

NAZARETH COLLEGE OF ARTS AND SCIENCE
(Affiliated to the University of Madras, Re-Accredited with B Grade by NAAC)

DEPARTMENT OF COMPUTER APPLICATIONS
BRANCH CODE- SZ
ACADEMIC YEAR 2023-2024

LEARNING OUTCOME

Bachelor of Computer Applications (BCA) is a 3 – Year under Graduate Programme Spread over six semesters. The Course is designed to bridge the gap between IT industries and Academic institutes by incorporating the latest development, into the Curriculum and to give students a complete understanding within a structured framework. The Course helps the students to build-up a successful Career in Computer Science and for pursuing higher studies in Computer Science.

PROGRAM OUTCOME

- PO1:** Scientific aptitude will be developed in Students
- PO2:** Students will acquire basic Practical skills & Technical knowledge along with domain knowledge of different subjects in the Computer Science & humanities stream.
- PO3:** Students will become employable; Students will be eligible for career opportunities in education field, Industry, or will be able to opt for entrepreneurship.
- PO4:** Students will possess basic subject knowledge required for higher studies, professional and applied courses.
- PO5:** Students will be aware of and able to develop solution-oriented approach towards various Social and Environmental issues.
- PO6:** Ability to acquire in-depth knowledge of several branches of Computer Science and aligned areas. This Programme helps learners in building a solid foundation for higher studies in Computer Science and applications.
- PO7:** The skills and knowledge gained leads to proficiency in analytical reasoning, which can be utilized in modeling and solving real life problems.
- PO8:** Utilize computer programming skills to solve theoretical and applied problems by critical understanding, analysis and synthesis.
- PO9:** Ability to share ideas and insights while seeking and benefitting from knowledge and insight of others.
- PO10:** Mould the students into responsible citizens in a rapidly changing interdependent society.

COURSE OUTCOME – ODD SEMESTER

COURSE NAME	COURSE CODE	COURSE OUTCOME
SEMESTER I		
Part I : Lang I	100L1A	<p>1. □□□□ □□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□.</p> <p>2.□□ □□□□□□□□ □□□□□□□ □□□□□□ □□□□□□□□□□□□. □□□□ □□□□□□□□□□ □□□□□□□□□ □□□□□□□□.</p>
Part I : Hindi I	100L1E	<p>1. □□□□□ □□□ □□□□□ □□□, □□□□□, □□□□□□ □□ □□□□□ □□ □□□□ □□ □□□□□□ □□□□□□</p> <p>2. □□□□□□□□ □□□□ □□□□□□□ □□ □□□□□□□□□□ □□□□□□□□□ □□ □□□□ □□ □□□□□□ □□□□□□□□</p>
Part II : Communicative English	100L1Z	<p>CO1: Develop and integrate the use of the four language skills i.e. Reading, Listening, Speaking and Writing.</p> <p>CO2: Understand the total content and underlying meaning in the context.</p> <p>CO3: Form the habit of reading for pleasure and for information</p> <p>CO4 Comprehend material other than the prescribed text.</p> <p>CO5: Develop the linguistic competence that enables them, in the future, to present the culture and civilization of their nation.</p>
Part III : Problem Solving using PYTHON	100S1A	<p>CO1: Develop and execute simple Python programs</p> <p>CO2: Write simple Python programs using conditionals and looping for solving problems</p> <p>CO3: Decompose a Python program into functions</p> <p>CO4: Represent compound data using Python lists, tuples, dictionaries etc.</p> <p>CO5: Read and write data from/to files in Python programs</p>
Problem Solving using PYTHON Lab	120C1A	<p>CO1: To understand the problem solving approaches</p> <p>CO2: To learn the basic programming constructs in Python</p> <p>CO3: To practice various computing strategies for Python-based solutions to real world problems</p> <p>CO4: To use Python data structures - lists, tuples, dictionaries.</p> <p>CO5: To do input/output with files in Python.</p>

