Prospectus

2019

MSc Telecom Engineering

MSc Telecom Engineering Management
FACULTY

Engineering/Engineering Management

1) Dr. Shazia Zaheer
   Principal
   Institute of Communication Technologies

2) Dr Irfan Zafar
   HOD Academics
   PhD (IT), MSc in Digital Electronics, B.Sc Engg. (Electronics)

3) Dr Shahzada Alamgir khan
   Associate professor
   PhD Management Science & Engg, MSc Telecomm Management, M.Sc Electrical Engg, BSc Electrical Engg.

4) Nasir Majeed
   SM Certification
   M.Sc Electronics

5) Muhammad Kamran Zamurad Kayani
   SM T&D
   MBA, Certified HR / PQM/ HSE Professional

6) Javaid Usman
   Associate Professor
   M.Sc Mathematics, MBA

7) Akhtar Ali Khan
   Assistant Professor
INSTITUTE PROGRAMS

**M.Sc. Telecom Engineering Management**

In 1998, ICT started M.Sc Degree Program in Telecommunication Engineering Management with the collaboration and assistance of Institute National Des Telecommunication (INT) France. Now the program is being offered in affiliation with UET Peshawar. These admissions are being conducted for the 14th batch (Fall) of MS Telecommunication Engineering Management.

**M.Sc. Telecom Engineering**

The program is affiliated with UET Peshawar and now the 19th batch (Fall) is being admitted
Short Courses, CISCO and ORACLE Training Programs

Institute offers a number of short courses in areas of Telecommunication Information Technology, Management and Finance. It is continuously running its Cisco Academy and Oracle Academy with collaboration of CISCO and ORACLE Companies.

Facilities

The Institute has sophisticated and well-equipped academic and administrative facilities. It has the following high-tech laboratories with state-of-the-art equipment:
- Electronic and logic design
- Digital communication
- DSP / FPGA
- Optical fiber communication
- Radio frequency
- WLL
- Advanced networking
- SUN Solaris
- VOIP
- Wireless LAN
- Computer
- CISCO
- Oracle
- Workshop
- Digital switching exchange
- Next Generation Network (NGN)

All computers in the Institute are interconnected through a high speed Local Area Network, and connected to the Internet via dedicated Internet Link.

The peripheral facilities of ICT include experimental and testing telephone exchanges of the major telecom manufacturers including Alcatel.
Moreover, it also has a full-fledged research and training setup available for carrying out research in telecommunications and electronics. Most modern and latest teaching aids are available in the classrooms consisting:

- Audio/Visual systems
- Multimedia projectors and presenter
- Handouts/Lecture Notes

**ICT Library**

The ICT Library contains a rich collection of over 7000 books from major international publishers on Computer Science, Data Communication, Networking, Electronics, Telecommunications, Digital Signal Processing, ISDN, Wireless Communications, Management, and related subjects. CDs, Audio Visual Materials, and books in electronic format are also available. The Library also subscribes for a number of magazines and journals on Computer Science, Communication Systems and Management to update the student knowledge on the current developments. A wide variety of reference material is being continuously added to support research and development activities.

**POST GRADUATE PROGRAMS STRUCTURE**

To complete the post graduate program, students have to complete 33 Credit Hours of course work and a thesis worth 6 credit hours

**M.Sc. TELECOM ENGINEERING MANAGEMENT**

The Masters of Telecommunication Engineering Program is specially tailored keeping in view the innovations in the telecom sector, the global trends and challenges of the new millennium. The program is designed to produce top quality Telecom Management professionals capable of meeting the challenges of the current fast changing telecom environment.
Courses

