DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Program Educational Objectives (PEOs)

PEO 1: To provide the graduates with solid foundation in Computer Science and Engineering along with the fundamentals of Mathematics and Sciences with a view to impart in them high quality technical skills like modelling, analysing, designing, programming and implementation with global competence and helps the graduates for life-long learning.

PEO 2: To prepare and motivate graduates with recent technological developments related to core subjects like Programming, Databases, Design of Compilers and Network Security aspects and future technologies so as to contribute effectively for Research & Development by participating in professional activities like publishing and seeking copy rights.

PEO 3: To train graduates to choose a decent career option either in high degree of employability/Entrepreneur or, in higher education by empowering students with ethical administrative acumen, ability to handle critical situations and training to excel in competitive examinations.

PEO 4: To train the graduates to have basic interpersonal skills and sense of social responsibility that paves them a way to become good team members and leaders.

Program Outcomes (POs)

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 literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural science 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.

PO5   **Modern Tool Usage:** 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.

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 context 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 the 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 life long learning in the broadcast of technological change.

Program Specific Outcomes (PSOs)

PSO1   Ability to choose or develop the right tool for Data analysis and develop high end intelligent systems

PSO2   Understand, analyze and develop innovative solutions for real world problems in industry and research
establishments related to Artificial Intelligence and Data Science