Indo-American College
Not just another college

Permanently Affiliated to THIRUVALLUVAR UNIVERSITY, Vellore.
Accredited by NAAC with 'B' Grade
Recognised Under Section 2 (f) & 12 (b) of UGC Act.
T.N.Govt.G.O.MS. No.172, Higher Education Dept, dt.27-4-1998

DEPARMENT OF COMPUTER SCIENCE
PROGRAMME OUTCOMES (B. Sc)

PO1:	Having clear understanding of subject related concepts and apply the same to identify, formulate andanalyze Complex problems.
PO 2:	Confident enough to act as a productive contributor for both self and team growth.
PO 3:	Able to adapt work environment easily.
PO 4:	Clear understanding on Professional and ethical responsibility.
PO 5:	Able to work effectively by managing time and provide innovative solutions.
PO 6:	Help to understand the market's demand and ability to provide Quality and timely services.
PO 7:	Help to Provide Infinite Solutions to same problem.
PO 8:	Able to clear any competitive exams for higher education.
PO 9:	Able to identify and grab global opportunities.
PO 10:	Help to develop Problem solving and to analyze Critical data.

COURSE OUTCOMES

S. No	Course Code	Course Title	Course Outcomes
1	FCS11	PROGRAMMING INC	• At the end of the course, students should be able to: • Understand the concepts of Constants, Variables, and Data Types, Operators and Expressions • Understand the concepts of Managing Input and Output Operations, Decision Making and Branching, Decision Making and Looping. • Understand the concepts of Arrays, Character

			Arrays and Strings, User Defined Functions.
			• 4. Understand the concepts of Structure and Unions, Pointers, File Management in C.
			• 5. Understand the concepts of Fundamental Algorithms, Factoring Methods.
2	FPE10C	PROFESSIONAL ENGLISH-I	• At the end of the course, students should be able to:
			• Develop the communication skills through the multiple tasks. Develop the English spoken skills.
			• Develop the writing skills about any topic and story writing.
			• Negotiation Strategy skills developed.
			• Develop the presentation skill.
			• 5. Develop the critical thinking skill.
3	FPCS13	CORE PRACTICAL -1 PROGRAMMING IN C LAB	• At the end of the course, students should be able to:
			• Enhance the analyzing and problem solving skills and use the same for writing programs in C
			• Write diversified solutions, draw flow charts and develop awell-documented and indented program according to coding standards
			• Learn to debug a given program and execute the C program
			• Have enough practice the use of conditional and looping statements.
			• Implement arrays, functions and pointers.
4	FES10	ENVIRONMENTAL STUDIES	• At the end of the course, students should be able to:
			• Understand the Green house effect, soil, water and air pollution, acid rain, etc.
			• Apply the knowledge to aware common people about environmental pollution.
			• Do more research on waste management, nuclear waste management, biodegradation of hazardous wastes etc.
			• How to protect the forest
			• 5. Students got the awareness about social act and rules.

5	FCS21	C++ AND DATA STRUCTURES	• At the end of the course, students should be able to: • Understand the concepts of object oriented programming Apply structure and inline functions. • Understand the concepts of the types of inheritances and Applying various levels of Inheritance for real time problems Apply the OOPs concepts class and object. Understand Explain the file concept and exception handlings in C++ • Understand the concepts of Stacks and Queue using array and pointers. • Understand the concepts of Recursion, Binary Search Tree and graphs. • 5. Understand the concepts of Sorting and Searching Algorithms
6	FPE20C	PROFESSIONAL ENGLISH-II	• At the end of the course, students should be able to: • 1.To improve the communication competence. • 2. Develop the persuasive communication. • 3. Enhance the digital competence. • 4. Improve the creativity and imagination. • 5. Develop the workplace communication and the basics of academic writing.
7	FPCS23	CORE PRACTICAL -2 C++ AND DATA STRUCTURE LAB	• At the end of the course, students should be able to: • Understand the Creating and Deleting the Objects with the Concepts of Constructors and Destructors. • Demonstrate the Polymorphism Concepts and Operator Overloading. • Understand basic Data Structures such as Arrays, Linked Lists, Stacks, Queues, Doubly Linked List and Infix to Postfix Conversion. • Apply Algorithm for solving problems like Sorting and Searching. • 5. Apply Algorithms and use Graphs and Trees as tools to visualize and simplify Problems.

