Yashwantrao Chavan College Of Science, Karad Department of Computer Science B.Sc. Computer Science (Optional)

Program Outcomes (POs) :

Upon successful completion of the B.Sc. Computer Science (Optional) the student should have met the following Student Learning Outcomes:

| PO1 | Apply computer science theory and software development fundamentals to produce computing-based solutions. |
|-----|---|
| PO2 | The education objectives of the major to produce graduates who possess: A sound technical foundation in computer science and the ability to creatively apply computer and related technologies to practical problems. |
| PO3 | An ability to communicate and soft skills to function as an effective professional. |
| PO4 | Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles. |
| PO5 | Students will be prepared for a career in an information technology oriented business or industry, or for graduate study in computer science. |
| PO6 | An understanding of professional, ethical, legal, security, and social issues and responsibilities for the computing profession. |
| PO7 | An ability to analyze impacts of computing on individuals, organizations and society. |
| PO8 | An ability to apply knowledge of computing and mathematics appropriate to the discipline. |

Program Specific Outcomes (PSOs):

| PSO1 | Develop ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution. |
|------|---|
| PSO2 | To prepare students to undertake careers involving problem solving using computer science and technologies. |
| PSO3 | Develop ability to pursue advanced studies and research in computer science. |
| PSO4 | To produce entrepreneurs who can innovate and develop software products. |
| PSO5 | Individual and group study projects and assignments involving individual and team work encourage knowledge sharing and communication. |





Principal Yashwantrao Chavan College of Science

Course Outcomes (COs)

| | B.Sc. (Computer Science) Part I Semester I |
|------------|--|
| | DSC-A11 : Problem Solving using Computers |
| CO1 | Demonstrate a familiarity of computer programming language concepts. |
| CO2 | Understand to develop C programs on Linux platform. |
| CO3 | Apply C programming control structures for problem solving. |
| CO4 | Understand working and implementation of arrays. |
| | DSC-A12 Database Management System |
| CO1 | Describe the basic concepts of DBMS and various databases used in real applications. |
| CO2 | Demonstrate the principles behind systematic database design approaches. |
| | B.Sc. (Computer Science) Part I Semester II |
| | DSC-B11 Programming Skills Using 'C' |
| CO1 | Understand the concept and importance of pointers in C language. |
| CO2 | Demonstrate an understanding of functions in problem solving. |
| CO3 | Understand working of structure and dynamic memory allocation. |
| CO4 | Apply file handling techniques using C language. |
| | DSC-B12 Relational Database Management System |
| CO1 | Understand the importance and working of database. |
| CO2 | Demonstrate an understanding of the relational data model. |
| CO3 | Understand the concept of normalization and apply such knowledge to the normalization of a database. |
| CO4 | Apply SQL queries for database management. |



| tada a | B.Sc. (Computer Science) Part II Semester III |
|-------------|---|
| | DSC-C11 : Web Technology |
| CO1 | understand the principles of web design. |
| CO2 | construct basic websites using HTML and Cascading Style Sheets. |
| CO3 | build dynamic web pages with validation using JavaScript. |
| CO 4 | develop a modern web application that meets the current industry requirement. |
| | DSC-C12 : Object Oriented Programming Using C++ |
| CO1 | understand the principles of web design. |
| CO2 | understand how C++ improves C with object oriented features |
| CO3 | learn syntax and semantics of C++ programming language |
| CO4 | learn how to write inline functions for efficiency and performance. |
| CO5 | learn how to overload functions and operators in C++. |
| CO6 | learn how to design C++ classes for code reuse. |
| CO7 | learn how inheritance promotes code reuse in C++. |
| CO8 | learn how inheritance and virtual functions implement dynamic binding with polymorphism. |
| | B.Sc. (Computer Science) Part II Semester IV |
| S. Rey . | DSC-D11 : Cyber Security Essentials |
| CO1 | understand the concept of information security management. |
| CO2 | learn different access control methods. |
| CO3 | understand wireless network security. |
| CO4 | learn cyber security laws and the importance of security audit. |
| | DSC-D12 : Data Structure Using C++ |
| CO1 | understand the basic concepts such as Abstract Data Types, Linear and Non-Linear Data structures. |
| CO2 | choose appropriate data structures to represent data items in real-world problems. |
| CO3 | analyze the time and space complexities of algorithms. |
| CO4 | design programs using a variety of data structures such as array, stacks, queues, an linked list. |
| CO5 | analyze and implement various kinds of searching and sorting techniques. |



| | B.Sc. (Computer Science) Part III Semester V | | |
|-------------------|--|--|--|
| DSE-21E Core Java | | | |
| CO1 | 1.Object oriented programming concepts using Java. | | |
| CO2 | 2.Knowledgeof input, its processing and getting suitable output. | | |
| CO3 | 3.Understand, design, implement and evaluate classes and applets | | |
| CO4 | 4. Understand concept of Multiprogramming and Exception Handling | | |
| | DSE-22E C# Programming | | |
| CO1 | This course will cover the practical aspects C#.NET framework. | | |
| CO2 | The goal of this course is to introduce the students to the basics of OOPs and windows application program. | | |
| | - DSE-23E Linux part- I | | |
| C01 | 1. Upon completion of this course, students should have a good working knowledge of Linux. | | |
| CO2 | 2. Allowing them to easily use any Linux distribution. | | |
| CO3 | 3. This course shall help student to learn advanced subjects in computer science practically. | | |
| | DSE-24E Python Part -I | | |
| CO1 | 1. To understand why Python is a useful scripting language for developers | | |
| CO2 | 2. To learn how to write loops and decision statements in Python | | |
| CO3 | 3. To learn how to use lists, tuples, and dictionaries in Python programs | | |
| | B.Sc. (Computer Science) Part III Semester VI | | |
| | DSE-21F Advance Java | | |
| C01 | 1) The student will be able to develop distributed business applications, develop web pages Using advanced server-side programming through servlets and Java server pages. | | |
| CO2 | 2) Demonstrate approaches for performance and effective coding | | |
| CO3 | 3) To learn database programming using Java | | |
| CO4 | 4) To study web development concept using Servlet and JSP | | |
| | DSE-22F ASP .NET | | |
| CO1 | This course will cover the practical aspects of multi-tier web based application development using the .NET framework. | | |
| CO2 | The goal of this course is to introduce the students to the basics of distributed Web application development. | | |
| | DSDSE-23F Linux Part- II | | |
| C01 | 1. This course covers design principles of Linux Operating System Memory management. | | |
| CO2 | 2. Structure of File system and virtual file system is also elaborated. | | |
| CO3 | 3. This course contains details of shell programming and introduces System administration | | |
| - | DSE-24F Python Part -II | | |
| CO1 | 1. To learn how to write functions and pass arguments in Python | | |
| CO2 | 2. To learn how to build and package Python modules for reusability | | |
| CO3 | 3. To learn how to use exception handling in Python applications for error handling | | |
| | College | | |

