



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.



**ROBOTICS AND ARTIFICIAL
INTELLIGENCE ENGINEERING**

About

Engineering and robotics, along with artificial intelligence, is a rapidly growing field that prepares students to meet the demands of research, development, and industrial manufacturing. The need for skilled graduates is at an all-time high, given the increasing implementation of robotics and AI to perform data-intensive and repetitive tasks. Our program is designed to cultivate experts in Robotics and Artificial Intelligence, developed in collaboration with industry leaders to ensure it aligns with the most current trends and cutting-edge technologies.

Career Scope

High Demand: There is a global demand for graduates skilled in artificial intelligence and robotics. Collaboration with robotics and AI industries, in addition to extensive lab work, prepares students for flourishing careers in the ever-changing technology sector.

Access to Cutting-Edge Technology: Since robotics and AI are at the forefront of technological innovation, students engage with the latest advancements in automation, machine learning, and robotics.

Versatile Career Opportunities: Graduates have a wide array of career options across various industries, including healthcare, automotive, defense, entertainment, and research.

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 Robotics and Ai Engg Stream
- Applied Physics for Robotics and Ai Engg Stream
- Elements of Robotics and Artificial Intelligence Engineering
- 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

- Fundamentals of Robotics & Applications
- Manufacturing Technology for Robots
- Analog and Digital Electronic Circuits
- Data Structures and Algorithms
- Introduction to Modeling and Design for Manufacturing
- ESC/ETC/PLC
- Social Connect and Responsibility
- Ability Enhancement Course/Skill Enhancement Course – III
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 2

- Mathematics-II for Robotics and Ai Engg Stream
- Applied Chemistry for Robotics and Ai Engg Stream
- 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 for Health
- Innovation and Design Thinking

Semester 4

- Robot Kinematics, Dynamics and Control
- Mechanics and Measurement Systems for Robots
- Microcontroller
- Robot Programming & Simulation Lab
- ESC/ETC/PLC
- Ability Enhancement Course/Skill Enhancement Course- IV
- Biology For Engineers
- Universal human values course
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga



Semester 5

- Managerial Economics for Robotics
- Hydraulics & Pneumatics
- Fundamentals of AI for Robots
- Artificial Intelligence Lab
- Professional Elective Course
- Mini Project
- Research Methodology and IPR
- Environmental Studies
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 7

- Control Engineering
- Natural Language Processing
- Wireless communication
- Professional Elective Course
- Open Elective Course
- Major Project Phase-II

Semester 6

- Robot Operating System
- Digital Image Processing
- Professional Elective Course
- Open Elective Course
- Project Phase I
- Virtual Instrumentation & Automation Lab
- Ability Enhancement Course/Skill Development Course V
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga
- Indian Knowledge System

Semester 8

- Professional Elective (Online Courses)
- Open Elective (Online Courses)
- 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

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Collaboration



Center of Excellence



Clubs



Digital Library



Laboratories



Research



Sports



Hostels



Habba



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