

VISION OF THE DEPARTMENT

Making our students technically superior and ethically strong, who in turn shall advance the quality of life. To generate competent professionals to become part of the industry and research organizations at the national and international levels.

MISSION OF THE DEPARTMENT

M1: Prepare the students with strong fundamental concepts, analytical capability, programming and problem solving skills.

M2: Create an ambience of education through faculty training, self-learning, sound academic practices and research endeavors.

M3: Provide opportunities to promote organizational and leadership skills in students through various extra-curricular and co-curricular events.

M4: To make the students as far as possible industry ready to enhance their employability in the industries.

M5: To improve department industry collaboration through internship program and interaction with professional society through seminar/workshops.

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, research literature, and analyze 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.

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 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 teamwork: 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 life-long learning in the broadest context of technological change

PROGRAM EDUCATION OBJECTIVES (PEOs)

PEO-I: To provide the imperatives knowledge of science and engineering concepts fundamental for a computer professional and equip the proficiency of mathematical foundations and algorithmic principles for competent problem solving ability.

PEO-II: To inculcate ability in creativity & design of computer support systems and impart knowledge and skills for analyze, design, test and implement various software applications.

PEO-III: To exhibit leadership capability, triggering social and economic commitment and inculcate community services and protect environment.

PEO-IV: To train students with good scientific and engineering logics to comprehend, analyze, design and create novel products as well as solutions for the real time problems.

PEO-V: To encourage student's lifelong learning skills, entrepreneurship abilities, ethical values for a successful professional career.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO -1 Foundation of mathematical concepts: To use mathematical methodologies to crack problem using suitable mathematical analysis, data structure and suitable algorithm.

PSO - 2 Foundation of Computer System: the ability to interpret the fundamental concepts and methodology of computer systems. Students can understand the functionality of hardware and software aspects of computer systems.

PSO - 3 Foundations of Software development: the ability to grasp the software development lifecycle and methodologies of software systems. Possess competent skills and knowledge of software design process. Familiarity and practical proficiency with a broad area of programming concepts and provide new ideas and innovations towards research.

Course Outcomes (CO)

At the end of the course, student would be able to

CO1: Students will understand the need of object oriented programming, fundamental concepts and will be able to solve computational problems using basic constructs like if-else, control structures, array, strings in Java environment.

CO2: Student will understand how to model the real world scenario using class diagram and be able to exhibit communication between objects using sequence diagram..

CO3: Students will be able to implement relationships between classes..

CO4: Students will be able to demonstrate various collection classes.

CO5: Students will be able to create and user interfaces and packages

CO6: The students will be able to demonstrate programs on exceptions, multithreading and applets.