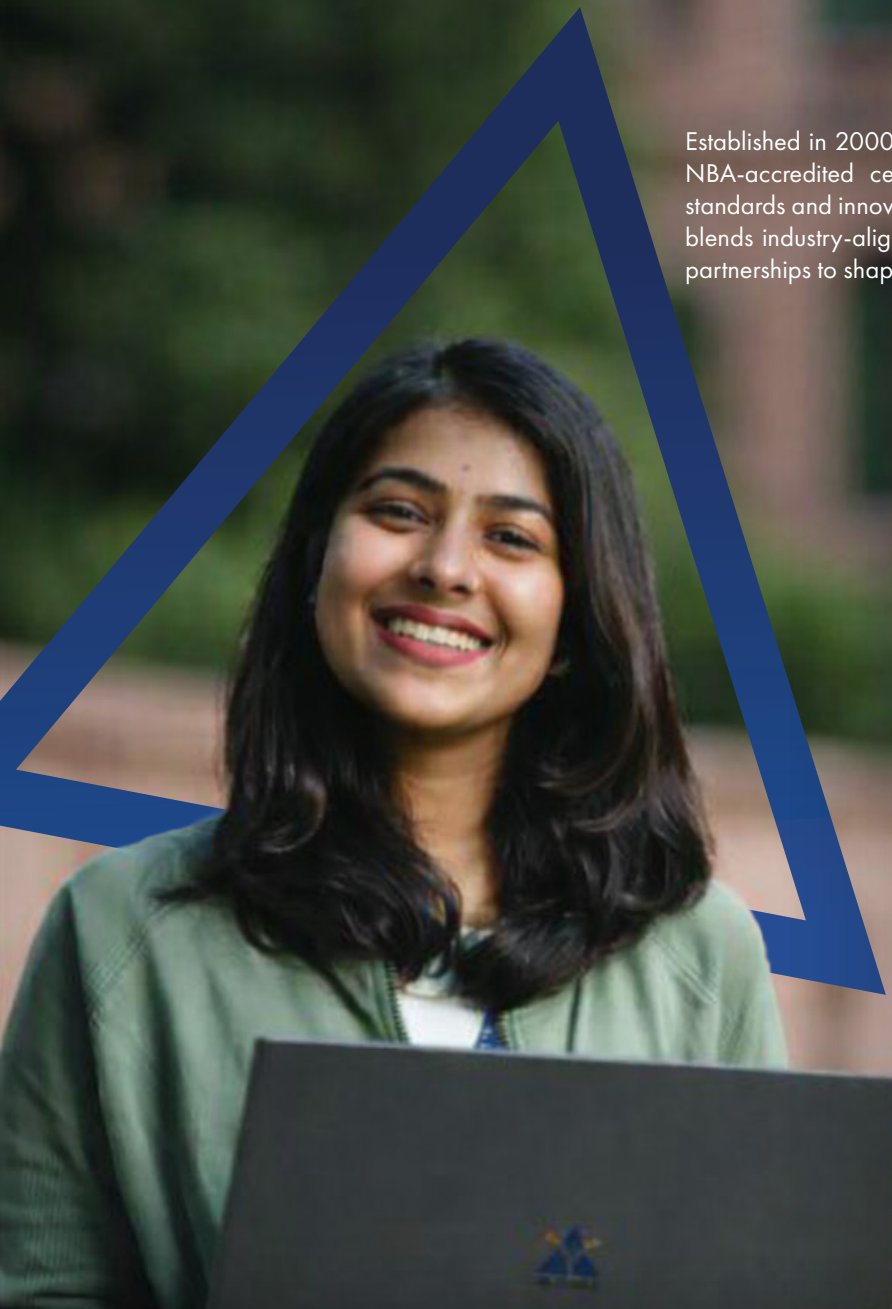
# ACHARYA INSTITUTE OF TECHNOLOGY

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.

