STAFF MEMBERS:

The department of Electrical and Electronic Engineering has sixteen academic staff. Majority of the academic staff has a PhD and some are registered professional engineers. All the staff members are actively involved in research. Seven technical staff look after the four laboratories of the department. Most of our technical staff, have bachelor degrees relevant to their laboratory work.

Academic Staff Members:

Dr. R. T. F. Ah King
Dr. V. Bassoo
Dr. Y. Beeharry
Dr. Y. Bissessur
Dr. T. P Fowdur
Dr. M. A. Hosany
Dr. I. M. Jahmeerbacus
Mr. R. A. Jugurnauth
Mr. A. P. Murdan
Dr. V. Oree
Dr. B. Rajkumarsingh
Dr. Y. K. Ramgolam *(Head of Department)*
Mrs. R. Ramjug-Ballgobin
Dr. G. Ramsawock
Dr. S. Z. Sayed Hassen
Mr. H. Shamachurn

Technical Staff Members:

Mr. M. S. Beekaroo
Mr. P. S. Bhugawn
Mr. D. Cuppoor
Ms. K. Jhugursing
Mr. A. Muttea
Mr. A. Purahoo
Mr. N. Sujeebun

Contact details:

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Head of Department
Electrical and Electronic Engineering Department
Faculty of Engineering
University of Mauritius
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For more information, please visit our website at:
http://uom.ac.mu/foe/eee/

University of Mauritius
Faculty of Engineering

Department of
Electrical and Electronic Engineering
2020 - 2021

The Electrical Engineering Division was initially set up with the foundation of the School of Industrial Technology in 1968. In the early 1970s, the school started to offer a joint Diploma in Mechanical and Electrical Engineering to cater for the shortage of engineers in Mauritius and the growing demand for such professionals by the industry.

The B.Tech Electrical Engineering course was first offered in September 1976 followed by the conversion to BEng (Hons) Electrical Engineering in the mid-1990s. The Department now offers a number of undergraduate programmes to meet the requirements of the electrical, electronic and telecommunication industries.
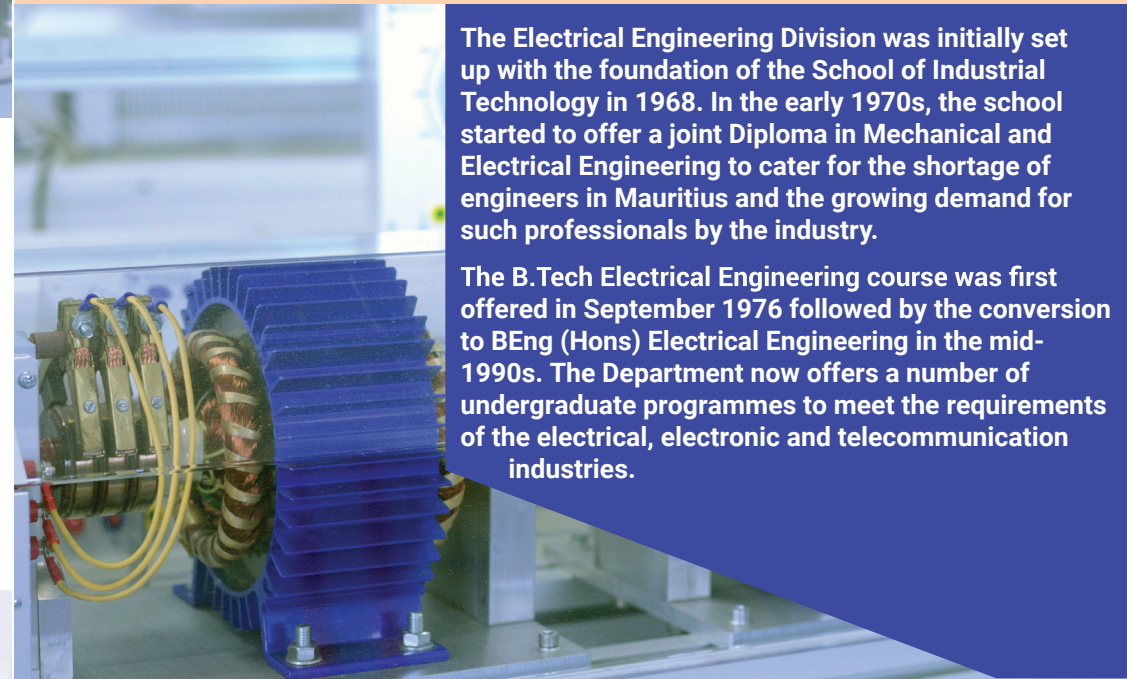
INTRODUCTION:

