

Bachelor of Computer Science [BCS]

- **Course/Program Name:** Bachelor of Computer Science [BCS]
- **Duration:** Three years
- **Affiliation:** Course is affiliated and recognized by Shivaji University Kolhapur
- **Pattern of Program:** Semester
- **Course Structure:**
 - **BCS I (Sem I and Sem II)**

Mathematics: Paper-I, II, III, IV (Mathematics Practical I & II)
Electronics: Paper-I, II, III, IV (Electronics Practical I & II)
Statistics: Paper-I, II, III, IV (Statistics Practical I & II)
Computer science: Paper-1.1, 1.2, 2.1, 2.2
(Paper-1.3/2.3:Laboratory course in Computer Science-I &II)
The Practical examination will be conducted in annual.
 - **BCS II (Sem III and Sem IV)**

Computer Science: Paper-V, VI, VII, VIII
(Laboratory course in Computer Science-III &IV)
Mathematics: Paper-V, VI, VII, VIII (Mathematics Practical III & IV)
Electronics: Paper-V, VI, VII, VIII (Electronics Practical III & IV)
English: Paper-I, II
The Practical examination will be conducted in annual.
 - **BCSIII (Sem V and Sem VI)**

Computer Science:
Paper-IX, X, XI, XII, XIII, XIV/XV (Elective-I OR Elective-II)
Paper- XVI, XVII, XVIII, XIX, XX, XXI/XXII (Elective-I OR Elective-II)
Lab Course-IV (Based on Paper-IX and XVI)
Lab-Course-V (Based on paper – X, XIII, XVII&XX)
Lab Course-VI (Software Project)
The Practical examination will be conducted in annual.
- **Course Type:** Non Grantable
- **Course Outcomes**
 1. To develop knowledge, understanding and skills in information technology.
 2. To give knowledge and skill to students needed to become effective professionals within the computing industries and also provide skills for computer science solutions to information technology problems.
 3. To give computer education to student with electronics, mathematics, statistics and communication skill.
 4. To create awareness of computer science and its applications.
 5. To provide range of educational activities, to develop a range of transferable skills applicable to employment for IT industries.
 6. Student will capable to design the system under any platform using VB .Net, Java with respect to database using Ms-Access, SQL Server.
 7. Students will be able to use appropriately system design notations with analyzing, designing, implementing & testing the computerized system.
 8. To serve need of advanced computer knowledge and to provide trained manpower to industries.
 9. To develop software skills and self employment abilities in student.
 10. To impart adequate professional knowledge and computer skill so as to enable students to take up careers in field of IT.

- **Program Outcomes:**

On successful completion of this program,

1. students will have knowledge about operating system, Procedure oriented, Object oriented, Event driven languages, Computer Networks, Web Technology, Software Engineering E-Commerce, Computer fundamental, System analysis and Design, Data structure etc.
2. An ability to apply design and development principles in the construction of software systems of varying complexity.
3. Students will have the ability to use current techniques, skills, and tools necessary for computing practice.
4. Students will have the ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
5. Students will have the ability to analyze a problem and identify and define the computing requirements appropriate to its solution.
6. Students will have the ability to communicate effectively with a range of audience.
7. Students will have an understanding of professional, ethical, legal, security, and social issues and responsibilities.
8. Students will have the ability to function effectively on teams to accomplish a common goal.
9. Students will have a basic knowledge of computer hardware and software.

- **Program Specific Outcomes:**

A graduate of the Bachelor of Computer Science (B.C.S) Program will give:

1. Professional Skills:

The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, web design, and networking for efficient design of computer-based systems.

2. Problem-Solving Skills:

The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.

3. Depth of Knowledge

In a self-selected area of depth in Computing, students will demonstrate a depth of knowledge appropriate to graduate study and/or lifelong learning in that area.

4. Successful Career and Entrepreneurship:

The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, and students are well prepared for higher studies.

5. Personal & Social Development:-

To assist to development of new methods and process of software development. As well as give lifelong learning skills, attitudes for social and personal development among student.

6. Ease For Latest Trends:

Be acquainted with the contemporary issues, latest trends in technological development and thereby innovate new ideas and solutions to existing problems.