ACHARYA INSTITUTE OF TECHNOLOGY

ACHARYA

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 ELECTRONICS & COMMUNICATION

Specialization in Product Life Cycle Management (PLM) powered by

LARSEN & TOUBRO
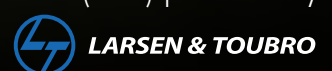
About

Our Electronics and Communication program teaches students the intricacies of developing and testing electronic circuits and communication devices like transmitters, receivers and integrated circuits. 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

Diverse Opportunities: In addition to the telecom sector, graduates can work in a number of fields such as Logistics, Automobiles, FMCG and Manufacturing, among others.

Thriving Telecommunication Industry: The global demand for improved connectivity has opened avenues for graduates not just in India, but abroad as well.

Innovation in Electronics: Graduates are given an opportunity to shape the future of communication as the industry is constantly evolving. The scope for cross-disciplinary collaboration is high, as ECE engineers are frequently associating with experts in the fields of electrical engineering, computer science, and information technology to bring about new products and services.

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 ECE Streams
- Applied Physics for ECE Stream
- Elements of Electronics Engineering
- Basic Electronicsfor ECE 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

AV Mathematics-III for EC Engineering
- Digital System Design using Verilog
- Electronic Principles and Circuits
- Network Analysis
- Analog and Digital Systems Design Lab
- ESC/ETC/PLC
   Electronic Devices
   Computer Organization and Architecture
   Sensors and Instrumentation
   Applied Numerical Methods for EC Engineers
- Social Connect and Responsibility
- Ability Enhancement Course/Skill Enhancement Course – III
   LABVIEW programming
   C++ Basics
   MATLAB Programming
   IOT for Smart Infrastructure
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 2

- Mathematics - II for ECSI
- Chemistry for ECS
- 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

- Engineering Electromagnetics
- Basic signal Processing
- Principles of Communication Systems
- Communication laboratory
- ESC/ETC/PLC
   8051 Microcontroller
   Operating Systems
   Industrial Electronics
   Control Systems
- Ability Enhancement Course / Skill Enhancement Course - IV
   Embedded C basics
   DAQ using LabVIEW
   PCB Design
   Risk Management in IOT Implementation
- Biology For Engineers
- Universal human values course
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 5

- Digital Communication
- Computer Organization & ARM Microcontroller
- Computer Communication Network
- Electromagnetics Waves
- Communication Lab II
- Research Methodology & Intellectual Property Rights
- Environmental Studies
- Ability Enhancement Course-V
  - IoT (Internet of Things) Lab
  - Communication Simulink Toolbox
  - Java Programming
  - Data Structures Using C++

Semester 7

- Advanced VLSI
- Optical & Wireless Communication
- Professional elective Course - II
  - Advanced Design Tools for VLSI
  - Digital Image Processing)
  - DSP Algorithms & Architecture
  - Biomedical Signal Processing
  - Speech Signal Processing
- Professional elective Course - III
  - IoT & Wireless Sensor Networks
  - Machine Learning with Python
  - Network Security
  - Multimedia Communication
  - Fabrication technology
- Open elective Course - II
  - Optical & Satellite Communication
  - Basic Digital Signal Processing
  - ARM Embedded Systems
  - E-waste Management
  - Basic Digital Image Processing
- Project work
- Technical Seminar
- Research Internship/ Industry Internship
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 6

- Technological Innovation Management and Entrepreneurship
- Computer Organization & ARM Microcontroller
- VLSI Design & Testing
- Professional Elective Course - I
  - Artificial Neural Networks
  - Python Programming
  - Cryptography
  - Micro Electro Mechanical Systems
- Open Elective Course - I
  - Communication Engineering
  - Basic VLSI Design
  - Microcontrollers
  - Electronic Circuits with Verilog
  - Sensors & Actuators
- VLSI Laboratory
- Mini Project
- Innovation / Entrepreneurship / Societal Internship

Semester 8

- Professional Elective (Online Courses) Only through NPTEL
- Open Elective (Online Courses) Only through NPTEL
- 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 Exellence

Clubs

Digital Library

Laboratories

Research

Sports

Hostels

Habba

PROGRAMS OFFERED

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