



## **Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning)**

### **M. Tech- Computer Science and Engineering (Artificial Intelligence and Machine Learning)**

#### ***Department Vision:***

To be a leading department in Artificial Intelligence and Machine Learning recognised for excellence in Education, Research, Innovation and Community engagement, empowering learners to become competent Professionals, Innovators and Researchers with regional, national, and global impact.

#### ***Department Mission:***

**Mission 1:** To provide quality education in Artificial Intelligence and Machine Learning that develops strong foundational knowledge, practical skills, and critical thinking through experiential and application-oriented learning.

**Mission 2:** To promote research, innovation, entrepreneurship, and industry collaboration in Artificial Intelligence and Machine Learning to address real-world societal and industrial challenges.

**Mission 3:** To develop ethical and socially responsible professionals with critical thinking, leadership qualities, and a commitment to lifelong learning.

#### ***Programme Educational Objectives (PEOs):***

**PEO 1:** Graduates will design and develop intelligent systems using advanced Artificial Intelligence and Machine Learning techniques to solve complex real-world problems.

**PEO 2:** Graduates will conduct research and apply advanced Artificial Intelligence and Machine Learning techniques to develop innovative solutions for the evolving needs of industry and society

**PEO 3:** Graduates will develop responsible and sustainable AI solutions by applying ethical practices, interdisciplinary collaboration, and lifelong learning to address emerging technological and societal challenges.

***Programme Outcomes (POs):***

| PO          | Statement                                                                                                                                                                                                                                          |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PO1:</b> | An ability to independently carry out research /investigation and development work to solve practical problems                                                                                                                                     |
| <b>PO2:</b> | An ability to write and present a substantial technical report/document                                                                                                                                                                            |
| <b>PO3:</b> | Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program                               |
| <b>PO4:</b> | Students will be able to conduct independent and collaborative research by applying advanced knowledge, modern research methodologies, and innovative approaches to develop intelligent solutions for complex engineering and societal challenges. |
| <b>PO5:</b> | Students will be able to demonstrate professional ethics, leadership, effective communication, and collaborative skills while managing multidisciplinary projects and contributing responsibly to academia, industry, and society.                 |
| <b>PO6:</b> | Engage in lifelong learning and continuous professional development to adapt to emerging technologies and contribute to sustainable development and the well-being of the region, nation, and the global community.                                |

***Programme Specific Outcomes (PSOs):***

**PSO 1:** Graduates will apply advanced Artificial Intelligence and Machine Learning algorithms, models, and computational techniques to design and optimize intelligent systems for complex problems.

**PSO 2:** Graduates will formulate research problems, critically evaluate existing methods, and conduct systematic experiments to validate novel AI/ML approaches using appropriate datasets, metrics, and research methodologies.

**PSO 3:** Graduates will develop and evaluate responsible, reliable, and domain-specific AI solutions by integrating emerging technologies, interdisciplinary knowledge, and ethical principles to address complex industrial and societal challenges.

  
**Head of Department**  
 ( Signature & Seal )

**Head of the Department**  
**Computer Science & Engineering (AI & ML)**  
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