

**VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY, (AUTONOMOUS)
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**

VISION

To produce competent professionals in Artificial Intelligence and Data Science by focusing excellence in knowledge-centric education, innovation and research to address the needs of industry and society.

MISSION

- Impart knowledge in Artificial Intelligence and Data Science technologies in par with industrial standards.
- Excel in Teaching-Learning process using modern infrastructure and innovative components.
- Foster research attitude through project-based learning.
- Enhance employability and entrepreneurial skills in the field of AI & DS through training and self- learning.

Programme Educational Objectives

Our graduates after few years of graduation will:

1. **Preparation:** Develop successful career in Software industry or carryout research in core areas of Artificial Intelligence and Data Science.
2. **Core Competence:** Demonstrate their technical skills and competency in various applications through the use of Artificial Intelligence and Data Science to address various issues in the society.
3. **Multidisciplinary:** Solve intelligent computing and multidisciplinary challenges using their analytical, decision-making and core skills in Artificial Intelligence and Data Science.
4. **Professional Environment:** Exhibit professional ethics and moral values with capability of working as an individual and as a team to contribute to industry and society.
5. **Learning Environment:** Engage in life-long learning by pursuing higher education to augment career development.

PROGRAMME OUTCOMES

Graduates will be able to

PO1: **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

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

PO3: **Design/Development of Solutions:** 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.

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 for complex problems.

PO5: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to 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 professional engineering practice.

PO7: Environment and Sustainability: Understand the impact of the 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, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

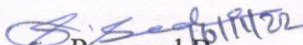
PO11: Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

PROGRAMME SPECIFIC OUTCOMES

PSO1: Integrate the fundamentals of mathematical, analytical, programming and domain knowledge to build AI enabled systems for solving real world problems.

PSO2: Acquire skills to model the data science assisted systems and to analyse the data to solve business related problems.


Prepared By


Verified By

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CCO (A)


Principal