



# SHRI GNANAMBICA DEGREE COLLEGE

(AUTONOMOUS)  
(Affiliated to S.V. University)



## DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

### PROGRAM OUTCOMES (POs) Bachelor of Science in Computer Science (B.Sc CS)

#### Introduction

The Bachelor of Science in Computer Science (B.Sc CS) program is designed to provide students with strong theoretical and practical foundations in computer science, programming, software development, networking, cloud computing, artificial intelligence, and cybersecurity. The program aims to develop analytical thinking, technical competence, communication skills, ethical values, and interdisciplinary understanding required for employment, higher education, research, and entrepreneurship.

#### PROGRAM OUTCOMES (POs)

After successful completion of the B.Sc CS program, graduates will be able to:

##### PO1 – Fundamental Computing Knowledge

Apply knowledge of computer science fundamentals, programming languages, databases, operating systems, networking, software engineering, and computational principles for solving computing problems.

##### PO2 – Problem Solving and Programming Skills

Identify, analyze, and develop appropriate solutions for computational and real-world problems using algorithms, logical reasoning, and programming techniques.

##### PO3 – Software Development and System Design

Design, develop, test, and maintain software applications, web applications, and computing systems using suitable tools, technologies, and methodologies.

##### PO4 – Modern Computing Tools and Technologies

Use modern computing tools, cloud technologies, artificial intelligence applications, cybersecurity concepts, and emerging technologies effectively in professional practice.

##### PO5 – Data Management and Analytical Skills

Apply database management, data analysis, visualization, and analytical reasoning techniques for effective interpretation and decision making.

##### PO6 – Professional Ethics and Teamwork

Demonstrate professional ethics, cyber ethics, teamwork, leadership qualities, and social responsibility in computing environments.

**PO7 – Communication and Interpersonal Skills**

Communicate effectively through oral, written, and digital modes and function efficiently as an individual and as a team member in multidisciplinary environments.

**PO8 – Lifelong Learning and Adaptability**

Develop self-learning ability, critical thinking, adaptability, and continuous learning skills to cope with rapidly evolving technologies and professional challenges.

**PO9 – Interdisciplinary and Scientific Knowledge**

Integrate knowledge from multidisciplinary and minor courses such as mathematics, statistics, physics, electronics, environmental studies, and social sciences for holistic understanding and problem solving.

**CO-PO Mapping Methodology**

The Course Outcomes (COs) of individual courses are mapped with the relevant Program Outcomes (POs) using the following scale:

Mapping Level	Description
3	High Correlation
2	Moderate Correlation
1	Low Correlation
-	No Correlation

**Assessment and Attainment**

The attainment of Program Outcomes is measured through:

- Internal Assessment Tests
- Semester End Examinations
- Laboratory Performance
- Assignments and Seminars
- Mini Projects and Major Projects
- Viva-Voce Examinations
- Practical Implementation Activities
- Student Participation in Technical Events

The attainment levels are evaluated periodically for continuous improvement of curriculum delivery and academic quality enhancement.

**Conclusion**

The Program Outcomes of B.Sc CS aim to prepare graduates with strong theoretical foundations, technical competence, analytical abilities, ethical values, communication skills, and interdisciplinary understanding required for careers in software development, IT industries, higher education, research, and entrepreneurship.

The Program Outcomes are approved in BOS and Ratified in Academic Council.

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