About Us

Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning) - CSE (AIML)

The Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning) at JIS College of Engineering is dedicated to advancing knowledge and education in the dynamic and rapidly evolving fields of AI and ML. Our curriculum is designed to equip students with a robust understanding of core computer science concepts, coupled with specialized training in artificial intelligence and machine learning. Through a blend of theoretical learning and hands-on experience, we aim to foster innovation and research, preparing our graduates to tackle complex challenges in AI-driven industries and academia. Our state-of-the-art laboratories, experienced faculty, and collaborative research environment ensure that students receive the best education and practical insights needed to excel in this cutting-edge field.

Key Highlights

- Specialized Curriculum: Comprehensive courses focused on AI and ML, ensuring students are well-versed in the latest technologies and methodologies.
- Experienced Faculty: A team of dedicated professors and industry experts with extensive experience in AI and ML research and applications.
- State-of-the-Art Labs: Cutting-edge laboratories equipped with advanced computing resources and tools for AI and ML experimentation and research.
- Research Opportunities: Active research programs and projects that encourage students to engage in innovative and impactful research.
- Industry Collaboration: Strong ties with leading tech companies and organizations for internships, projects, and collaborative research initiatives.
- Workshops and Seminars: Regularly organized events featuring experts from academia and industry, providing insights into the latest trends and developments in AI and ML.
- Capstone Projects: Hands-on projects that allow students to apply their knowledge to real-world problems, enhancing their practical skills and employability.
- Student Clubs and Competitions: Active participation in AI and ML clubs, hackathons, and competitions, fostering a culture of learning and innovation.

HOD's Message

The vibrancy of the Department of CSE (AIML) & CST at JIS College of Engineering stems from the collective expertise of our faculty, staff, and students. Our faculty members hail from esteemed universities and industries, boasting specialized knowledge spanning various domains of computer science, artificial intelligence, and machine learning. We take pride in our top-tier lab facilities and software exposure provided to students. We especially with a focus on AI and ML, stands as a cornerstone discipline in today's technology-driven world. It involves the design, development, and maintenance of complex software systems and intelligent algorithms that power our modern society. This encompasses everything from data analytics and natural language processing to advanced robotics and autonomous systems. Beyond its technical aspects, our Department holds a

pivotal role in modern society, ensuring the provision of innovative solutions for industries such as healthcare, finance, transportation, and more. Its diverse sub-disciplines, from software engineering to cybersecurity, address crucial aspects of our digital infrastructure and technological advancements. At JIS College of Engineering, our CSE (AIML) and CST departments equip students with comprehensive knowledge and practical skills essential for navigating the challenges of the real world. Join us and embark on a journey towards a rewarding career in computer science and engineering, making a tangible impact on our world through innovation and technology.

Vision and Mission of AIML/CST

Vision: To lead in the field of Artificial Intelligence and Machine Learning by cultivating a generation of engineers equipped with comprehensive, ethical, and adaptable expertise. Our vision is to excel in technology education and research, serving society with integrity and innovation, and nurturing individuals committed to making a positive impact on humanity

Mission:

M1: Foster an environment that cultivates industry-ready professionals, researchers, and entrepreneurs through advanced courses in cutting-edge technologies and state-of-the-art laboratory experiences.

M2: Enable faculty to engage in progressive research and mentor students in emerging themes, fostering excellence in both teaching and research.

M3: Implement capacity development initiatives focused on skilling, upskilling, and reskilling for faculty and students while fostering a strong commitment to professional ethics in technology and innovation.

M4: Cultivate excellence by enhancing curricular, co-curricular, and extracurricular activities by implementing best practices to foster personal and professional growth, ensuring all excel in technical skills and ethical standards.

Program Outcome (POs) (B.Tech.):

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs) (B.Tech.):

PSO1: The ability to understand, illustrate, discuss, explain the fundamental design and working principle of any existing system or new computing model or concept related to the field of computer science and technology and artificial intelligence with machine learning.

PSO2: To design and conduct experiments, as well as to analyze and interpret data.

PSO3: The ability to design, implement and analyse a solution proposal with proper documentation demonstrating adequate technical skill along with the necessary concept for driving propensity towards technological innovation.

Program Educational Objectives (PEOs) (B.Tech.):

PEO1: Graduates will apply their knowledge and skills to succeed in their careers and/or obtain advanced degrees.

PEO2: Graduates are prepared to take up Masters/Research programs.

PEO3: Graduates will demonstrate a strong foundation in computer science principles and advanced knowledge in artificial intelligence and machine learning, enabling them to solve complex problems in diverse domains.

PEO4: Graduates are prepared to be good entrepreneur and responsible social representatives.