Three Semesters Courses

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>1. Organizational behavior &amp; Human Resources</td>
<td>03</td>
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<tr>
<td>2. Financial and cost accounting</td>
<td>03</td>
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<tr>
<td>3. Switching and transmission technologies</td>
<td>03</td>
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<tr>
<td>4. Strategic Management for Telcos</td>
<td>03</td>
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<td>5. Project and Quality Management</td>
<td>03</td>
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<td>6. Marketing Strategies for Telcos</td>
<td>03</td>
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<tr>
<td>7. Traffic Engineering</td>
<td>03</td>
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<tr>
<td>8. Architecture and Interconnection of data networks</td>
<td>03</td>
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<td>9. Telecom law, Regulation and Policy</td>
<td>03</td>
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<tr>
<td>10. Research Methodologies</td>
<td>03</td>
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<tr>
<td>11. Managerial Economics</td>
<td>03</td>
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<tr>
<td>12. Thesis</td>
<td>06</td>
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M.Sc. TELECOM ENGINEERING
This program is envisaged to provide an optimal balance between academic and professional contents, comprehensive coverage of Telecommunication theories and techniques, as well as the latest telecommunication technologies. The subjects and their credits are given below. All the subjects are supported by extensive laboratory and research work.

Courses

Three Semesters Courses

<table>
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<tr>
<td>1. Advance Digital Communication System</td>
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<tr>
<td>2. Advance Digital Signal Processing</td>
<td>03</td>
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<tr>
<td>3. Telecomm. Switching Principles/NGN</td>
<td>03</td>
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<tr>
<td>4. Random Signal Processes</td>
<td>03</td>
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<tr>
<td>5. Fiber Optic Communication</td>
<td>03</td>
</tr>
</tbody>
</table>
6. Broadband Networks 03
7. Traffic Engineering 03
8. Wireless Communication 03
9. Research Methodology 03
10. VOIP 03
11. Network Security 03
10. Thesis 06

Fee Structure

For Local Students
Admission Fee: Rs.10,000/- (Once, at the time of admission)
Security Fee: Rs. 10,000/- (Refundable, to be deposited at the time of admission)
Library fund: Rs.5000/- (For full session)
Exam Fee: Rs.1000/- per semester
Tuition Fee: Rs. 4500/- Per Credit hour

For Foreign Students
Admission Fee: US $ 200/- (Once, at the time of admission)
Security Fee: US $ 200/- (Refundable, to be deposited at the time of admission)
Library fund: US $ 100/- (For full session)
Examination Fee: US $ 25 / - per semester
Tuition Fee: US Dollars 100/ - Per Credit hour

Mode of Payment
- All payments will be made through Bank Draft/Pay Order in the name of “Senior Manager Finance Central Payments, PTCL Headquarters, Islamabad”.
- The Bank Draft / Pay Order shall be submitted to Manager Finance, ICT Islamabad.
- Tuition Fee of each semester will be paid in advance. However, late fee will be charged at prescribed rates in case of submission of fee after the announced dates
- Those who will not pay their dues/ tuition fee before final examination of respective semester will not be allowed to appear in the examinations.

Selection Criteria
Selection will be made after qualifying departmental subject test and ETEA test only. (Eligibility criteria mentioned in advertisement)

RULES & REGULATIONS

Rules
Institute of Communication Technologies is affiliated with UET Peshawar. The Master of Science (MSc Telecom Engg /MSc Telecom Engineering Management) at Institute of Communication Technologies is affiliated with UET, PESHAWAR has the following two alternative degree Programs during morning & evening hours. A total of 33 credit hours (including 24 C.Hr course work + 3 C.Hr research methodology course + 6 C. Hr research Thesis) are required to complete the M.Sc Degree Program.
For award of M.Sc. degree, at least one paper should be published from M.Sc research thesis in a refereed national/ international conference or journal.

Minimum Duration of MSc Program
The minimum duration of M.Sc. /Master Degree program will be 13 months for a full time morning course and 18 months for evening program including time for thesis preparation and defense.

Time Limit for completion of Program
All requirements for the Master Degree, including all course work on the students study plan and thesis (including defense and oral exam) should be completed within three years for morning and four years for evening programs. Time limit begins from the date of commencement of class in ICT. If a student fails to complete the required work within the requisite period, he will not be eligible for the Degree.

