



BAPATLA ENGINEERING COLLEGE::BAPATLA

(Autonomous)

DEPARTMENT OF EEE

INDUCTION PROGRAM FOR I B.TECH EEE STUDENTS

WELCOME TO THE DEPARTMENT

OF ELECTRICAL AND

ELECTRONICS ENGINEERING

INDUCTION PROGRAM FOR I B.TECH EEE STUDENTS

Bapatla Engineering College:

- ❖ **Founded in 1981 by President Muppalaneni Seshagiri Rao of Bapatla Education Society.**
- ❖ **Approved by AICTE.**
- ❖ **Granted Autonomous status by UGC in 2010.**
- ❖ **Affiliated to Acharya Nagarjuna University.**

History of EEE Department

- **Inaugural Year:** The Department of Electrical and Electronics Engineering (EEE) began its journey in the year 1995. This marked the inception of our commitment to delivering excellence in electrical and electronics education.
- **Growth in Intake:** Over the years, the department has expanded its intake capacity to accommodate more aspiring engineers. We started with an intake of 60 students, which increased to 90 in 2003, further expanding to 120 in 2007, and finally reaching 180 in 2011. Presently, the department's intake capacity is set at 120 students.
- **Accreditation:** Acknowledging our commitment to quality education, the department received accreditation from the National Board of Accreditation (NBA) multiple times. The department was first accredited by NBA in the year 2003, reaffirmed its commitment to excellence in 2007, and continued its accreditation in 2013

Vision and Mission (Institute)

Institute Vision

- Our college, Bapatla Engineering College, envisions establishing centers of excellence that impart high-quality education and inculcate impeccable standards of ethics and professionalism. This vision is pursued through the tireless dedication of our staff, allowing the college to effectively adapt to the ever-changing facets of education.

Institute Mission

- **Our mission is to provide quality education at par with global standards to students from all over India, particularly those from local and rural areas. We aim to ensure that our students not only become technologically competent but also ethically strong individuals. They shall possess the skills and knowledge to improve the quality of life and contribute to the economic growth of our nation.**

Vision and Mission (Department)

Department Vision:

- **The Department of Electrical & Electronics Engineering aspires to deliver programs of the highest quality that produce globally competent technocrats. These technocrats will have the expertise to address the challenges of the millennium and work towards achieving sustainable socio-economic development.**

Department Mission:

Our department's mission encompasses several key aspects:

- **M1. Quality Teaching and Practical Skills: We aim to provide quality teaching blended with practical skills, ensuring that our students not only excel academically but also acquire hands-on expertise.**
- **M2. Ethical Strength and Technological Competence: We work towards preparing our students to be ethically strong**

and technologically competent professionals in the field of Electrical and Electronics Engineering.

- **M3. Research and Social Focus: We encourage and motivate both our faculty and students to engage in research activities that align with societal needs. We aim to bridge the gap between academic knowledge and real-world application.**

Facilities and Infrastructure

- **Electrical machines labs**
- **Power Systems Lab**
- **Advanced power system lab**
- **Electrical Measurements lab**
- **Control Systems Lab**
- **IOT LAB**
- **Electronic Design Lab**
- **Computer Lab**

Teaching and Learning

- **Interactive lectures**
- **Practical sessions**
- **Project-based learning**
- **Practical skills, interactive learning, and industry relevance.**
- **Industry Interaction**
- **Guest lectures from industry experts**
- **Industrial visits**
- **Internship opportunities**
- **Campus recruitment drives**

Department Achievements

- **Faculty publications in reputed journals**
- **Student participation in national-level competitions**
- **Alumni success stories**
- **Faculty and student accomplishments.**
- **Slide 11: Future Plans**

Future Plans

- **Launching new programs in emerging fields**
- **Expanding research initiatives**
- **Strengthening industry partnerships**
- **Promoting innovation and entrepreneurship**

Program Educational Objectives (PEOs)

- **PEOs are broad statements describing the career and professional accomplishments the program prepares graduates to achieve.**

The PEOs for the B.Tech program in Electrical & Electronics Engineering, which include:

- **PEO1: To provide students with a strong foundation in the principles of Basic Sciences, Mathematics, and Engineering. This will enable them to solve real-world problems encountered in modern electrical engineering and pursue higher studies, placement, or research.**
- **PEO2: To integrate knowledge from various courses and design innovative and cost-effective products in the broader interests of organizations and society.**
- **PEO3: To equip students with the ability to lead and work in their profession with a multidisciplinary approach,**

cooperative attitude, effective communication, and interpersonal skills. This will be achieved through participation in team-oriented and open-ended activities.

Program Outcomes:

Engineering graduates will be able to:

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of Electronics and Instrumentation Engineering. problems.

PO2. Problem analysis: Identify, formulate, research literature and analyze complex engineering problems reaching, substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PO3. Design/development of solutions: Design solutions for problems in the field of Electronics and Instrumentation Engineering and design system components or processes that meet the specified needs with appropriate consideration for public health and safety and the cultural, societal and environmental considerations.

PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.

PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6. The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and

cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7. Environment and Sustainability: Understand the impact of the Electronics and Instrumentation Engineering solutions in societal and environmental contexts, and demonstrate the need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. Individual and Team work: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.

PO10. Communication: Communicate effectively on Electronics and Instrumentation Engineering activities with the engineering community and with the society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and receive clear instructions.

PO11. Project management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work as a member and leader in a team to manage projects in a multidisciplinary environment.

PO12. Life-long Learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSO's)

PSO1: The Electrical and Electronics Engineering graduates are capable of applying the Knowledge of mathematics and sciences in modern power industry.

PSO2: Analyse and design efficient systems to generate, transmit, distribute and utilize electrical energy to meet social needs using power electronic systems.

PSO3: Electrical Engineers are capable to apply principles of management and economics for providing better services to the society with the technical advancements in renewable and sustainable energy integration.