8	FGA20	VALUE EDUCATION	• At the end of the course, students should be able to: • Get knowledge about value of education. • Get idea about how to lead the family in society. • Personality development. • Understood about social awareness and consumer rights. • 5. Get idea about modern warfare and terrorism.
9	CCS31	PROGRAMMING IN JAVA	• At the end of the course, students should be able to: • 1: Understand the concept of • General-purpose and Purely object-oriented progra language including data types and classes • 2: Understand the concept of loops • 3:Understand the concepts of Arrays • 4:Understand the concepts of Files • 5: Understand the concept of internet programming using applet sand GUI-based
10	CPCS3	CORE PRACTICAL -3 PROGRAMMING IN JAVA	• At the end of the course, students should be able to: • 1: Understand the concept of purely object-oriented programming language including data types and classes. • 2: Implement layout managers. • 3: Develop an application using frames. • 4: Understand the concepts of RMI. • 5: Handle exceptions in program.
11	CSCS33	DIGITAL LOGIC DESIGN AND COMPUTER ORGANIZATION	• At the end of the course, students should be able to: • 1: Understand Boolean algebra and basic gates. • 2: Understand how to simplify expression using K-Map. • 3: Understand how to build combinational circuits. • 4: Know about registers and addressing modes • 5: Understand types of memories.
12	CCS41	RELATIONAL DATABASE MANAGEMENT SYSTEMS LABS	• At the end of the course, students should be able to : • 1.Describe the database architecture and its applications Sketch the ER diagram • for real world applications Uses various ER diagram for a similar concepts from various sources. • 2. Discuss about the relational algebra and

			calculus Construct various queries in
			• SQL and PL/SQL Compiles various queries in SQL, Relational Calculus and
			• Algebra.
			• 3. Describe the various normalization forms Apply the normalization concepts
			• for a table of data Practices a table and implement the normalization
			• Concepts.
			• 4. Explain the storage and accessing of data.
			• 5. Illustrate the query processing in database management. Define the concurrency control and deadlock concept.
13	CPCS45	CORE PRACTICAL – 4 RELATIONAL DATABASE MANAGEMENT SYSTEMS LABS	• At the end of the course, students should be able to :
			• Design and Implement a database schema for a given problem domain.
			• Populate and Query a database using SQL DDL/DML Commands.
			• Build well formed in String Date/Aggregate Functions.
			• Design and Implement a database query using Joins, Sub-Queries and Set
			• Operations.
			• Program in SQL including Objects (Functions, Procedures, Triggers)
14	CCS51	MOBILE APPLICATIONS DEVELOPMENT	• At the end of the course, students should be able to:
			• 1.Understand the basics of smart phones and android platforms.
			• 2.Understand the basic concepts of user interface related to app development.
			• 3.Understand the important of data persistence in mobile environment.
			• 4.Understand the various services and network facilities provided by android platform.
			• 5. Understand the various apps deployed and developed on by mobile platform.
15	CCS52	OPERATING SYSTEM	• At the end of the course, students should be able to:
			• Understand the structure and functions of operating systems.
			• Understand the principles of scheduler, scheduler algorithms and
			• Deadlock.

