Computer Science & Engineering

LEARNING ESSENTIALS

JIS College of Engineering

Computer Science & Engineering

Vision

The Computer Science and Engineering Department at JIS College of Engineering will be a leader in computing innovation through excellence in undergraduate and graduate education, active research programs and the dissemination of knowledge. The Department will leverage both the international and interdisciplinary nature of computing.

Mission

- The Department's mission is to provide students and faculty with an open environment that encourage professional and personal growth.
- The academic programs mission is that to prepare students for flexible career paths and continuing advancement in computing.
- The students are motivated and encouraged to build a successful careers in the computing professions through flexible programs of study that can be adapted to support individual career goals.

Computer Science & Engineering

Programme Educational Objectives

01 Graduates will be engineering practitioners and leaders, who would assist to resolve industry's technological problems.

02 Graduates will be engineering professionals, innovators or entrepreneurs engaged in technology development, technology deployment or engineering system implementation in industry and research institute.

03 Graduates will interact with their peers in other disciplines in industry and society and contribute to social awareness and the economic growth of the country.

04 Graduates will be successful in pursuing higher studies in engineering or management and will pursue career paths in teaching or research.

Computer Science & Engineering

Programme Outcomes

- **Engineering knowledge:** Apply knowledge of mathematics, science, engineering fundamentals in engineering specialization to get the solution of complex engineering problems.
- **Problem analysis:** Identify, formulate, research literature and analyze complex engineering problems and formulate it to the substantiated conclusions of mathematics, natural sciences and engineering sciences.
- **Design / Development of solutions:** Design solutions for complex engineering problems to meet the specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.
- **Conduct Investigations of Complex Problems:**Use the research-based knowledge and methodologies for interpretation of data and synthesis of information to provide valid conclusions.
- **Modern Tool Usage:** Use the appropriate techniques, resources and modern engineering and IT tools to predict and model the complex engineering activities with an understanding of the limitations.
- **The Engineer and Society:** Apply contextual knowledge reasoning to assess societal, health, safety, legal and cultural issues towards consequent responsibilities relevant to professional engineering practice.
- **Environment and Sustainability:** Apply the engineering solutions in societal and environmental contexts and demonstrate knowledge for sustainable development.
- **Ethics:** Apply ethical principles to commit the professional ethics, responsibilities and norms for engineering practice.
- **Individual and Team Work:** Effectively function as an individual, a member and leader in diverse group in multidisciplinary areas.
- **Communication:** Effectively communicate on complex engineering activities with the engineering community for effective reports and design documentation to make effective presentations and give and receive clear instructions.
- **Project Management and Finance:** Use engineering and management principles to manage projects and in multidisciplinary environment as a member and leader of a team.
- **Life-long Learning:** Self-learner and clearly understand the value of lifelong learning.