

Dr. A.P.J. ABDUL KALAM UNIVERSITY, INDORE

SCHOOL OF ENGINEERING

Department of CSE

Course Outcomes (CO)

- **Digital Logic Design:**

Understanding number systems, designing combinational and sequential circuits, and identifying timing problems in digital design.

- **Data Structures & Algorithms:**

Applying algorithms to solve well-known problems, inferring performance analysis, and utilizing techniques like Divide and Conquer and the Greedy method.

- **Elements of Computer Science & Engineering:**

Knowing the functional units of a basic computer, understanding data structures and algorithms for problem-solving, and recognizing the significance of operating systems and networks.

- **Software Engineering:**

Applying software engineering principles, developing UML diagrams, choosing appropriate testing types, and illustrating the benefits of agile development.

Program Outcomes (PO)

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problem
2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. 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.
4. 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.

5. **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.

Program Specific Outcomes (PSO)

- **PSO1.** The Computer Science and Engineering graduates are able to analyze, design, develop, test and apply management principles, mathematical foundations in the development of computational solutions, make them to expert in designing the computer software and hardware.
- **PSO2.** Develop their skills to solve problems in the broad area of programming concepts and appraise environmental and social issues with ethics and manage different projects in inter-disciplinary field.
- **PSO3.** Apply mathematical and scientific skills in numerous areas of Computer Science and Engineering to design and develop software-based systems.