

Stanley College of Engineering and Technology for Women

(Approved by AICTE, Accredited by NAAC 'A', UGC Autonomous) Abids, Hyderabad, Telangana–500001

Department of Artificial Intelligence & Data Science

Vision: To be the center of excellence in empowering girl students with quality education to make lifelong global innovators & contributors in the ever-advancing field of Artificial Intelligence & Data Science.

Mission:

- 1. To provide a student-centric education that aims to focus on a four-tiered strategy of Education, Research, Development and Innovation by formulating a meaningful curriculum that combines theory and practical skills.
- 2. To Foster industry collaborations for impactful applications, industry readiness & encourage students in research, innovations and inventions through quality internships, hackathons & other technical events.
- 3. To let our young minds flourish in any industry by promoting continuous learning and develop employability skills through quality training programs.
- 4. To produce competent and ethical engineers who will design, develop, innovate & invent ethical AI systems, leaving a remarkable impact on the technological needs of the society and achieve self- sustainability.

Program Educational Objectives: (PEO's)

PEO1: To provide graduates with the proficiency to utilize the fundamental knowledge of basic sciences, mathematics, artificial intelligence, data science and statistics to build systems that require management and analysis of large volume of data.

PEO2: To enrich graduates with necessary technical skills to pursue pioneering research in the field of AI

PEO3: To encourage students to think critically, develop innovative skills, expose them to an array of ideas and information through numerous technical events, hackathons and quality internships.

Program Specific Outcomes: (PSO's)

PSO1: To instill interest and curiosity in students in the field of AI and Data Science through project-based learning.

PSO2: To provide a concrete foundation and enrich their abilities to qualify for Employment, Higher studies and pursue Research in Artificial Intelligence and Data science with ethical values.

PSO3: To promote ethical and responsible AI practices for the benefit of humanity and to harness AI for a positive societal impact & meet global standard.

PROGRAM OUTCOMES

PO1: Engineering knowledge: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the conceptualization of engineering models.

PO2: Problem Analysis: Identify, formulate, research literature and solve complex engineering problems reaching substantiated conclusions using first principles of mathematics and engineering sciences.

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

PO4: Conduct investigations of complex problems: Conduct investigations of complex problems including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.

PO5: Modern Tool Usage: Create, select and apply appropriate techniques, resources, and modern engineering tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PO6: The engineer and society: Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.

PO7: Environment & sustainability: 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.

PO8: Ethics: Demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering practice.

PO9: Individual and Team work: Understand and commit to professional ethics and responsibilities and norms of engineering practice.

PO10: Communication: Understand the impact of engineering solutions in a societal context and demonstrate knowledge of and need for sustainable development.

PO11: Project Management and Finance: Demonstrate a knowledge and understanding of management and business practices, such as risk and change management, and understand their limitations.

PO12: Lifelong Learning: Recognize the need for, and have the ability to engage in independent and life-long learning