

1st Semester:

- Engineering Mathematics-I
- Engineering Chemistry
- Principles of Electrical Engineering.
- Engineering. Graphics
- Environmental Science & Pollution Control
- Essential of IT

2nd Semester:

- Communication Skills
- Engineering Physics
- Engineering Mathematics-II
- Engineering Mechanics
- Basic Electronics
- Electrical Workshop Practice

3<sup>rd</sup> Semester:

- **Circuit Theory & Networks**
- **Electrical Measurements and Measuring Instruments**
- **Electronic Devices and Circuits**
- **Electrical & Electronic Materials**
- **Engineering Mathematics-III**
- **Object Oriented Programming Methodology**

4<sup>th</sup> Semester:

- **Electrical machine I**
- **Power System –I**
- **Analog Digital Communication**
- **Digital Electronics and logic design**
- **Network analysis & synthesis**
- **Computer programming**

5<sup>th</sup> Semester:

- **Electrical Machine-II**
- **Power System -II**
- **Microprocessors & Interfacing**

- Electromagnetic Field Theory
- Electronic Instrumentation
- Electrical Engineering Simulation Lab I

#### 6<sup>th</sup> Semester:

- Linear control systems
- Power system III
- Power electronics
- High voltage engineering
- Signal and systems
- Electrical engineering simulation Lab II
- Minor project

#### 7<sup>th</sup> Semester:

- Electrical drives
- Computer aided protection
- Special electrical machine & design
- Elective I
- Elective II
- Major project
- Industrial training

#### 8<sup>th</sup> Semester:

- Advanced electrical drives
- Utilization of electrical power
- Elective III
- Elective IV
- Major project

#### Elective I

- SCADA systems and applications
- Calibration and testing of electrical equipments
- Power system reliability

#### Elective II

- Energy Management & Audit
- Power quality and industrial application
- Advanced power system protection

#### Elective III

- Advanced power system
- Generalized Theory of Electrical Machines
- Industrial instrumentation

#### Elective IV

- EHV AC and DC Transmission
- HVDC
- Renewable and Non-conventional Energy Systems