

Department of Mathematics

M. Tech- Machine Learning and Computing (ML & C)

Program Educational Objectives (PEO)

- Provide students with comprehensive theoretical and practical knowledge, enabling them to contribute effectively to research and innovation in ML & C, including a deep understanding of algorithms, data structures, data mining and computational methods.
- Foster interdisciplinary learning by integrating concepts from mathematics, computer science, statistics, and other domain-specific areas, empowering students to address real-world challenges holistically, through projects, case studies and model selection.
- Prepare students for careers in the industry by offering hands-on experience with customized tools, techniques, and methodologies used in machine learning and computing, ensuring their readiness to meet the demands of the industry.
- Educate students about the ethical implications of machine learning and computing, emphasizing fairness and responsible use of artificial intelligence to instill ethical awareness in their professional practices.

Program Outcomes (PO)

- Graduates will acquire advanced skills in designing, implementing, and evaluating machine learning algorithms, equipping them to tackle complex problems across diverse domains by translating theoretical knowledge into practical applications.
- Graduates will receive training to contribute to machine learning and computing knowledge creation, demonstrating critical thinking skills in data analysis, result interpretation, and decision-making using machine learning models.
- They will possess a comprehensive interdisciplinary understanding of theory, techniques, and tools in machine learning and computing, to extract valuable information from data to take decisions accordingly.
- Overall, the program outcome is a set of ethically trained ML graduates who can pursue careers in research, academia, industry, or entrepreneurship in the rapidly evolving field of machine learning and computing.