Electrical and Electronic Engineering is a rapidly evolving field of study which incorporates many different subject areas, such as Control Systems, Telecommunication Systems, Computer Networks, Power Systems, Power Electronics, Instrumentation, Signal Processing, Microprocessors and Renewable Energy. The Department of Electrical and Electronic Engineering has been offering degree programmes for more than twenty years and the programme contents have been under constant revision to adapt to changing technology and to meet new market requirements.

The Faculty is currently in the process of seeking accreditation of its engineering programmes with the Engineering Council of South Africa (ECSA). Accreditation will add value to the engineering programmes by ensuring that the Faculty meets international standards and graduates have the competencies expected of them for embarking into the practice of engineering. In addition, accreditation will facilitate global mobility and increase employment opportunities for graduates. Our Electrical and Electronic Engineering programmes in particular have been completely revised to meet international standards.
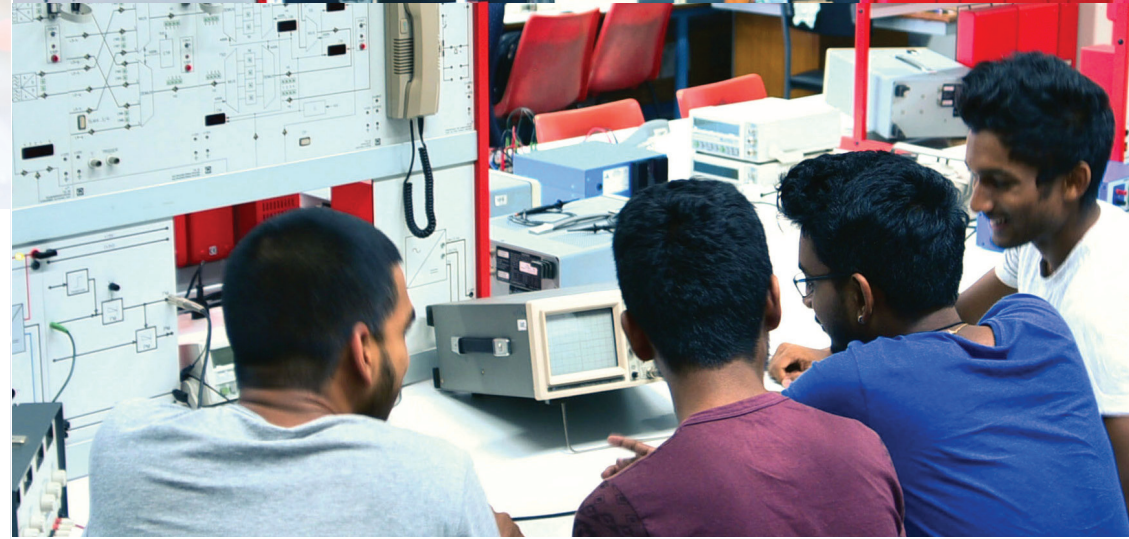
PROGRAMMES ON OFFER:

- BEng (Hons.) Electrical & Electronic Engineering
- BEng (Hons.) Telecommunications Engineering with Networking
- BEng (Hons.) Mechatronics Engineering (Jointly with Mechanical and Production Engineering Department)
- BSc Electrical and Computer Engineering (Jointly with the University of Arizona)
- MSc. Telecommunications with Internet of Things (Part-Time/Online – in collaboration with the University of Novi Sad, Serbia)
- MSc. Renewable Energy and Smart Electrical Systems (Part-Time/Online)
- MSc. by Research
- MPhil / PhD (by Research)

The entry requirements for the Bachelor in Engineering Degree programmes are:
GCE 'A' Level Passes in Mathematics and Physics; and Chemistry at O Level.

