Computer Science & Engineering (Artificial Intelligence / Machine Learning)

Program Overview

The Bachelor of Engineering (B.E.) in Computer Science & Engineering (Artificial Intelligence / Machine Learning), affiliated with Mumbai University, is a four-year undergraduate program designed to equip students with both foundational and advanced knowledge in computer science, with a specialized focus on AI and ML technologies. The curriculum blends theoretical concepts with practical skills, covering core subjects such as Data Structures, Digital Logic & Computer Architecture, Database Management Systems, Operating Systems, and Computer Networks. Specialized courses in Artificial Intelligence, Machine Learning, Deep Learning, and Data Science are integrated throughout the program to ensure students gain hands-on experience with modern AI/ML tools and frameworks.

The program emphasizes project-based learning, industry-oriented electives, and skill-based labs, encouraging innovation and research. Students undertake mini-projects and a major final-year project, fostering teamwork and real-world problem-solving abilities. The syllabus is regularly updated to align with industry trends and accreditation standards, ensuring graduates are well-prepared for careers in software development, AI/ML engineering, data analysis, and research, or for pursuing higher studies in cutting-edge domains. The program's holistic approach aims to produce professionals who can contribute to technological advancements and address complex challenges in the evolving field of artificial intelligence and machine learning.

Career Prospects

- Industry-focused curriculum with advanced AI and ML courses.
- Emphasis on hands-on learning through labs, projects, and internships.
- Exposure to interdisciplinary applications across technology, healthcare, and finance.
- Strong foundation in core computer science and specialized AI/ML subjects.
- Opportunities for research, leadership development, and capstone projects.
- Regularly updated syllabus aligned with evolving industry trends and technologies.

Career Prospects

- AI/ML Engineer
- Data Scientist
- Machine Learning Engineer
- Deep Learning Scientist
- Natural Language Processing (NLP) Engineer
- Computer Vision Engineer
- AI Software Developer
- Research Scientist (AI/ML)
- Robotics Engineer
- Data Analyst (AI/ML specialization)
- AI Product Manager
- AI/ML Consultant

Program Outcomes

- Apply mathematical and computational concepts to solve AI and ML problems.
- Design and develop intelligent systems using modern AI/ML tools and techniques.
- Analyze and interpret complex data for informed decision-making.
- Implement optimization and modeling strategies for real-world applications.
- Communicate and collaborate effectively in multidisciplinary AI/ML projects.
- Engage in lifelong learning to adapt to evolving AI and ML technologies.