

Department of Artificial Intelligence & Data Science

a) Vision of the Department

To emerge as a Center of Excellence in Artificial Intelligence and Data Science by fostering a cognitive learning environment, advancing education and research, and promoting industrial collaboration to nurture inventive and skilled professionals.

b) Mission of the Department

M1: To empower students with content-based learning through premier-quality data science education, research opportunities, and industrial collaboration, enabling them to excel in the field of AI and Data Science.

M2: To offer training programs that bridge the gap between academia and industry, fostering industry-ready graduates.

M3: To prepare graduates to embrace lifelong learning and contribute to society as ethical and responsible citizens.

a) Program Educational Objectives (PEOs)

PEO 1: To become successful professionals with expertise in technology, knowledge, and skills relevant to the ICT industry.

PEO 2: To contribute to synthesizing solutions for real-world problems through effective teamwork.

PEO 3: To grow as sincere professionals, motivated lifelong learners, and ethical practitioners.

b) Program Specific Outcome (PSOs)

PSO 1: Students will engage in sustainable development and demonstrate data analytics skills for effective interpretation and decision-making to address real-life problems.

PSO 2: Students will develop programming skills essential for building AI-based data science applications.

PSO 3: Students will apply ethical principles and uphold professional and social responsibilities.

Program Outcomes

PO1	Engineering Knowledge: Apply knowledge of mathematics and science, with fundamentals of Artificial Intelligence & Data Science to be able to solve complex engineering problems related to Artificial Intelligence & Data Science.
PO2	Problem Analysis: Identify, Formulate, review research literature and analyze complex engineering problems related to Artificial Intelligence & Data Science and reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences
PO3	Design/Development of solutions: Design solutions for complex engineering problems related to Artificial Intelligence & Data Science 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 of Artificial Intelligence & Data Science related 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 Artificial Intelligence & Data Science professional engineering practice
PO7	Environment and Sustainability: Understand the impact of the Artificial Intelligence & Data Science 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 able to comprehend and with 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 management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi-disciplinary environments.
PO12	Life-Long Learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning the broadest context of technological change.

PO1	Engineering Knowledge: Apply knowledge of mathematics and science, with fundamentals of CSE- Internet of Things and Cyber Security including Block Chain Technology to be able to solve complex engineering problems related to the domain.
PO2	Problem Analysis: Identify, Formulate, review research literature and analyze complex engineering problems related to the domain and reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences
PO3	Design/Development of solutions: Design solutions for complex engineering problems related to CSE- Internet of Things and Cyber Security including Block Chain Technology 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 related to the domain.
PO5	Modern Tool Usage: Create, Select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling of CSE- Internet of Things and Cyber Security including Block Chain Technology related complex engineering activities with an understanding of the limitations
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