# **Scholarship & Waiver Policy**

For CGPA 3.0 in Bachelor/Hons./ equivalent degrees

> For CGPA 3.5 in Bachelor/Hons./ equivalent degrees

- 15%
- & Sufi Mizanur Rahman Foundation Scholarship Fund (For meritorious students suffering from financial hardship)
- ✓ Ratnagarbha Tahmina Rahman Scholarship Fund (Based on semester results)
- ∀ Hon'ble Chairman/BoT/Vice Chancellor's Scholarship
- \* Terms and conditions apply

# Specific Job Fields

The expanded fields of Electronic and Communication Engineering (ECE) play vital roles in the progress of the country. ECE graduates will be able to seek out the opportunities in the fields of:

- Network design and operation (public and private telecom operators)
- Design of network for financial services applications (banks, financial services center building societies etc.)
- Technical marketing including network design solution
- Telecommunications research organizations
- Telecommunications Consultancy
- Telecommunications software development
- Computer & Software Engineering
- Electronics Industries
- Telecommunication Sectors
- Mobile Companies
- Satellite Engineering
- TV Broadcasting
- Electronics Industries
- IT Sectors and Banking
- Microcontrollers and Embedded Systems
- Biomedical Engineering
- Industrial Automation
- Research Organizations

















**25**%

For

Alumni

75%

For Physically

Challenged

Students

20%

Spouses

Up to

100%

**Scholarships** 

20%

For Siblings

# UNIVERSITY OF INFORMATION TECHNOLOGY & SCIENCES

Permanent Campus: Holding 190, Road 5, Block J, Baridhara, Maddha Nayanagar, Vatara, Dhaka-1212 **(S)** 09678-008487 **(B)** 01713-487709, 01939-915209, 01914-240649, 01844-043870





# **Telecommunication Engineering**

MS. Tel. Engg.







Date: July 20, 2009



## M.Sc. in Telecommunication Engineering

Master of Science in Telecommunication Engineering (MS .Tel .Engg ) was introduced and approved by the UGC in 2005 in the Department of ECE under the Faculty of Science and Engineering (FSE). The objective of this 36+ credit hour MS. Tel. Engg. program is to provide graduate Engineers with discipline-specific knowledge and technical skills in advanced telecommunication engineering, to develop them to become efficient and skilled engineers in communication engineering, telecommunications, networking, computers and information technology. The program is highly recommended for the students who wish to obtain technical as well as engineering management positions in the telecommunication industries.

#### Innovative & Research Based Curriculum

The curriculum is designed to train and enhance professional practice, advance technical and specialist skills, and provide an opportunity to put theory into practice with applied projects and research. The curriculum has been designed in close alignment with similar programs of the reputed and top ranked universities of USA, Canada and Australia.

## **Admission Requirement**

Students having Bachelor of Science (B.Sc.) degree in EEE/EE/ECE/ETE/IT/CS/CSE/related fields with minimum 2nd class or CGPA 2.0 or equivalent are eligible to apply for M. Sc. in Telecommunication Engineering program. Depending on the educational background, the duration of this program can be of (i) one-year with 36 credits or (ii) two-years with 60 credits. In case of two-years MS. Tel. Engg. program, the pre-requisite courses will be covered during 1st year of the program.

Curriculum Structure						
	One year MS. Tel. Engg. Program		Two years MS. Tel. Engg. Program			
Course Type	No. of Courses	Credits	No. of Courses	Credits		
Pre-requisite courses	-	_	6	18.0		
Core-courses	4	12.0	6	18.0		
Elective -courses	2	6.0	2	6.0		
Research based thesis	2	18.0	2	18.0		
	Total Credits = 36.0		Total Cre	dits = 60.0		

#### Expenditure

#### Admission Fees (One time)

Application Form 500 Admission Fee 10,000 Student Welfare 200 **Other Fees (Per Semester):** 5,000 Including Library Fee, Laboratory Fee, Transport Fee and Co-curriculum Fee.

#### **Tuition Fees**

#### For one year program

Tuition Fee (per credit) 2,600
Total Tuition Fees (36 Credits) 93,600 **Total Program Cost** 1,14,300

# For two years program

Tuition Fee (per credit) 2,600
Total Tuition Fees (60 Credits) 1,56,000
Total Program Cost 1,86,700

#### List of Courses

# **Pre-requisite courses**

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ECE 530	Electronic Devices and Circuits
ECE 531	Digital Electronics
ECE 532	Electrical Measurements and Instrumentation
ECE 533	Electromagnetic Fields and Waves
ECE 534	Computer Organization and Architecture
ECE 535	Antennas and Propagation
ECE 536	Basic Communication Theory
ECE 537	Digital Signal Processing
ECE 538	Micro-Processor, Micro-Controller and Assembly Language Programming
ECE 539	Operating Systems

#### Core Courses

COICC	Core courses		
ECE 540	Telecommunication Networks		
ECE 541	Signals and Systems		
ECE 542	Advanced Telecommunication Engineering		
ECE 543	Tele-traffic Engineering		
ECE 544	Data Communications		
ECE 545	Digital Modulation Technique		

#### **Elective Courses**

ECE 560	Microwave Theory and Techniques
ECE 561	Digital Transmission Technologies
ECE 562	Cellular Mobile Systems
ECE 563	Network Planning
ECE 564	Digital Communications
ECE 565	Multimedia Communication Systems
ECE 566	Cellular Network Planning
ECE 567	Information and Coding Theory
ECE 568	Switching Systems
ECE 569	Antenna Engineering
ECE 570	Optical Fiber Communication
ECE 571	Broadband networks
ECE 572	Video Communication
ECE 573	Internet Engineering
ECE 574	Satellite Communications

#### **Research Based Thesis**

ECE 601	Thesis (Part- I)
ECE 602	Thesis (Part- II)

#### **Research Based Thesis**

The Research Based Thesis may last for a semester (six-months) or slightly longer for a one-year based MS. Tel. Engg. program or two semesters (twelve months) or slightly longer for two-year based MS. Tel. Engg. degree. It is highly desirable that the research-based thesis should contain publishable material in a peer-reviewed international journal (Internationally peer-reviewed journals and conferences). It is expected that a student should produce publishable content that can be published in at least 01 (one) article in international journal or 03 (three) conference papers in the country or abroad.

# Laboratory Resources in the Department of ECE

Department of ECE is highly equipped with all modernized equipment for physics, chemistry, electronics, electrical, machine, instrumentation, computation, computer, analog and digital communication, telecommunication, VLSI, optical fiber, microprocessor, simulation laboratories etc.

# **Faculty Information**

Department of ECE is committed to excel in both undergraduate and post-graduate education by offering a quality education with the goal of producing extraordinary engineers, researchers and scholarly outcomes in furthering its mission to improve the future of the country.

The Department of ECE has highly qualified faculty members with higher degrees obtained from around the world. The faculty members in the department are individuals who are deep researchers, qualified writers and critics of contemporary textbooks in the area they teach. Both the faculty members as well as students of the department have published numerous peer-reviewed articles in peer-reviewed journals like IEEE, Springer, Elsevier etc.