Department of Electrical Engineering

Labs:

- **Power Systems Lab**
- **Electrical Machines-I Lab**
- **Electrical Machines-II Lab**
- **Basic Electrical Engineering Lab**
- **Electrical Measurements Lab**
- **Power Electronics Lab**
- **Light Loads Control Systems Lab**
- **Faculty Cabins**
- **Department Committee Room**

Overview:

The Department of Electrical Engineering was established in 2010. The department offers a **minor degree** in Electrical Engineering and started offering a **four-year undergraduate programme (B-Tech)** in Electrical Engineering from the academic year 2016-2017, with an intake of 140 students per year. The department aims to develop students into skilled engineers who can contribute to society. The department is supported by efficient and enthusiastic faculty members who are also engaged in research activities.

The department boasts **12 well-equipped laboratories** with modern technology, managed by a dedicated lab staff who assist students. The department encourages students to follow a **learning-by-doing approach**, fostering practical knowledge and project work. The department's curriculum is designed to ensure student success in their careers, while keeping them up-to-date with the latest advancements in electrical engineering.

Vision:

To transform today's electrical students into world-class engineers, catering to the needs of a visionary society.

Mission:

- To teach students through a **learning-by-doing method**.
- To focus on student career development and maintain a conducive environment for interaction between students and faculty.
- To provide students with all necessary facilities and platforms to showcase their talents and contribute to societal development.
- To stay updated with the advancements in electrical engineering.
- To encourage students to work on innovative technologies that improve the lives of ordinary people.

HOD's Message:

The vision behind establishing the Department of Electrical Engineering is to produce dynamic engineers who can make a significant impact in modern society. The department achieves this by offering high-quality teaching and sophisticated laboratories. With around 500 students, 10+ faculty members, and 12 laboratories, the department also organizes guest lectures, workshops, and industrial visits to enhance students' practical knowledge. Various student committees, including the **Department Student Grievance Redressal Committee (DSGRC)** and the **Department**

Beautification Committee, are present to cater to the welfare of the students. The **Department Student Activity Room** is available for students to organize various activities to bring out their talents.

Faculty:

- **Head of Department**:
  - **Bhukya Bhavsingh**, M.Tech (VCE Warangal), Assistant Professor | Email: hod.eee@rgukt.ac.in
- **Faculty Members**:
  - **Laxman Mutyam**, M.Tech (IIT Bombay), Assistant Professor (Regular) | Email: mutyamlaxman@gmail.com
  - **Dr. Namani Rakesh**, Ph.D., Associate Dean of Engineering, Assistant Professor (Regular) | Email: namanirakesh@rgukt.ac.in
  - **V Vinay Kumar**, M.Tech (RGUKT Basar), Assistant Professor | Email: vvinay259@gmail.com
  - **Bhukya Bhavsingh**, M.Tech (VCE Warangal), Assistant Professor | Email: bhavsingh205@gmail.com

Staff:

- **S. Tulasi Ram**, M.Tech (JNTU), Lab Assistant | Email: tulasirams@rgukt.ac.in
- **K. Ravikumar**, B.Tech, Lab Assistant | Email: ravikumar.kakati@gmail.com

Major Equipments in Labs:

1. **Power Electronics Lab**:
   - High voltage power electronics lab trainer: 12 units
   - Six diode assembly: 12 units
   - Six SCR assembly: 12 units
   - Six IGBT assembly: 12 units
   - Firing circuits: 12 units
   - 4-Channel DSO: 18 units
   - 2-Channel DSO: 6 units
   - Experimental setups as per curriculum: 12 sets
2. **Control Systems Lab**:
   - Universal PLC platform with human-machine interface: 1 unit
   - Industrial PID controller: 2 units
   - 2-Channel DSO: 4 units
   - Experimental setups as per curriculum: 12 sets
3. **Power Systems Lab**:
   - Percentage differential relay: 2 units
   - Transmission line system: 2 units
   - Synchronous impedance calculation: 2 units
   - Transformer oil testing: 1 unit
   - Experimental setups as per curriculum: 12 sets
4. **Electrical Measurements Lab**:
   - Current transformer and potential transformer kits: 2 sets
   - Calibration of power factor meter and energy meter: 2 units
   - Transformer oil testing: 1 unit

- Experimental setups as per curriculum: 12 sets

5. **Basic Electrical Engineering Lab**:
   - Battery charger and inverter system: 1 unit
   - Transformer lab kit to see no load magnetization current: 2 sets
   - Boost converter kits: 2 sets
   - Experimental setups as per curriculum: 12 sets
6. **Electrical Simulation Lab**:
   - Intel core i7 8th Gen computers: 70 units
   - Matlab software users: 20 users
   - Experimental setups as per curriculum: 12 sets
7. **Power Electronics and Drives Lab**:
   - Three-phase controlled rectifier drive: 1 unit
   - Step-down chopper drive: 2 units
   - Experimental setups as per curriculum: 12 sets
8. **Electrical Technology Lab**:
   - 300V/100A rectifier system and Main distribution panel: AC 415V, 300A: 2 units
   - Motor-generator setups: 12 units
   - Experimental setups as per curriculum: 12 sets
9. **Electrical Machines-I Lab**:
   - Rectifier: 220V, 300A: 1 unit
   - DC Motor-generator setup: 5 units
   - Experimental setups as per curriculum: 12 sets
10. **Electrical Machines-II Lab**:

- Main distribution panel: AC 415V, 300A: 1 unit
- Three-phase alternators: 4 units
- Experimental setups as per curriculum: 12 sets

Campus Selected Students (2020-2021):

- Students from the Department of Electrical Engineering were successfully selected in campus recruitment during the academic year 2020-2021.

Events:

1. **Techfest Report as part of Antahpragnya-2020**
2. **Industrial Visit Report - 2019**
3. **Engineer's Day Report - 2019**
4. **Techfest Report as part of Antahpragnya-2018**

Committees:

- **Department Student Grievance Redressal Committee (DSGRC)**
- **Department Beautification Committee**

Student Activity Room:

- A space for students to conduct various activities, fostering talent and collaboration.