			• Learn various memory management schemes. • To study I/O management, File system and Mass Storage Structure. • To learn the basics of UNIX, LINUX systems and perform administrative • tasks on LINUX servers.
16	CCS53	DESIGN AND ANALYSIS OF ALGORITHMS	• At the end of the course, students should be able to: • Understanding various algorithm design techniques. • This technique is the basis of efficient algorithms for all kinds of problems. • This is a simple approach which tries to find the best solution at every step. • Providing a general insight into the dynamic programming approach. • Algorithm design paradigm for discrete and combinatorial optimization problems.
17	CPCS56	CORE PRACTICAL –5 MOBILE APPLICATIONS DEVELOPMENT LAB	• At the end of the course, students should be able to: • Develop application using GUI • Write an application using Layout Managers and Event Listener • Develop an application using Multi-threading • Develop an application using database • Develop an application using Widgets
18	CPCS57	CORE PRACTICAL –5 OPERATING SYSTEM LAB	• At the end of the course, students should be able to: • Implement the concept using Shell program • Implement the concept of CPU scheduling • Implement the concept of Deadlock • Implement the concept of File Organization Techniques • Implement the concept of Paging
19	CECS54C	SOFTWARE TESTING	• At the end of the course, students should be able to: • To understand the concept of software testing, and software quality • To learn to inspect and detect errors by going through each and every code segment • gain knowledge of various functional and structural testing techniques • Understand basic concept of Software Management tools and object oriented testing

			• Understand basic concept of Software quality and software quality assurance
20	CSCS55	SOFTWARE ENGINEERING	• At the end of the course, students should be able to : • Introduces the concepts and methods required for the construction of large software intensive systems. • Gets the idea of choosing the Requirements in Software Engineering. • Gives an understanding the concept of Data Engineering. • Impart knowledge on Testing and Debugging. • Enable the students to learn the basic of Project Management & Scheduling.
21	CCS61	OPEN SOURCE SOFTWARE	• At the end of the course, students should be able to : • To understand the concept of HTML, HTML5 and CSS. • To learn to inspect and detect errors by going through each and every • code segment. • To understand basic concept of Java Script and MySQL. • To understand basic concept of PHP • To understand basic concept of PERL
22	CCS62	PYTHON PROGRAMMING	• At the end of the course, students should be able to : • Learn the concepts of Datatypes, Operators, Pre-defined Functions • Understand the concepts of Control and Looping Statements • Understand the concepts of Functions, Tuples, Indexing and Sets • Understand the concepts of List • Understand the concepts of Objects, Class and Exceptions
23	CECS63A	BIG DATA ANALYTICS	• At the end of the course, students should be able to : • Explore the fundamental concepts of big data analytics. • Learn to use various techniques for mining data stream. • Learn the Big data Business Perspective • Understand the applications using Map Reduce

			Concepts • Introduce programming tools HIVE in Hadoop echo system.
24	CECS64C	CLOUD COMPUTING	• At the end of the course, students should be able to : • To understand the concepts in Cloud Computing • To understand the concepts of Cloud Computing Services. • To enable the Students to learn Programming Models in Cloud • Computing and its Environments. • Learn the basics of Software • Development in Cloud. Learn Security Aspects of Cloud Computing.
25	CPCS66	CORE PRACTICAL - 7 PYTHON PROGRAMMING LAB	• At the end of the course, students should be able to : • Implement the Concepts of Fibonacci, GCD, Prime Numbers • Implement the Concepts of Sum of Squares and Elements • Implement the Concepts of Palindrome, Strings • Implement the Concepts of List.
26	CPCS67	CORE PRACTICAL - 8 OPEN SOURCE SOFTWARE LAB	• At the end of the course, students should be able to : • Create Web page with Frames, Tables and CSS • Develop a program using Shell • Create Web page using JavaScript • Develop application using PHP and MYSQL • Perform string Operations using Perl
27	CPCS68	PROJECT WITH VIVA VOCE (COMPULSORY)	• 1.In a specialization domain of his / her choice, student manager will be able to choose an appropriate topic for study and will be able to clearly formulate& state a research problem • 2. For a selected research topic, student manager will be able to compile the relevant literature and frame hypotheses for research as applicable • 3.For a selected research topic, student manager will be able to plan a research design including the sampling, observational, statistical and operational designs if any • 4. For a selected research topic, student manager will be able to compile relevant data, interpret & analyze it and test the hypotheses • Wherever applicable.