GIRLS HOSTEL, Abul Hassan Isphani Road, KARACHI UNIVERSITY
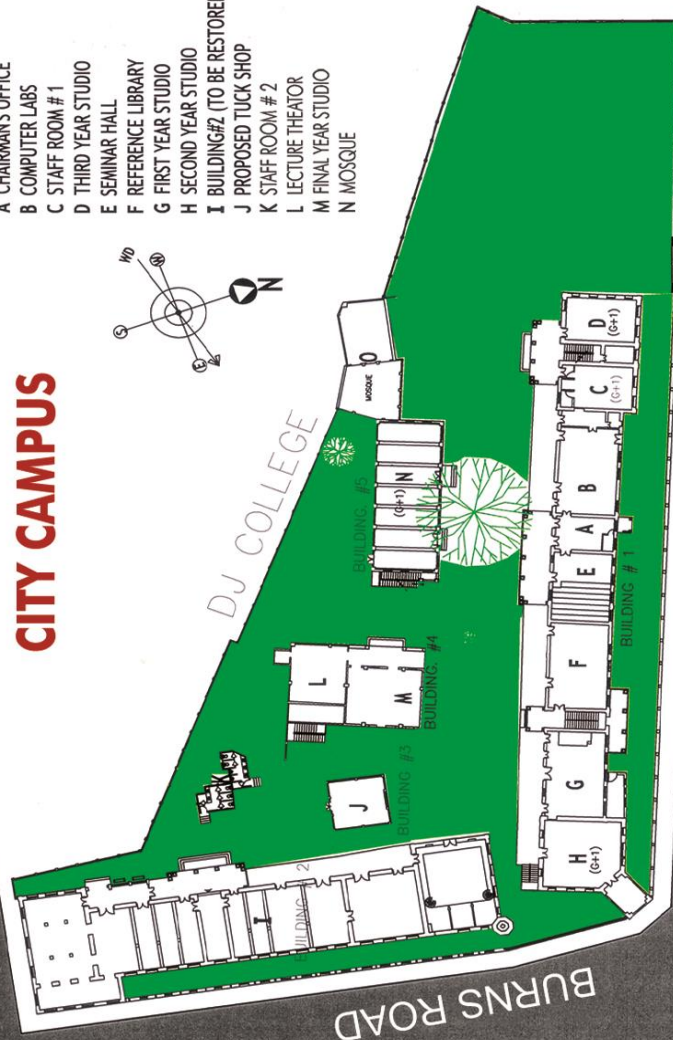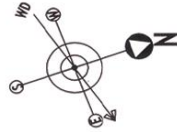
LEJ CAMPUS

LOCATION MAP OF NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY (LEJ CAMPUS) KARACHI

CITY CAMPUS

A CHAIRMAN'S OFFICE
B COMPUTER LABS
C STAFF ROOM # 1
D THIRD YEAR STUDIO
E SEMINAR HALL
F REFERENCE LIBRARY
G FIRST YEAR STUDIO
H SECOND YEAR STUDIO
I BUILDING#2 (TO BE RESTORED)
J PROPOSED TUCK SHOP
K STAFF ROOM # 2
L LECTURE THEATOR
M FINAL YEAR STUDIO
N MOSQUE

MOULANA DIN MUHAMMAD WAFAI ROAD

BURNS ROAD

DJ COLLEGE

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