

The Department of Electronic & Telecommunication Engineering

The Department of Electronic & Telecommunication Engineering established in 1969, is unique in offering a B.Sc. Engineering degree in Sri Lanka in this specialization. As such, entry to the department is highly competitive. It is the mission of the department to develop in its students, the knowledge and the engineering skills necessary to be highly sought-after in, and to keep pace with, the rapidly advancing Electronics and Telecommunications industry.

The Department offers **B.Sc. Engineering** course with an intake of 100 students. This course aims at providing the students with a good grounding in Electronics and Telecommunications principles, applications and systems design. Of the students entering the University of Moratuwa, those having the best performance at the first year enter the Electronics & Telecommunications field. Not surprisingly therefore, our graduates are highly valued by the telecommunications, industrial electronic and software industries, both in Sri Lanka as well as overseas.

The postgraduate courses are intended to fill the critical need of providing up-to-date technical knowledge to practicing engineers.

Academic staff of the department have had specialized training abroad in fields of study such as Optoelectronics, Physical Electronics, Medical and Industrial Electronics, Optical Communications, Digital Communications, VLSI design, Signal Processing and Electromagnetics. The Department also carries out **postgraduate degree programs by research** in these specialized areas.

Short-term courses are also conducted by the department for Continuing Professional Development (CPD) of engineers and other technical personnel in the field. In addition, the academic staff are often consulted for solutions of problems faced by relevant industries, and present their research at seminars and conferences of professional organizations in their fields of interest.

The Department has recently undergone a significant expansion in its facilities through grants from the Government of Sri Lanka and the Japan International Cooperation Agency (JICA). The facilities provided by these grants included a building with fully-equipped laboratories worth over Rs. 500 Million. These laboratories are well equipped with modern instruments, teaching aids and other equipment necessary to conduct practical classes as well as design-oriented project work and research.

It is envisaged that the Department will, through continuous improvements and expansions to its programs of study, in the near future, be able to produce a sufficient number of high-quality engineers to enable Sri Lanka to enjoy the benefits of advanced technology. It is also expected that, the development of much-needed research and development capacity within the local electronics and telecommunications industries will result from these efforts.

Postgraduate Diploma / Master of Science in Telecommunications

This course, in its present form, commenced in February 2005 and has been developed specifically to target engineers who wish to build and advance their careers in this most fast-changing and challenging field of study. This is a two-year part-time degree program. The first year consists of lectures conducted on Fridays and Saturdays. The year consists of 3 terms, and candidates are expected to earn the required number of credits from the core and optional course modules during this period.

Those who successfully complete the exams and other course work will be eligible for the award of the **Postgraduate Diploma in Telecommunications**. The **Master of Science** degree requires the completion of a research project during the second year, after obtaining a minimum Grade Point Average (GPA) of 3.0 in the PG Diploma. Candidates may also complete the M.Sc. in one year on a full-time basis, where the first year and the second year work will be carried out simultaneously.

Curriculum and Evaluation

Total credits required for the PG Diploma is 40, 28 from compulsory modules and 12 from optional modules listed below.

Module Code	Title	Credits
<i>Core Modules</i>		
EN5250	Telecommunications Networks	3
EN5350	Data Communications & Networking	3
EN5251	Random Processes and Signal Analysis	3
EN5252	Tele-traffic Engineering	3
EN5253	Digital Communications	3
EN5300	Cellular Mobile Systems	3
EN5909	Research Methods	1
EN5901	Project Stage A	2
EN5750	Special Topics in Communications	2
EN5301	Wireless Communications and Networks	3
EN5902	Project: Stage B	2
EN5910	Research Project	5
<i>Optional Modules</i>		
EN5254	Information Theory	3
EN5255	Error Control Coding	3
EN5450	Digital Signal Processing	3
EN5351	Internet Technologies	3
EN5352	Multimedia Networks	3
EN5400	Telecom. Switching & Transmission	3
EN5302	Mobile Computing	3
EN5256	Microwave Engineering	3
EN5258	Advances in Antenna Design	3
EN5401	Optical Communications	3
EN5451	Computer Vision & Image Processing	3
EN5402	Advanced Satellite Communications	3
EN5403	Advanced Radar & Navigation Systems	3
EN5257	Network Management and Planning	3

Grades for course modules are awarded based on continuous assessment assignments and end-of-term examinations, according to Senate-approved guidelines.

Grade Points are assigned as follows for the purpose of calculating the GPA.

Grade	Grade Points	Evaluation
A+	4.2	
A	4.0	Excellent
A-	3.7	
B+	3.3	
B	3.0	Good
B-	2.7	
C+	2.3	Pass
I	0.0	Incomplete
F	0.0	Fail
N	0.0	Academic Concession

The GPA is calculated according to the formula:

$$\text{GPA} = \frac{\sum (\text{GRADEPOINTS} * \text{CREDITS})}{\sum \text{CREDITS}}$$

Eligibility

1. B.Sc. Engineering degree of University of Moratuwa, in a relevant field as judged by the Faculty and approved by the Senate,
OR
2. Any other Engineering degree in a relevant field and equivalent to (1) as judged by the Faculty, and approved by the Senate,
OR
3. A professional qualification of a recognized professional institute in a relevant field AND a minimum of one year of appropriate experience after obtaining such qualification: the acceptability of the professional qualification of the candidate, the recognition of the institute and the relevancy of the field for this purpose shall be judged by the Faculty and approved by the Senate.

Course Fees

Application fee		Rs. 1000.00*
PG Diploma Fee - 1 st Year		Rs. 150,000.00
M.Sc. Research – 2 nd Year		Rs. 50,000.00
Total Course Fee		Rs. 200,000.00
Registration fee:	First Year	Rs. 1,000.00
	Second Year	Rs. 500.00
Examination fee:		Rs. 500.00
Library deposit (refundable)		Rs. 2,500.00

*May be paid by a pay-in voucher from Bank of Ceylon (Account No: 306836) in favour of PG Diploma/MSc Telecommunication 2011, University of Moratuwa or at the Shroff's counter at the University.

Scholarships maybe available for selected candidates on merit and need basis.

Application Procedure

Application forms and further details are available at <http://www.ent.mrt.ac.lk/pg>.

Applications should be sent to:

The Course Coordinator
PG Diploma/M.Sc. in Telecommunications
Department of Electronic & Telecommunication Engineering
University of Moratuwa
Moratuwa

Closing Date for Applications is 10th November 2010.
Interviews for Short Listed Applicants will be held on 13th November 2010 – Morning Session

For more information please contact:

Dr Ajith Pasqual
Course coordinator
PG Diploma/M.Sc. in Telecommunications
Email: pasqual@ent.mrt.ac.lk
Tel: +(94)-11-2650634 – 6 ext. 3300 or 3321
Web: <http://www.ent.mrt.ac.lk/pg>



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P.G. Diploma / M. Sc. in Telecommunications 2011/12



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