



ACHARYA INSTITUTE OF TECHNOLOGY

Affiliated to VTU

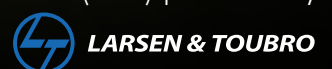


- Accredited, industry-aligned programs with expert faculty.
- Access to LinkedIn and high-performance laptops for seamless learning.
- In-demand certifications in EV, Cyber Security, and more for career advantage.
- Global exposure through partnerships and a diverse student body.
- Cutting-edge labs and a digital library for comprehensive resources.
- Collaborations with top corporations offering internships and projects.
- Vibrant clubs and activities focused on holistic development.
- Robust placement support with 550+ recruiting companies annually.



**B.E ELECTRICAL AND
ELECTRONICS**

Specialization in Product Life Cycle
Management (PLM) powered by



About

The Electrical and Electronics Engineering program encompasses the in-depth study, design, and implementation of equipment, devices, and systems that leverage electricity, electronics, and electromagnetism. Students benefit from state-of-the-art labs and cutting-edge technology, ensuring hands-on experience and practical application of theoretical knowledge. Our strategic collaboration with L&T further enhances the learning journey by providing students with exposure to real-world industry insights and the latest developments, allowing them to stay abreast of relevant happenings in the dynamic field.

Career Scope

Versatile Career Opportunities: Graduates can pursue careers in diverse industries such as power generation, electronics, telecommunications, and automation. The focus on renewable energy and sustainable practices has provided graduates with an opportunity to address global energy challenges.

Innovation in Technology: The field is at the forefront of technological innovation. Graduates have the opportunity to contribute to the development of cutting-edge technologies. Continuous learning is therefore essential. Graduates who are prepared to adapt to new technologies are guaranteed long-term success in this dynamic industry.

Global Demand: The ever-changing nature of the industry has resulted in a substantial global demand for graduates in electrical and electronics engineering. They also boast competitive starting salaries.

Eligibility

Pass in 10+2 / Higher Secondary (HS) / Pre University (PUC) / 'A' Level (with 12 years of schooling) or its equivalent with English as one of the languages. Shall have secured a minimum of 45% marks in aggregate in Physics, Mathematics and any one of the following: Chemistry, Biology, Computer Science, Electronics. AIT admits students as per prevailing rules and regulations of VTU.

Candidate must have completed 17 years by June - for the year of admission.

Duration
4 years

COURSE CONTENT

Semester 1

- Mathematics-I for EEE Streams
- Applied Physics for EEE Stream
- Elements of Electrical Engineering
- Basic Electronics for EEE stream
- Engineering Science Course-I
- Emerging Technology Course-I
- Programming Language Course-I
- Communicative English
- Professional Writing Skills in English
- Samskrutika Kannada/ Balake Kannada
- Indian Constitution
- Innovation and Design Thinking
- Scientific Foundations of Health

Semester 3

Engineering Mathematics for EEE

- Electric Circuit Analysis
- Analog Electronic Circuits
- Transformers and Generators
- Transformers and Generators lab
- ESC/ETC/PLC
 - Digital Logic Circuits
 - Electrical Measurements and Instrumentation
 - Electromagnetic Field Theory
 - Physics of Electronic Devices
- Social Connect and Responsibility
- Ability Enhancement Course/Skill Enhancement Course - III
 - SCI LAB/MATLAB for Transformers and Generators
 - Circuit Laboratory using P Spice
 - 555 IC Laboratory
 - Electrical Hardware Laboratory
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 2

- Mathematics-II for EESI
- Chemistry for EES
- Computer-Aided Engineering Drawing
- Engineering Science Course-II
- Programming Language Course-II
- Emerging Technology Course-II
- Professional Writing Skills in English
- Communicative English
- Indian Constitution
- Samskrutika Kannada/ Balake Kannada
- Scientific Foundations of Health
- Innovation and Design Thinking

Semester 4

Electric Motors

- Transmission and Distribution
- Microcontrollers
- Electric Motors lab
- Ability Enhancement Course/Skill Enhancement Course- IV
 - Basics of VHDL Lab
 - PCB Design Laboratory
 - Sci Lab / MATLAB for Electrical and Electronic Measurements
 - Arduino & Rasberry PI Based Projects
- ESC/ETC/PLC
 - Electrical Power Generation and Economics
 - Op-Amp and LIC
 - Engineering Materials
 - Object Oriented Programming
- Biology For Engineers
- Universal human values course
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga



Semester 5

- Engineering Management and Entrepreneurship
- Signals & DSP
- Power Electronics
- Professional Elective Course(Industry suggested course)
 - Vertical Elective –I: POWER ENGINEERING
 - Vertical Elective –II : CONVERTERS AND DRIVES
 - Vertical Elective –IV : ELECTRIC VEHICLE TECHNOLOGY
 - Vertical Elective –V: ELECTRICAL SYSTEM AUTOMATION
- Mini Project
- Research Methodology and IPR
- Environmental Studies
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 7

- Scalable Computing
- Statistical Machine Learning for Data Science
- Information & Network Security
- Professional Elective Course
 - IOT Analytics
 - Business Analytics
 - Data Engineering & MLOps
 - Deep Learning
- Open Elective Course
 - Introduction to DBMS
- Major Project Phase-II

Semester 6

- Power system Analysis I
- Control Systems
- Professional Elective Course
 - Vertical Elective –I: POWER ENGINEERING
 - Vertical Elective –II : CONVERTERS AND DRIVES
 - Vertical Elective –III: EMBEDDED SYSTEMS
 - Vertical Elective –IV : ELECTRIC VEHICLE TECHNOLOGY
 - Vertical Elective –V: ELECTRICAL SYSTEM AUTOMATION
- Open Elective Course
 - Utilization of Electrical Power
 - Renewable Energy Sources
 - Industry suggested course
 - Industrial Servo Control Systems
 - Semiconductor Devices
 - Industry suggested course
- Project Phase I
- Control System Lab
- Ability Enhancement Course/Skill Development Course V
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 8

- Professional Elective (Online Courses)
 - Vertical Elective –I: POWER ENGINEERING
 - Vertical Elective –II : CONVERTERS AND DRIVES
 - Vertical Elective –III: EMBEDDED SYSTEMS
 - Vertical Elective –IV : ELECTRIC VEHICLE TECHNOLOGY
 - Vertical Elective –V: ELECTRICAL SYSTEM AUTOMATION
- Open Elective (Online Courses)
 - Industry suggested course/ MOOCS
 - Industry suggested course / MOOCS
 - NPTEL /MOOCS
 - NPTEL MOOCS
- Internship (Industry/Research) (14 - 20 weeks)



Acharya Legacy

Founded in 1990, Acharya aims to revolutionize education. With over 12,000 students and 100+ academic programs annually, it stands among the global education elite. Located in India's technical hub, Bangalore, Acharya prioritizes innovation and knowledge. The institution fosters experiential and collaborative learning, shaping well-rounded individuals, evident in its diverse student population from 75+ countries.

11 Institutions

15 Research Centers

100+ Programmes

75+ Nationalities

12000+ Students

1000+ Eminent Faculties

120 Acres State-of-the-Art Campus

B Premnath Reddy
Founder Chairman
Acharya Group

Acharya Offerings - click on each to know more... >>

Academic Studio



Collaboration



Center of Excellence



Clubs



Digital Library



Laboratories



Research



Sports



Hostels



Habba



PROGRAMS OFFERED

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