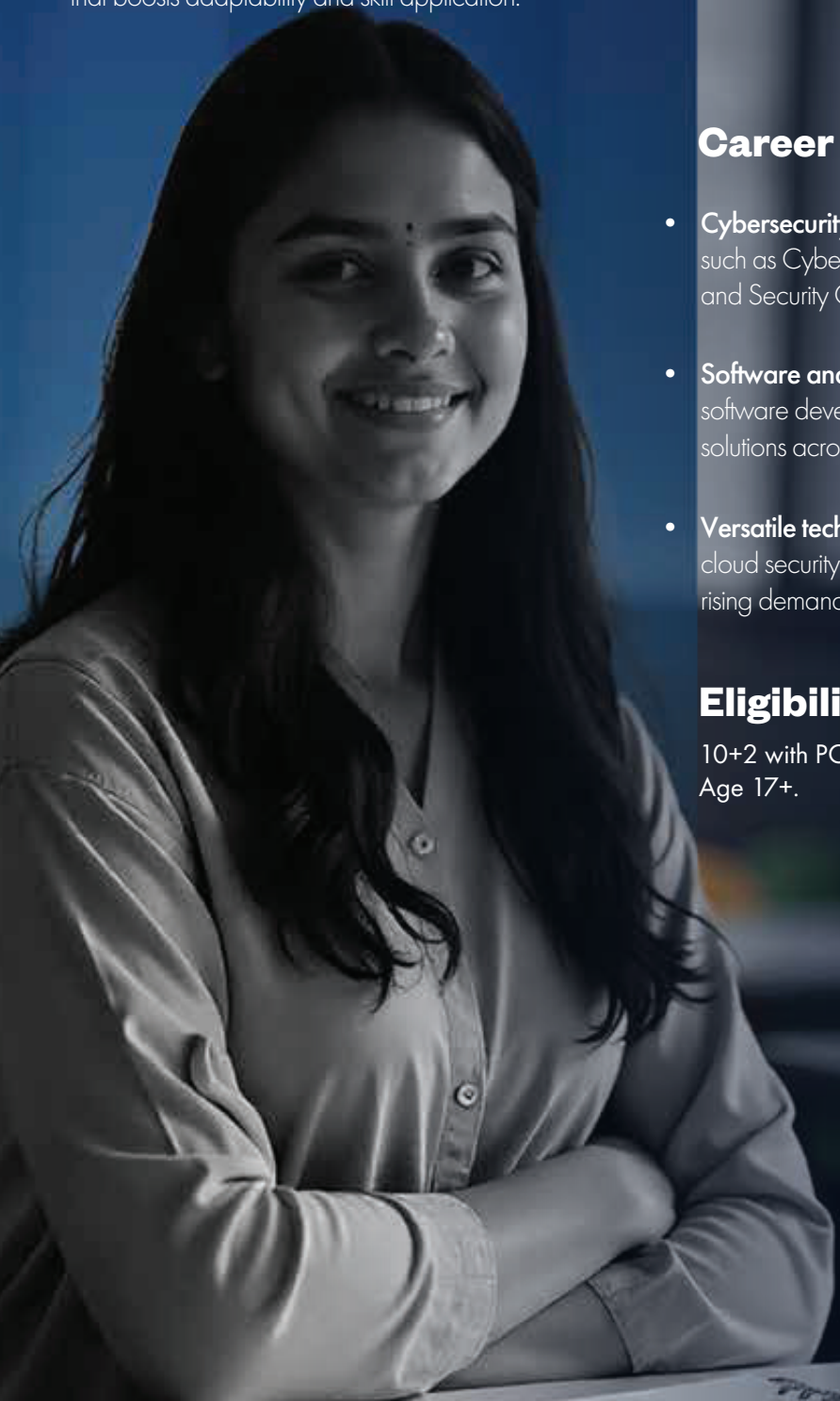
# B.E INFORMATION SCIENCE & ENGINEERING (CYBER SECURITY)

Cyber Security Certification
in Association with
**IT Industry Partners**

## About

Information Science and Engineering deals with the generation, distribution, analysis, and use of information, data, and knowledge in systems. Our extensive course equips students with problem-solving skills and adaptability and makes them ready to play a crucial role in shaping today's technology-driven world. Additionally, our partnership with the EC Council enriches their understanding of cybersecurity challenges, providing an opportunity for certification by the company.

- **Strong core computing foundation** covering data structures, algorithms, programming and information processing essentials.
- **Focused cybersecurity curriculum** that explores security challenges, secure system design, ethical defensive strategies, and protection against threats.
- **Partnership with EC-Council** enabling specialised cybersecurity training and opportunities for earning two global cybersecurity certifications.
- **Cloud & web technologies integration** including cloud computing and full stack web development to support scalable, secure information systems.
- **Hands-on, practical learning focus** through web technologies, database management and real-world problem solving that boosts adaptability and skill application.



## Career Scope

- **Cybersecurity & IT security roles –** Graduates are prepared for careers such as Cybersecurity Analyst, Ethical Hacker, Network Security Specialist and Security Consultant.
- **Software and systems development pathways –** Opportunities in secure software development, database administration, systems analysis and IT solutions across sectors.
- **Versatile tech industry roles –** Scope in risk management, digital forensics, cloud security, technology consulting, and global security operations with rising demand for cybersecurity expertise.

## 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 for CSE 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 Lab
- ESC/ETC/PLC
  - Object Oriented Programming with Java
  - Object Oriented Programming with C++
- Social Connect and Responsibility
- Ability Enhancement Course/Skill Enhancement Course – III
  - Data analytics with Excel
  - R programming
  - Project Management with Git
  - Data Visualization with Phyton
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

### Semester 4

- Analysis & Design of Algorithms
- Advanced Java
- Database Management Systems
- Analysis & Design of Algorithms Lab
- ESC/ETC/PLC
- Ability Enhancement Course/Skill Enhancement Course- IV
  - Green IT and Sustainability
  - Capacity Planning
  - UI/UX
  - Technical writing using LATEX
- Biology For Engineers (Information Technology in Biology)
- Universal human values course
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga



**Semester 5**

- Software Engineering & Project Management
- Computer Networks
- Theory of Computations
- Data Visualization Lab
- Professional Elective Course
  - Computer Vision
  - Artificial Intelligence
  - Distributed Systems
  - Unix System Programming
- Mini Project
- Research Methodology and IPR
- Environmental Studies
- National Service Scheme (NSS)
- Physical Education (PE) (Sports and Athletics)
- Yoga

**Semester 7**

Big Data Analytics

- Parallel Computing
- Information & Network Security
- Professional Elective Course
  - Deep Learning
  - Software Quality Assurance
  - Embedded Systems
  - Distributed File Systems
- Open Elective Course
  - Introduction to DBMS
  - Introduction to Algorithms
  - Software Engineering
- Major Project Phase-II

**Semester 6**

- Full Stack Development
- Machine Learning
- Professional Elective Course
  - Blockchain Technology
  - Internet of Things
  - Compiler Design
  - Cloud Computing
- Open Elective Course
  - Introduction to Data Structures
  - Fundamentals of Operating Systems
  - Mobile Application DevelopmentIntroduction to AI
- Project Phase I
- Machine Learning lab
- Ability Enhancement Course/Skill Development Course V
  - Progressive App Development
  - Tosca – Automated Software Testing
  - Cyber Laws
  - 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)

## Enrichment Programs

- **3rd Sem** : Networking & Wireshark
- **4th Sem** : Palo Alto Firewall
- **5th Sem** : Ethical Hacking
- **6th Sem** : QRadar SIEM

## 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.

## 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

## **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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