

## 0320 MS. Electrical Engineering

At postgraduate level the Department offers MS. program in Electrical Engineering. The areas of active research include Electronic Devices and Materials, Intelligent Systems, Microelectronics and Computer Systems, Nano-engineering, Photonics Systems, Systems and Control, Telecommunications and Signal processing. This gives graduates an unparalleled advantage in both technical skills and intellectual discipline to become leaders in overcoming the challenges of modern technological advancements. The student can choose amongst one of the following specializations while pursuing his Master's in Electrical Engineering:

### Communication and Electronic Engineering

The Master's degree courses are aimed at bringing the students abreast with the most recent developments in their fields of specialization. These courses are offered for both part-time and full-time students.

Shift : Evening

Duration : 2 years, 4 semesters, 30 credit hours

Eligibility : BSc. Electrical Engineering (4 years) or equivalent qualification with at least 50% marks or CGPA 2.50/4.00 from any HEC recognized University and qualify University test.

#### 1st Semester

Course	Course Title	Credit Hours
EE- 602	Stochastic Processes	3
EE- 603	Linear System Theory	3
EE-xxx	Elective I	3

#### 2nd Semester

Course	Course Title	Credit Hours
EE-6xx	Advanced Electronics	3
EE-605	Advanced Wireless Communication	3
EE-xxx	Elective II	3

#### 3rd Semester

Course	Course Title	Credit Hours
EE-xxx	Elective III	3
EE-699	Research Thesis	3

#### 4th Semester

Course	Course Title	Credit Hours
EE-xxx	Elective IV	3
EE-699	Research Thesis	3

### Power & Control Engineering

The Master's degree courses are aimed at bringing the students abreast with the most recent developments in their fields of specialization. These courses are offered for both part-time and full-time students.

#### 1st Semester

Course	Course Title	Credit Hours
EE- 602	Stochastic Processes	3
EE- 603	Linear System Theory	3
EE-xxx	Elective I	3

#### 2nd Semester

Course	Course Title	Credit Hours
EE-6xx	Advanced Power Generation	3
EE-610	Advanced Power Electronics	3
EE-xxx	Elective II	3

#### 3rd Semester

Course	Course Title	Credit Hours
EE-xxx	Elective III	3
EE-699	Research Thesis	3

#### 4th Semester

Course	Course Title	Credit Hours
EE-xxx	Elective IV	3
EE-699	Research Thesis	3

#### Elective Courses For Electrical Engineering:

##### Communication & Electronic Engineering

Advanced Digital Communication

Photovoltaic Energy and its Applications

Mobile & Wireless Networks

Advanced Digital System Design

VLSI Design

Software Defined Networking

##### Power & Control Engineering

Advanced Topics in Electronics

Advanced Power System & Control

Power System Stability & Control

High Voltage Engineering Insulations

Renewable Energy Systems