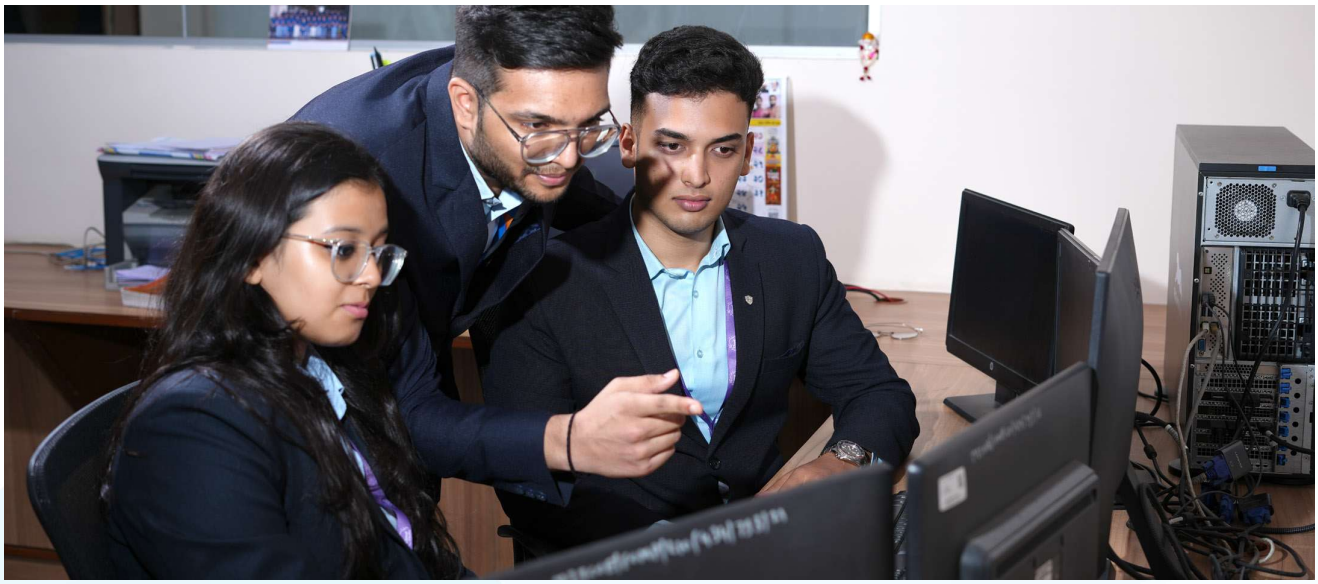
Computer Science & Engineering



Program Overview

The Bachelor of Engineering (B.E.) in Computer Science & Engineering, affiliated with Mumbai University, is a four-year undergraduate program that provides a comprehensive foundation in both theoretical and practical aspects of computing. The curriculum is structured across eight semesters and covers core subjects such as Programming Languages, Data Structures and Algorithms, Digital Logic Design, Computer Organization and Architecture, Database Management Systems, Operating Systems, Computer Networks, and Software Engineering. Advanced topics like Artificial Intelligence, Machine Learning, Cloud Computing, Web Technologies, and Cyber Security are also integrated, enabling students to keep pace with evolving industry trends.

The program emphasizes hands-on learning through laboratory work, mini-projects, internships, and a final-year research project, fostering problem-solving, critical thinking, and technical proficiency. Students are encouraged to participate in seminars, workshops, and technical events to enhance their professional skills. The syllabus also includes elective courses, allowing students to tailor their learning to specific interests within the field. Graduates are well-prepared for diverse career opportunities in IT, software development, data analysis, research, and higher studies, benefitting from a curriculum that aligns with industry requirements and technological advancements.

Program Highlights

- Comprehensive curriculum covering programming, algorithms, databases, and computer networks.
- Emphasis on hands-on learning through labs, mini-projects, and major projects.
- Elective courses in emerging areas like AI, cloud computing, and cybersecurity.
- Regularly updated syllabus aligned with industry requirements and technological advancements.
- Opportunities for internships, workshops, and industry interaction.
- Strong foundation for careers in IT, software development, and higher studies.

Career Prospects

- Software Developer/Engineer
- Data Scientist or Data Analyst
- Artificial Intelligence/Machine Learning Engineer
- Cybersecurity Specialist
- Cloud Solutions Architect or Cloud Engineer
- Full Stack Developer or Web Developer
- Database Administrator
- DevOps Engineer
- Game Developer
- Big Data Engineer
- Network Engineer or System Administrator
- IT Consultant or Business Analyst

Program Outcomes

- Apply knowledge of computing, mathematics, and engineering fundamentals to solve complex problems.
- Design, implement, and evaluate computer-based systems to meet specified requirements.
- Use modern computing tools and techniques for analysis and development of software solutions.
- Communicate effectively and function efficiently in multidisciplinary teams.
- Understand and address professional, ethical, legal, and societal responsibilities.
- Engage in lifelong learning and adapt to emerging technologies and trends.