

#### About GMRIT

GMR Institute of Technology is situated in Rajam, a small industrial town approximately 100 kilometers away from the 'city of destiny,' Visakhapatnam in Andhra Pradesh. The institute's campus spans over a sprawling 117 acres of land. The lush, sylvan, and idyllic surroundings in the heart of the agricultural belt provide an ideal setting for higher studies. The institute is affiliated with Jawaharlal Nehru Technological University, Kakinada, and approved by AICTE New Delhi. It has been accredited with NAAC - 'A' grade by UGC. The institution also holds ISO 9001:2008 Quality Systems certification. The Department of EEE has been accredited by the National Board of Accreditation (NBA) in Tier-I for the academic years 2022-23 to 2024-25.

GMRIT offers 4-year B.Tech. programs in nine core disciplines and 2-year M. Tech programs in six specializations. The approved annual intake of the institute for the academic year 2022-23 is 1122 students. The institution has received a grant extension of autonomous status for a period of ten

www.gmrit.edu.in

years, starting from 2018-19 to 2027-2028.

## About EEE Department

#### Vision

To be a nationally preferred department of learning for students and teachers alike, with dual commitment to research and serving students in an atmosphere of innovation and critical thinking.

#### Mission

To provide high-quality education in Electrical & Electronics Engineering to prepare the graduates for a rewarding career in Electrical & Electronics Engineering and related industries, in tune with evolving needs of the industry.

To prepare the students to become thinking professionals and good citizens who would apply their knowledge critically and innovatively to solve professional and social problems

#### Overview

The Department of Electrical & Electronics Engineering was established in 1997. The department offers four-year B.Tech and two-year M.Tech programs. It has a rich tradition and well-qualified faculty, along with widely recognized laboratories. The department aims to provide a strong foundation in Electrical and Electronics Engineering fundamentals, emphasizing mathematical and scientific principles. Additionally, the course focuses on developing skills in the application of design processes for innovative engineering solutions. The annual intake of students in this department is 120.

### **Facilities & Infrastructure**

- Sophisticated Laboratories include:
  - Electrical Machines Lab
  - Electrical Engineering Lab
  - Electrical Measurements Lab
  - Power Systems Lab
  - Power Electronics Lab
  - Electrical Systems Simulation
  - Power Electronics and Drives Lab (PG)
- An efficient administrative office that operates as per ISO-9001 standards
- A well-stocked department library
- To enable the students and provide opportunities, to understand in the industrial eco-systems and work on latest technological developments in the industries, MoUs are signed with various industrial organizations
- Committed and dedicated faculty

#### Major Courses Offered

- Electrical Machines
- Electrical Circuits
- Measurements and Instrumentation
- Semiconductor Devices & Circuits
- Linear and Digital integrated circuits
- Electromagnetic Field Theory
- Control Systems
- Power Generation, Transmission and Distribution
- Power System Protection
- Green Energy Technologies
- Power Electronics
- Electrical Vehicle Technologies
- Signals and Systems Theory
- Electrical Drives
- Power System Analysis and Control
- Engineering Economics and Project management

#### Academic Achievements

#### **Technical Paper Publication in Conferences**

#### **Papers Published in Journals**

Karthick K et al. published a paper on "Mitigation of supply current harmonics in fuzzy-logic based 3-phase induction motor", International Journal of Power Electronics and Drive Systems (IJPEDS), Institute of Advanced Engineering and Science (IAES) Indonesia, p-ISSN: 2088-8694, e-ISSN 2722-256X, Vol 14, No 1, pp.266-274, March 2023, (Indexed by

3

SCOPUS, Q<sub>3</sub>, IF:DOI: http://doi.org/10.11591/ijpeds.v14.i1.pp266-274)

Vinay Kumar M et al. published a paper on "Environmental Impacts of the Solar Photovoltaic Systems in the Context of Globalization", Ecological Engineering and Environmental Technology, 2023, 24(2), pp. 231–240 (Indexed in Scopus, IF:, DOI: https://doi.org/10.12912/27197050/157168)

# **Guest Lectures**

Mr Satyanarayana, Chairman, APEPDCL Palakonda Division, AP, India delivered guest lecture on "Consumer Awareness On Problems On Electricity Consumption" to III Year EEE students on 15-02-2023.



# **Co-Curricular Activities:**

G Gowtham (III Year Civil Engg ) & Ch Ganeswara Rao (III Year EEE ) selected for University Level in Power Lifting Competition and to participate in national level competition at Guru Kashi University, Punjab

