



Palus Shikshan Prasarak Mandal's
Arts, Commerce & Science College, Palus

Tal. Palus, Dist. Sangli, (Maharashtra) 416310 ☎: (02346) 226226.

(Affiliated to Shivaji University, Kolhapur)

DBT STAR College Scheme Assisted, NAAC Reaccredited with CGPA-2.67(B+)

● Web : www.acscpalus.edu.in ● Email : acscollegepalus@gmail.com ●

B.A., B.Com, B.Sc., B.B.A., B.C.A., B.C.S., M.A., M.Com., M.Sc., PGDCA.

Principal, **Dr. R. S. Salunkhe** M.A., M.Com., M.Phil., Ph.D., SET., M.B.A., D.Litt.

Outward No.: Mahavi/ /F- /

Bachelor of Science (B.Sc.)

Department of Computer Science

Programme Outcomes (POs)

After completing B.Sc. degree programme, the students will be able to:

PO1: Ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution

PO2: Understand the academic field to pursue multi and interdisciplinary science careers in future that include Chemistry, Physics, Botany, Zoology, Mathematics, Microbiology and Computer Science.

PO3: Plan and execute experiments or investigations, analyze and interpret data information collected using appropriate methods.

PO4: To train students in professional skills related to Software Industry. PO5: Ability to design, implement, and evaluate computer-based system, process, component, or program to meet desired needs

PO6: To develop problem solving abilities using a computer.

PO7: Acquire the skills and ability to engage in independent and life-long learning in the broadest context socio technological changes.

PO8: Demonstrate professional and ethical attitude with enormous responsibility to serve the society

Programme Specific Outcomes (PSOs)

PSO1: Develop Competence in basic technical subjects in Computer applications like Programming Languages, Data Structures, Databases, Operating Systems, Software Engineering.

PSO2: Identify, analyze, formulate and develop Computer applications.

PSO3: Ability to communicate effectively among a range of audiences

PSO4: Ability to analyze the local and global impact of computing on individuals, organizations, and society

PSO5: An ability to effectively integrate IT-based solutions into the user environment.

PSO6: Ability to use current techniques, skills, and tools necessary for computing practices

PSO7: Ability to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems

Course Outcomes (COs)

B.Sc. Part – I Computer Science (Optional)

SEM-I

Course Title: Basics of C Programming

Course Outcomes: After successful completion of this course, students will able to:

- 1) Demonstrate a familiarity of computer programming language concepts.
- 2) Understand to develop C programs on Linux platform.
- 3) Use basics of C language syntax as identifiers, keywords, variables, data types and operators.
- 4) Apply the concept of branching, looping, decision-making statements and Array for problem solving.

Course Title: Database Concepts

Course Outcomes: After successful completion of this course, students will able to:

- 1) Describe the basic concepts of DBMS and various databases used in real applications.
- 2) Demonstrate the principles behind systematic database design approaches.
- 3) Describe the fundamental elements of Relational Database Management Systems.
- 4) Use various commands in data languages with example.

SEM-II

Course Title: Advanced C Programming

Course Outcomes: After successful completion of this course, students will able to:

- 1) Understand the concept and importance of pointers in C language.
- 2) Demonstrate an understanding of functions in problem solving.
- 3) Understand working of structure and dynamic memory allocation.
- 4) Apply file handling techniques using C language.

Course Title: Advanced Database

Course Outcomes: After successful completion of this course, students will able to:

- 1) Understand various functions and subqueries.
- 2) Understand various joins and views.
- 3) Use the control statements and stored procedures.
- 4) Use the cursors and triggers.