Regulations
1.1 Admission

a) Master degree program will be open, twice a year to candidates who have the potential for success in advanced study.
b) Candidates seeking admissions to Master Degree Program must have a Bachelor’s Degree in an Engineering discipline from an Institution accredited by Pakistan Engineering Council (PEC).

c) Candidates seeking admission must have to pass ETEA test and Departmental Subject Test, organized by Institute of Communication Technologies (ICT).

d) Applications on the prescribed form shall be made to the Registrar, before the last date mentioned in the advertisement in the newspapers, after which no application shall be entertained.

e) The merit list for each specialization will be determined by the Entry test.

f) On the recommendations of the Admission Committee, the Principal ICT shall approve the names of the candidates selected for admission.

g) A candidate’s admission shall be confirmed after he has deposited the prescribed fees with the Institute within the period specified for this purpose.

h) No student will be admitted after Zero semester (one month) of the start of classes.

i) The Registrar ICT, shall forward to the Deputy Registrar/Deputy Controller (Exams) the particulars of each student admitted for the first time, within a period of 15 days of the completion of admission. The Registrar shall submit the case of registration of each student to UET Peshawar if not already registered with the University of Engineering & Technology. The requisite documents for registration would be completed and submitted by the students within the scheduled period.

j) Admission of any student is liable to be cancelled if his academic progress or conduct at any stage is found unsatisfactory.

k) Students registered for Master Program shall not be allowed to participate in Student Union Elections.

l) The facility of Hostel accommodation for Master Students shall be provided on need basis subject to availability. Rules for Hostel are separately explained in detail.

m) If any of the particulars given by the candidate in his application for admission are found incorrect or facts suppressed, he/she shall be refused admission. If any incorrect or false statement or suppression of facts is detected after a candidate has been granted admission, his/her admission shall be cancelled and he/she shall be expelled from the Institute with the approval of Principal ICT, at any time during the course of his/her studies.

n) A candidate who is already a confide full time student in some other institution is ineligible to apply for admission in this Institute. If a case is detected where a
student enrolled in this Institute, is also a student of some other University/Institution, his/her admission in this Institute shall be cancelled. o) No quota is reserved for employees of ICT/PTCL employees, however in morning session PTCL officers/officials are preferred.

1.1.1 Admission of Foreign Students
a) The applications of foreign students must be routed through Government of Pakistan, Ministry of Finance, Revenue and Economic Affairs (Economic Affairs and Statistics Division), Islamabad. All applications of this category should be submitted, along with their application forms.

b) A certificate showing proficiency in English language e.g. TOEFL with minimum score of 200 or IELTS certificate of British Council with a minimum score of 5.5.
c) A Financial statement confirming the availability of funds for completing the Master Degree program.
d) Foreign Students seeking residential accommodation at the Institute Hostel may apply well in time.

1.2 Academic Course Coordinator

Any faculty member with at least Master in the relevant field of Engineering shall be appointed as Academic Course Coordinator. Each specialization of the Department concerned will have a postgraduate Advisor who will work under the direct Supervision of the Principal. The advisor will monitor the implementation of the postgraduate program in his department and maintain liaison with the BOASAR Secretariat. His duties will include:-
a) Providing guidance to students on rule and regulations of the Master Degree program.
b) Providing guidance to students on selection of research projects.
c) Organizing field trips of Master students.
d) Promoting links with industries and other outside organizations.
e) Promoting faculty research.
f) Organization extension lecturers, seminars, workshop and training courses in the departments.
g) Supervising reference library in the department.
h) Coordinating with the Academic Course Coordinator of Master. Students on various issues such as registration, selection of courses and general program of the study.

**MISCELLANEOUS**

**Hostel & Transport**
Limited hostel accommodation is available for students coming from outside of Rawalpindi/Islamabad. ICT will help students seeking accommodation in the city at various private hostels.

**Scholarships**

Two scholarships are offered only to private students who got the first and second position (GPA must be above 3) in any semester then he/she will eligible for merit scholarship which is 50% discount of tuition fee for next semester.
HOW TO REACH

Institute of Communication Technologies (ICT)
Plot # 31-33, Sector H-9/4, Islamabad.
Tel #051-4865715