



# **SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY**

## **(An Autonomous Institution under UGC, New Delhi)**

(Permanently Affiliated to JNTUH, Approved by AICTE, New Delhi and Accredited by NBA, NAAC)  
Sheriguda Village, Ibrahimpatnam Mandal, Ranga Reddy Dist. – 501 510

### **VISION OF THE INSTITUTE**

To be a premier institution in engineering & technology and management for competency, values and social consciousness.

### **MISSION OF THE INSTITUTE**

**IM<sub>1</sub>:** Provide high quality academic programs, training activities and research facilities.

**IM<sub>2</sub>:** Promote continuous industry-institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among stakeholders.

**IM<sub>3</sub>:** Contribute to the economic and technological development of the region, state and nation.

### **VISION OF THE DEPARTMENT**

To produce competent professionals recognized for excellence, innovation and societal relevance by impacting their knowledge of Artificial Intelligence and Data Science.

### **MISSION OF THE DEPARTMENT**

The Department has following Missions:

**DM 1:** To produce industry-ready professionals and leverage Artificial Intelligence and Data science innovative models for automation, effective decision-making and competitive advantage.

**DM 2:** To develop state-the-art of academic and infrastructural services with modern learning resources to produce self-Sustainable professionals.

**DM 3:** To inculcate the prominence of higher studies, research and entrepreneurship to pursue global standards.

### **PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

**PEO I:** Comply with the contemporary trends and best practices of industry and research standards of Artificial Intelligence and Data Science.

**PEO II:** Develop Artificial Intelligence and Data Science based solutions to address diverse needs of the community for improving the quality of life and environment.

**PEO III:** To produce creative and technically strong engineers with research pioneering solutions to meet global Challenges.

**PEO IV:** Inculcate values of professional ethics, social concerns, environment protection and life-long learning.

## PROGRAM OUTCOMES (POs) & PROGRAM SPECIFIC OUTCOMES (PSOs)

PO	Description
PO 1	<b>Engineering Knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
PO 2	<b>Problem Analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO 3	<b>Design / development of Solutions:</b> 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.
PO 4	<b>Conduct investigations of complex problems:</b> 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.
PO 5	<b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO 6	<b>The engineer and Society:</b> 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.
PO 7	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO 8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
PO 9	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO 10	<b>Communication:</b> 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.
PO 11	<b>Project management and finance:</b> 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.
PO 12	<b>Life-long learning:</b> 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
<b>Program Specific Outcomes</b>	
PSO 1	Adapt, contribute and innovate new technologies in the key domains of Artificial Intelligence & Data Science during higher studies / product development
PSO 2	To equip students with interdisciplinary skill sets to be able to build intelligent systems which in turn provide dynamic and promising careers in the global marketplace.
PSO 3	Utilize Artificial Intelligence and Data Science tools to provide innovative business solutions.