B.Sc. Part – II Computer Science (Optional)
SEM-III

Course Title: Web Technology

Course Outcomes: Upon successful completion of this course, students will be able to

1. Understand the principles of web design.
2. Construct basic websites using HTML and Cascading Style Sheets.
3. Build dynamic web pages with validation using JavaScript.
4. Develop a modern web application that meets the current industry requirement

Course Title: Object Oriented Programming Using C++

Course Outcomes: Upon successful completion of this course, students will be able to

1. Understand the principles of web design.
2. Understand how C++ improves C with object oriented features
3. Learn syntax and semantics of C++ programming language
4. Learn how to write inline functions for efficiency and performance.
5. Learn how to overload functions and operators in C++.
6. Learn how to design C++ classes for code reuse.
7. Learn how inheritance promotes code reuse in C++.
8. Learn how inheritance and virtual functions implement dynamic binding with polymorphism.

SEM-IV

Course Title: Cyber Security Essentials

Course Outcomes: Upon successful completion of this course, students will be able to

1. Understand the concept of information security management.
2. Learn different access control methods.
3. Understand wireless network security.
4. Learn cyber security laws and the importance of security audit

Course Title: Data Structure Using C++

Course Outcomes: Upon successful completion of this course, students will be able to

1. Understand the basic concepts such as Abstract Data Types, Linear and Non-Linear Data structures.
2. Choose appropriate data structures to represent data items in real-world problems.
3. Analyze the time and space complexities of algorithms.
4. Design programs using a variety of data structures such as array, stacks, queues, and linked list.
5. Analyze and implement various kinds of searching and sorting techniques.

B.Sc. Part – III Computer Science (Optional)

SEM-V

Course Title: Core Java

Course Outcomes: After successful completion of this course, students will able to:

- 1) Use the syntax and semantics of java programming language and basic concepts of OOP.
- 2) Apply the concepts of Multithreading and Exception handling to develop efficient and error free code
- 3) Develop reusable programs using the concepts of inheritance, polymorphism, interfaces and packages.
- 4) Design and program stand-alone Java applications and GUI

Course Title: C# Programming

Course Outcomes: After successful completion of this course, students will able to:

- 1) Understand framework and architecture of .NET.
- 2) Learn common type system of .NET.
- 3) Learn object oriented concepts of C#.net
- 4) learn graphical user interface (GUI) with windows form controls their properties, methods and events.

Course Title: Linux Operating System

Course Outcomes: After successful completion of this course, students will able to:

- 1) Learn architecture and basics of Linux Operating System.
- 2) Understand the kernel-shell and general purpose utilities.
- 3) Understand file system of Linux operating system.
- 4) Learn Process management and Simple BASH Programming.

Course Title: Basics of Python

Course Outcomes: After successful completion of this course, students will able to:

- 1) Understand why Python is a useful scripting language for developers.
- 2) Learn how to write loops and decision statements in Python.
- 3) Learn how to use lists, tuples and dictionaries in Python programs.
- 4) use of functions and modules in Python programs.

SEM-VI

Course Title: Advanced Java

Course Outcomes: After successful completion of this course, students will able to:

- 1) Develop distributed business applications, develop web pages using advanced server-side programming through servlets and Java server pages.
- 2) Demonstrate approaches for performance and effective coding.
- 3) Learn database programming using Java.
- 4) Study web development concept using Servlet and JSP.

Course Title: ASP.NET

Course Outcomes: After successful completion of this course, students will able to:

- 1) Understand Web server, HTTP request response architecture.
- 2) Learn Web forms and their controls.
- 3) Learn state management in web forms.
- 4) Understand ADO.NET Architecture with connection oriented and Disconnected layer.

Course Title: Advanced Linux OS

Course Outcomes: After successful completion of this course, students will able to:

- 1) Understand the working and use of NANO editor.
- 2) Learn Regular expressions using met characters.
- 3) Learn filters with the help of regular expression.
- 4) learn advanced BASH shell Programming.

Course Title: Advanced Python

Course Outcomes: After successful completion of this course, students will able to:

- 1) Learn how to use exception handling in Python applications for error handling.
- 2) Makes code more reusable and easier to work with larger programs using oops.
- 3) Understand Python programming using Django framework.
- 4) Develop web pages or web applications using Django.