The entry requirements for the Masters Degree programmes are:
A 2nd class honours degree or a GPA not less than 2.5 out of 4 or equivalent from a recognised higher education institution, OR alternative qualifications acceptable to the University of Mauritius.

Note: Please consult the Programme structures available on the Department website for more information.

Communications Laboratory

In the communications Laboratory, practical exercises on specially designed training panels and modules that offer a complete course of study into the fundamentals of analogue and digital communications

• Analogue Communications Training Panel System provides students training on modulation techniques such as such as AM (Amplitude Modulation) and FM (Frequency Modulation).

• Digital Communications Modules provide students with a complete introduction to digital communications ranging from signal sampling & reconstruction to fibre

Feedback from our Graduates

Nishi Seeparsand
Associate Engineer - Core Network
EMTEL Ltd

Electronics and Communication is an interesting course if you are enthusiastic about science/technology.

The course covers both software and hardware, and will open up many job opportunities.

Natasha Ramluckun
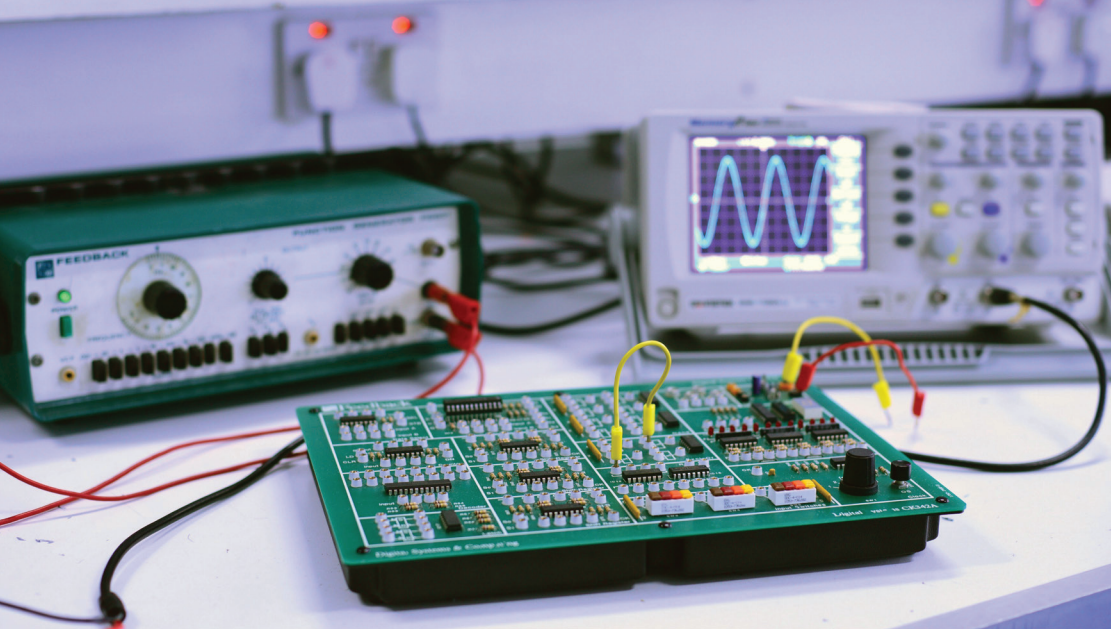*Associate Engineer – Core Network*
EMTEL Ltd

ECE is a vast field with immense applications. With ECE, you will have knowledge of something that is everywhere, be it in everyday devices or way of life. Communication engineers in general are likely to be in demand for the foreseeable future, but as technology evolves, the roles of individuals will change also.

Ashmanee Rangaven
IT Analyst
Orange Business Services

The EEE course is a very challenging one but with the support of the teaching staffs, interesting modules and facilities provided by the university like well-equipped labs and relevant library data helps enormously to excel.