Financial Accounting I	120E1C	CO1: After finishing this course, students are well acquainted with Principles of accounting and well equipped in the system of keeping Financial Accounting Records.
SEMESTER III		
Data Structures	SZ23A	CO1: Implement abstract data types for linear data structures. CO2: Apply the different linear and non linear data structures to problem solutions. CO3: Critically analyze the various sorting algorithms.
Java programming	SZ23B	CO1: Knowledge of the structure and model of the Java programming language. CO2: Understand the basic principles of creating Java applications with GUI. CO3: Demonstrate use of string and String Buffers, Develop multithreaded programs in Java.
Computer Organization	SZ23C	CO1: Describe the major components of a computer system and state their function and purpose CO2: Describe the microstructure of a processor CO3: Demonstrate the ability to program a microprocessor in assembly language. CO4: Classify and describe the operation DMA and peripheral Interfaces.
Data Structures using Java Lab	SZ231	CO1: Write functions to implement linear and non-linear data structure operations. CO2: Suggest appropriate linear and non-linear data structure operations for solving a given problem. CO3: Analyze various sorting methods.
Financial Accounting	SZ33A	
SEMESTER V		
Software Engineering	SU25A	CO1: The students should be able to specify software requirements, design the software using tools CO2: To write test cases using different testing techniques.
Operating System	SE25B	CO1: Understand the structure and functions of Operating System CO2: Compare the performance of Scheduling Algorithms. CO3: Analyze resource management techniques CO4: Identify the features of I/O and File handling methods
Relational Database Management System	SE25C	CO1: Describe basic concepts of database system CO2: Design a Data model and Schemas in RDBMS CO3: Competent in use of SQL CO4: Analyze functional dependencies for designing robust Database

C++ programming Lab	120C21	<p>CO1: Design and create classes. Implement Stream I/O as appropriate.</p> <p>CO2: Design appropriate data members and member functions.</p> <p>CO3: Implement functions, friend functions, static members, constructors and compile-time polymorphism.</p> <p>CO4: Implement inheritance, run-time polymorphism and destructors.</p> <p>CO5: Implement templates and exceptions. Use STL class library. Implement File I/O</p>
Financial Accounting II	120E2C	<p>CO1: Remember the concept of subsidiary and cash book</p> <p>CO2: Apply the knowledge in preparing accounts of Fire Insurance Claims</p> <p>CO3: Analyse the accounting treatment of Non-Profit Organisation</p> <p>CO4: Evaluate the accounting treatment of Bills of Exchange</p> <p>CO5: Determine the royalty accounting treatment</p>
SEMESTER IV		
Open Source Technologies	SZ24B	<p>CO1: To recognize the benefits and features of Open Source Technology and to interpret, contrast and compare open source products among themselves</p>
Computer Network	SZ24A	<p>CO1: Analyse different network models</p> <p>CO2: Analyse and compare a number of data link, network and transport layer.</p> <p>CO3: Analysing key networking protocols and their hierarchical relationship in the conceptual model like TCP/IP and OSI.</p>
E-Commerce technologies	SA24C	<p>CO1: Obtain a general understanding of basic business management concepts.</p> <p>CO2: Have complete knowledge about basic technical concepts relating to E-Commerce.</p> <p>CO3: Obtain thorough understanding about the security issues, threats and challenges of E-Commerce.</p>
Open Source Technologies Lab	SA241	<p>CO1: Students must be able to use appropriate open source tools based on the nature of the problem</p> <p>CO2: Students should be able to code and compile different open source software</p>
Cost and Management Accounting	SZ34A	
SEMESTER VI		

Web Design And Development	SZ26A	<p>CO1: Ability to Develop and publish Web pages using Hypertext Mark-up Language (HTML).</p> <p>CO2: Ability to optimize page styles and layout with Cascading Style Sheets (CSS).</p> <p>CO3: Ability to Understand, analyze and apply the role of languages to create a capstone</p> <p>CO4: Website using client-side web programming languages like HTML, DHTML, CSS, XML, JavaScript, and AJAX.</p>
Data Mining	SZ26B	<p>CO1: To have knowledge in Data mining concepts.</p> <p>CO2: To apply Data mining concepts in different fields.</p>
Mobile Application Development	SZ26C	<p>CO1: To explain the basics of mobile application development</p> <p>CO2: Develop Android application with User interface, networking and animation.</p> <p>CO3: Use simulator tools to test and publish the application.</p>
Mobile Application Development Lab	SZ261	<p>CO1: Use Emulator tools to design and develop applications.</p>
IOT And Its Applications	SU46B	<p>CO1: Use of Devices, Gateways and Data Management in IoT.</p> <p>CO2: Design IoT applications in different domain and be able to analyze their performance</p> <p>CO3: Implement basic IoT applications on embedded platform</p>