

M. Sc. Computer Science

Course /Program : M. Sc. In Computer Science

Duration- : Two years Full time

Affiliation- : Shivaji University, Kolhapur

Pattern of Program- :Semester method

Course structure - :

M.Sc. Part I - Semester I

Course Code	Title of the Course	Credits	Teaching Scheme (h/w)		Evaluation Scheme (marks)		
			L	P	CIE	SE	Total
CS2111	Theory of Languages	4	4	-	20	80	100
CS2112	Advanced Computer Networks	4	4	-	20	80	100
CS2113	Advanced Data Base Theory	4	4	-	20	80	100
CS2114	Design and Analysis of Algorithms	4	4	-	20	80	100
CS2115	Data Base Lab	4	-	12	20	80	100
CS2116	DAA and TL Lab	4	-	12	20	80	100
CS2131	CBCS (Comp.Sci / Other Dept.)	4	4	-	20	80	100
Total		28	20	24	140	560	700

M.Sc. Part I - Semester II

Course Code	Title of the Course	Credits	Teaching Scheme (h/w)		Evaluation Scheme (marks)		
			L	P	CIE	SE	Total
CS2211	Compiler Techniques	4	4	-	20	80	100
CS2212	Artificial Intelligence	4	4	-	20	80	100
CS2213	Java Programming	4	4	-	20	80	100
CS2221	Elective - I	4	4	-	20	80	100
CS2214	Java Lab	4	-	12	20	80	100
CS2215	Project	4	-	12	20	80	100
CS2231	CBCS (Comp.Sci / Other Dept.)	4	4	-	20	80	100
Total		28	20	24	140	560	700

Course Outcomes:

- To Improving abilities of youths interested in pursuing careers in the areas of Computer Science to develop the human resources in the thrust areas of national and global importance.
- To motivate the youth to capable for research work with great thirst for new technologies, techniques and methodologies.
- To prepare youth with good thinking to help society with new technology to solve the challenges.
- To provide opportunities to young graduates to reach her highest personnel and professional competence.
- This course has introduced the Choice Based Credit System (CBCS).

Program Outcomes:

- The goal of program is to prepare students for prominent carriers in software industry and /or for further academic study.
- To train youths -
 - To understand fundamentals of computer science and advanced programming techniques right from essential of Mathematics and Management Science to have high performance computing and soft computing tools.
 - To design component, or processes to meet the needs within realistic constraints.
 - To identify, formulate, and solve Software Engineering, Networking and Data Mining problems.
 - To utilize the techniques, skills and modern programming tools, and techniques necessary for software development practice.
 - To express effective communication skills.
- An ability to function effectively on multi-disciplinary teams (teamwork).
- An ability to analyze a problem, and identify, formulate and use the appropriate computing requirements for obtaining its solution (problem solving skills).

Program Specific Outcomes:

- Technical Expertise: Implement fundamental knowledge of computer science for developing effective computing solutions by creativity and logical reasoning.
- Successful Career: Deliver professional services with updated tools and technologies in computer science.
- Soft Skills: Develop leadership skills as system analyst and team work with effective communication and time management in the profession.
- Continuing Education Awareness -Recognition of the need for, and an ability to engage in continuing professional development and life-long learning.
- Professional Integrity: An understanding of professional, ethical, legal, security and social issues and responsibilities.