# PROGRAM OUTCOMES (POS) FOR COMPUTER SCIENCE MAJOR

## 1. Knowledge of Computing Fundamentals

Students will have a strong foundation in computer science, including digital logic, discrete structures, and programming paradigms, enabling them to apply theoretical and practical knowledge effectively.

#### 2. Problem-Solving and Analytical Skills

Students will be able to analyze, design, and implement algorithms and programs to solve complex computational problems, leveraging logical and critical thinking skills.

#### **3. Programming Proficiency**

Students will demonstrate expertise in multiple programming languages, including C, Java, and Python, developing the ability to write, debug, and optimize code efficiently.

#### 4. Software Development and Design

Students will be able to develop and design software solutions using Object-Oriented Programming, web technologies, and digital system design principles.

## 5. Mathematical and Analytical Abilities

Students will apply mathematical concepts such as discrete structures and logic to analyze and solve computational problems effectively.

#### 6. Digital and System Design Competency

Students will be able to understand and design combinational and sequential circuits, ensuring the efficiency and reliability of digital systems.

## 7. Web Development Skills

Students will be able to design and develop functional web pages using HTML and related technologies, ensuring user-friendly interfaces and interactive experiences.

#### 8. Effective Communication and Collaboration

Students will develop the ability to communicate technical concepts effectively, collaborate in team environments, and present ideas coherently.

#### 9. Adaptability and Lifelong Learning

Students will be able to adapt to emerging technologies, learn new programming paradigms, and apply acquired knowledge to evolving computing challenges.

## 10. Ethical and Professional Responsibility

Students will demonstrate awareness of ethical, social, and legal responsibilities in computing, ensuring responsible and secure application of technology.