ACHARYA INSTITUTE OF TECHNOLOGY

Affiliated to VTU

NBA NATIONAL BOARD OF ACCREDITATION | NAAC A ACCREDITED

Established in 2000, **Acharya Institute of Technology (AIT)** stands as a NAAC & NBA-accredited centre of excellence, recognised by NIRF for its academic standards and innovation. Located on a vibrant 120-acre campus in Bengaluru, AIT blends industry-aligned education, advanced infrastructure, and strong corporate partnerships to shape future-ready engineers and technology leaders.



- **Industry-aligned programs** delivered by expert faculty, enriched with in-demand certifications like Ai, EV, Cyber Security, and emerging technologies.
- **Smart learning ecosystem** with LinkedIn Learning access, high-performance laptops, advanced labs, and a digital library.
- **Strong industry collaborations** enabling internships, live projects, and real-world exposure with leading corporations.
- **Global outlook** through international partnerships and a culturally diverse student community.
- **Proven placement excellence** supported by 550+ recruiting companies visiting the campus annually.

B.E COMPUTER SCIENCE (DATA SCIENCE)

About

Our intensive skill-oriented program provides students with practical training in constructing business models for analytics. The curriculum's interdisciplinary nature integrates elements from computer science, statistics, mathematics, and domain-specific areas where data science is applied. Moreover, our partnership with the EC Council enhances students' comprehension of cybersecurity challenges, presenting an opportunity for certification by the company.

- **Interdisciplinary data science curriculum** that blends computer science, mathematics, statistics, and domain-relevant analytics to build deep technical competence.
- **Practical training with big data tools and frameworks** such as Hadoop, Spark, and distributed computing for managing and analysing large datasets.
- **Industry-oriented electives** covering advanced topics like blockchain, data forensics, privacy, algorithmic trading and data security.
- **Dedicated placement support and career guidance** from a structured cell focused on positioning students in top organisations.
- **Emphasis on data interpretation and storytelling,** bridging technical insights with business impact.



Career Scope

- **High-demand analytics careers** in roles such as Data Scientist, Data Engineer, Data Analyst, and Machine Learning Engineer across IT, finance, healthcare, and business sectors.
- **Opportunities in specialised data domains** including data architecture, business analytics, and solutions design with global organisational impact.
- **Pathways to advanced studies and research** in data science, AI, machine learning, business intelligence and related postgraduate programmes.

Eligibility

10+2 with PCM/PMC/PME + English, min 45%.
Age 17+.

Duration
4 years

COURSE CONTENT

Semester 1

- Mathematics-I for CSE Stream
- Applied Physics for CSE stream
- Principles of Programming Using C
- Engineering Science Course-I
- Emerging Technology Course-I
- Programming Languages Course-I
- Communicative English
- Professional Writing Skills in English
- Samskrutika Kannada/ Balake Kannada
- Indian Constitution
- Innovation and Design Thinking
- Scientific Foundations of Health

Semester 2

- Mathematics-II forCSE Stream
- Applied Chemistry for CSE 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 Kannad
- Scientific Foundations of Health

Semester 3

- Mathematics for Computer Science
- Digital Design & Computer Organization
- Operating Systems
- Data Structures and Applications
- Data Structures and Applications
- Data Structures Lab
- ESC/ETC/PLC
  - Object Oriented Programming with Java
  - Python Programming for Data Science
  - Data Analytics with R
- Social Connect and Responsibility
- Ability Enhancement Course/Skill Enhancement Course - III
  - Data Analytics with Excel
  - Ethics and Public Policy for AI
  - Project Management with Git
  - PHP Programming
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and
- Athletics)
- Yoga

Semester 4

- Analysis & Design of Algorithms
- Microcontrollers
- Database Management Systems
- Analysis & Design of Algorithms Lab
- ESC/ETC/PLC
  - Scala
  - MangoDB
  - MERN
  - Julia
- Ability Enhancement Course/Skill Enhancement Course- IV
  - Discrete Mathematical Structures
  - Metric Spaces
  - Optimization for Machine Learning
  - Algorithmic Game Theory
- Biology For Engineers
- Universal human values course
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga



Semester 5

- Software Engineering & Project Management
- Computer Networks (NS-2/3)
- Theory of Computation
- Data Visualization 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

- 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
  - Introduction to Algorithms
  - Software Engineering
  - Data Management
- Major Project Phase-II

FEE STRUCTURE

Refer offer letter for the actuals.

Inclusions : Tuition Fee, University Registration, Eligibility Fee, Miscellaneous Fee, Laboratory Fee, Library Fee and Sports Fee.

Exclusions : Uniform & Stationery.
Examination Fee as prescribed by the University / Board.

The Program Includes OBT, AMCAT/CoCubes, Soft Skills Training, Domain-Specific Training, Long Term Domain Training and LinkedIn Learning. Students are also provided with a Complimentary Laptop and Global Immersion Program.

Semester 6

- Big Data Analytics
- Artificial Intelligence & Machine Learning
- Professional Elective Course
  - Natural Language Processing
  - Exploratory Data Analysis
  - Blockchain Technology
  - Time Series Analysis
- Open Elective Course
  - Fundamentals of Operating Systems
  - Introduction to Data Structures
  - Mobile Application Development
  - Introduction to AI
- Project Phase I
- Machine Learning lab
- Ability Enhancement Course/Skill Development Course V
  - Explainable AI
  - PyTorch
  - Generative AI
  - Devops
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

Semester 8

- Professional Elective (Online Courses) Only through NPTEL

BOS will publish courses based on the availability

- Open Elective (Online Courses) Only through NPTEL

BOS will publish courses based on the availability

- 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 Faculty

120 Acres State-of-the-Art Campus



B Premnath Reddy
Founder Chairman
Acharya Group

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Habba



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