Jenita Mahadeo Moonowa
Manager
Mauritius Standards Bureau

Following the EEE/ECE Programme at UoM has been the stepping stone to my career in the engineering field. The conducive environment, dedicated teaching staffs and early exposure to the work environment through placements during the 4-year Programme have been very helpful to me in promoting learning and developing skills for success.
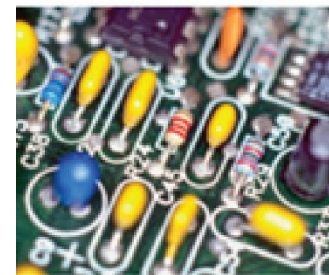
The undergraduate programmes are structured to provide a strong foundation leading to the possibility of specialisation and research, as well as preparing for a wide scope of job and postgraduate opportunities. Industrial training for a minimum of 12 weeks at a recognized company is a compulsory component of the BEng (Hons.) programmes and provides students with the opportunity to develop the skills, team spirit and professionalism expected from them once on the job market.

The BEng (Hons.) programmes are designed for secondary school-leavers who have good 'A' level grades and who would like to pursue a career as Professional Engineers in the government, parastatal bodies, or the private sector.

JOB PROSPECTS:

The typical career paths for our graduates include:

- Electrical and Power Engineers
- Renewable Energy Engineers
- Automation and Control Engineers
- Maintenance Engineer
- Control and Instrumentation Engineer
- Telecommunications Engineer
- Network and Security Engineers / Network Specialist
- Radio Access Network Engineers
- Radio Frequency and Wireless Engineer
- Telecommunications Applications Developer
- VoIP Operator
- Network Administrator
- Software Programmers / IT Consultant
- Marine and Utilities Industry
- Construction Industry
- Academic / Research Fellows
- Broadcast Engineer

LABORATORIES & FACILITIES:

Electronics Laboratory

The Electronics laboratory brings together a number of equipment such as oscilloscopes, signal generators, electronic kits, digital multi meters and power supplies to allow students develop and test electronic systems from the most basic semiconductor component to the more sophisticated digital system.

Electrical Power and Machines Laboratory

The practical classes run in the Electrical Power and Machines Laboratory involve experiments on the verification of network theorems, resonance in ac circuits, power measurement, power factor, and bridge circuits for electrical engineering. The experiments pertaining to electrical machines involve DC motor, DC generator, Induction Motors and Single phase Transformers.

Microprocessor, Instrumentation and Control Laboratory

The Microprocessor, Instrumentation and Control Laboratory enables the department to provide a wide range of innovative practicals in specialized fields of electrical engineering such a Microprocessors, Measurement Systems and Power Electronics. The equipment includes user friendly modules to enable students get an overview of the basic concepts as well as more complex equipment to urge them apply their knowledge of design in building up sophisticated systems.

Telecommunications Field

The BEng Telecommunications Engineering with Networking Programme covers a range of core topics such as programming for telecommunications systems, data communications and networking, communications protocol development, communications security and telecommunications project management.

The MSc Telecommunications with Internet of Things programme will provide state-of-the-art knowledge in the different areas of Telecommunications and IoT and is targeted at students with a background in Electrical Engineering, Telecommunications Engineering, Computer Science and other related areas.

BEng (Hons)
ELECTRICAL &
ELECTRONIC
ENGINEERING
/
MSc. RENEWABLE
ENERGY & SMART
ELECTRICAL
SYSTEMS

VIDEO CONFERENCING

BROADCASTING

MOBILE COMMUNICATIONS

The Cloud

BEng (Hons)
TELECOMMUNICATIONS
ENGINEERING WITH
NETWORKING
/
MSc.
TELECOMMUNICATIONS
WITH INTERNET OF
THINGS

NETWORKING AND SECURITY

CLOUD NETWORKS

WIRELESS COMMUNICATIONS

INTERNET OF THINGS
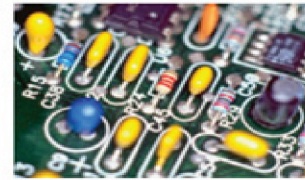
Electrical and Electronic Engineering Field

The students are equipped with the theoretical, analytical, design and practical problem-solving aptitudes necessary towards engineering practice. Innovation, scientific rigour, ethical attitude and a sense of purpose for the benefit of society form the core values associated with the delivery of the BEng Electrical and Electronic Engineering programme.

The MSc Renewable Energy & Smart Electrical Systems programme is targeted at students with general engineering/science backgrounds and provides them with an in-depth knowledge of the major renewable energy technologies as well as the state-of-the-art components of a smart electrical system.