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. Our Electrical and Electronic Engineering programmes in particular have been completely revised to meet international standards. The Faculty of Engineering has targeted 2020 for its first batch of students from accredited programmes to graduate.

PROGRAMMES ON OFFER:

- BEng (Hons.) Electrical and Electronic Engineering
- BEng (Hons.) Telecommunications Engineering with Networking
- BEng (Hons.) Mechatronics Engineering (Jointly with Mechanical and Production Engineering Department)
- MSc. Telecommunications with Internet of Things (Part-Time)
- MSc. Renewable Energy and Smart Electrical Systems (Part-Time)
- MSc. by Research
- MPhil / PhD (by Research)

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 as 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.

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-optic communications systems.

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

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.

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, Single-phase Transformers.
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.

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.