

**PO, PSO, CO (NEP REVISED)**  
**(With Effect from AY 2021-22)**

**Program Outcomes**

- PO1: Discipline knowledge:** Acquiring knowledge on basics of Computer Science and ability to apply to design principles in the development of solutions for problems of varying complexity
- PO2: Problem Solving:** Improved reasoning with strong mathematical ability to Identify, formulate and analyse problems related to computer science and exhibiting a sound knowledge on data structures and algorithms.
- PO3: Design and Development of Solutions:** Ability to design and development of algorithmic solutions to real world problems and acquiring a minimum knowledge on statistics and optimization problems. Establishing excellent skills in applying various design strategies for solving complex problems.
- PO4: Programming a computer:** Exhibiting strong skills required to program a computer for various issues and problems of day-to-day applications with thorough knowledge on programming languages of various levels.
- PO5: Application Systems Knowledge:** Possessing a sound knowledge on computer application software and ability to design and develop app for applicative problems.
- PO6: Modern Tool Usage:** Identify, select and use a modern scientific and IT tool or technique for modelling, prediction, data analysis and solving problems in the area of Computer Science and making them mobile based application software.
- PO7: Communication:** Must have a reasonably good communication knowledge both in oral and writing.
- PO8: Project Management:** Practicing of existing projects and becoming independent to launch own project by identifying a gap in solutions.
- PO9: Ethics on Profession, Environment and Society:** Exhibiting professional ethics to maintain the integrity in a working environment and also have concern on societal impacts due to computer-based solutions for problems.
- PO10: Lifelong Learning:** Should become an independent learner. So, learn to learn ability.
- PO11: Motivation to take up Higher Studies:** Inspiration to continue educations towards advanced studies on Computer Science.

**Program Specific Outcomes (PSOs)**

- PSO 1:** Apply standard Software Engineering practices and strategies in real -time software project development
- PSO 2:** Design and develop computer programs/computer -based systems in the areas related to AI, algorithms, networking, web design, cloud computing, IoT and data analytics.

**PSO 3:** Acquaint with the contemporary trends in industrial/research settings and thereby innovate novel solutions to existing problems

**PSO 4:** The ability to apply the knowledge and understanding noted above to the analysis of a given information handling problem.

**PSO 5:** The ability to work independently on a substantial software project and as an effective team member.

## **Program Educational Objectives**

**PEO1:** The primary objective of this program is to provide a foundation of computing principles and business practices for effectively using/managing information systems and enterprise software

**PEO2:** It helps students analyse the requirements for system development and exposes students to business software and information systems

**PEO3:** This course provides students with options to specialize in legacy application software, system software or mobile applications

**PEO4:** To produce outstanding IT professionals who can apply the theoretical knowledge into practice in the real world and develop standalone live projects themselves

**PEO5:** To provide opportunity for the study of modern methods of information processing and its applications.

**PEO6:** To develop among students the programming techniques and the problem-solving skills through programming.

**PEO7:** To prepare students who wish to go on to further studies in computer science and related subjects.

**PEO8:** To acquaint students to Work effectively with a range of current, standard, Office Productivity software applications.

## **Course Outcomes**

### **Semester: I**

**Course Code:** CAC01

**Course Title:** Fundamentals of Computers

**CO1:** Recall and describe the introduction to computers, their classification, anatomy, constituents, architecture, and the role of microcontrollers.

**CO2:** Recall and explain the concepts of operating systems, their functions, classification, kernel, shell, Unix basics, shell programming, and booting process.

**CO3:** Demonstrate an understanding of databases, their purpose, users, SQL, SQL data types, and basic SQL queries including select, alter, update, delete, truncate, and the use of where, and or, and not in clauses.

**CO4:** Recall and describe the basics of the internet, its features, applications, services, internet service providers, the domain name system, browsing, email, and searching.

**CO5:** Demonstrate an understanding of web programming basics and the introduction of HTML and CSS programming.

**CO6:** Recall and describe the introduction to computers, their classification, anatomy, constituents, architecture, and the role of microcontrollers.