

Gowrivakkam, Chennai-600073. Affiliated to University of Madras

DEPARTMENT OF COMPUTER APPLICATIONS

2018-2019

COURSE OUTCOMES

YEAR/ SEM: I/ I - CLA1L - TAMIL I

NO.	COURSE OUTCOME
C101.1	நாட்டுப்புற மக்களின் வாழ்வியல் பயன்பாடுகளை அறிகிறார்கள்.
C101.2	புதுக்கவிதைகளின் வாயிலாகப் புதுமைக் கருத்துக்களையும் சமூக சிக்கல்களையும் உணர்கின்றனர்
C101.3	சிறுகதைகளின் வாயிலாக சமூக மக்களின் வாழ்க்கை நிலையை அறிகிறார்கள்.
C101.4	சந்திரஹரி நாடகம் வாயிலாக பொய் என்றும் துன்பமே என்று அறிகிறார்கள
C101.5	இலக்கிய வரலாற்றின் வாயிலாக நாட்டுப்புறவியல், சிறுகதை, புதினம், நாடகம், கவிதை ஆகியவற்றில் உள்ள சமூக நீதிகளையும், சிறப்புகளையும் அறிகிறார்கள்

YEAR/ SEM: I/ I – CLE1E - HINDI I

NO.	COURSE OUTCOME
C102.1	To develop Communicating, Reading, and Writing skills in Hindi
C102.2	To understand the vision of Prem Chand about the poor people
C102.3	To learn the literary work based on foundation laid by the Scholars
C102.4	To understand the meaning and concept of Functional Hindi
C102.5	To understand the various forms of Functional Hindi according to its area of application

YEAR/ SEM: I/I – CLZ1K - ENGLISH I

NO.	COURSE OUTCOME
C103.1	To read and understand any text in English listening to the inputs given in the classroom



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C103.2	To make a detailed study of a few sample masterpieces of English poetry
C103.3	To write paragraphs and essays
C103.4	To get accurate both in oral and written communication to be strong In Grammar and its usage
C103.5	To imbibe the rules of language unconsciously and tune to deduce language structure and usage

YEAR/ SEM: I/I – SAU1A – FUNDAMENTALS OF DIGITAL COMPUTER

NO.	COURSE OUTCOME
C104.1	To understand the basic concepts of Computer and the type of computers
C104.2	To learn about the Number System such as decimal, hexadecimal, and octal & its conversions
C104.3	To simplify the Boolean algebra and k-map using 2 or more variables
C104.4	To understand the flip-flops and its types, counters and clocks
C104.5	To understand about the half and full adder, multiplexer and demultiplexer

YEAR/ SEM: I/I – SAZ11 – PC SOFTWARE LAB

NO.	COURSE OUTCOME
C105.1	To Practice about manipulate and formatting a word document
C105.2	To understand how to send a message to more recipients
C105.3	To learn about working with Excel.
C105.4	To create an employee payroll system using excel
C105.5	To practice animation, slide show and templates using power point.



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YEAR/ SEM: I/I – SBAMM – MATHEMATICS I

NO.	COURSE OUTCOME
C106.1	To apply tools and ideas in Mathematics for Solving Applied Problems
C106.2	To understand the importance of Matrices and its Applications
C106.3	To acquire ideas on Theory of Equations and its Applications
C106.4	To understand knowledge about the Expansions of Trigonometric Functions, Hyperbolic Functions.
C106.5	To understand the Summation of Series

YEAR/ SEM: I/I – NLT1C – BASIC TAMIL

NO.	COURSE OUTCOME
C107.1	தமிழ் எழுத்துகளைத் தெரிந்துகொள்ளுதல்
C107.2	தமிழ் ஒலியன்களை உச்சரிக்கக் கற்றுக்கொள்ளுதல்
C107.3	எழுத்துக்களைக் கொண்டு சொற்களை உருவாக்குதல்
C107.4	அன்றாடப் பயன்பட்டு சொற்களைப் பயிற்றுவித்தல்
C107.5	தமிழ் மொழியை அறிந்து கொள்ளுதல்

YEAR/ SEM: I/I – SNE1D - HTML

NO.	COURSE OUTCOME
C108.1	To understand the basic concepts of html and its tags.
C108.2	To illustrate about basic tags and its attributes.
C108.3	To learn about ordered, unordered & definition list
C108.4	To work with tables using table attributes
C108.5	To learn about the frames and its types



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YEAR/ SEM: I/I – TSSEA – ESSENTIALS OF LANGUAGE AND COMMUNICATION

NO.	COURSE OUTCOME
C109.1	To develop effective communication skills (spoken and written).
C109.2	To develop effective presentation skills.
C109.3	To conduct effective business correspondence and prepare business reports which produce results.
C109.4	Soft skills are in direct correlation with improved academic achievement.
C109.5	To develop them both for the sake of their education, and the sake of them professional careers.

YEAR/ SEM: I/II – CLA2H – TAMIL II

NO.	COURSE OUTCOME
C110.1	மூவேந்தர்களின் அகம் மற்றும் புற வாழ்வு பற்றிய செய்திகளை அறிகிறார்கள்.
C110.2	சிற்றிலக்கியங்களான தமிழ்விடு தூது, குற்றிலக் குறவஞ்சி, முக்கூடற்பள்ளு வாயிலாக தமிழின் சிறப்பும் மலைவளமும், வேளாண் செய்திகளையும் அறிகிறார்கள்.
C110.3	நளவெண்பாவின் வாயிலாக சூதாட்டத்தால் விளையும் சீர்கேடுகளை அறிகிறார்கள்
C110.4	சீறாப்புராணத்தின் வாயிலாக மனித நேயத்தையும், இரக்கக் குணத்தையும் அறிகிறார்கள்.
C110.5	மொழிப்பயிற்சியின் வாயிலாக இலக்கண அமைப்பு முறைகளை அறிகிறார்கள்.

YEAR/ SEM: I/II – CLE2G – HINDI II

NO.	COURSE OUTCOME
C111.1	To understand the Drama and the stories based on social problems
C111.2	To develop the approach of Hindi language
C111.3	To understand the change in content and style of expression in short stories in modern period



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C111.4	To develop the skills of Translation from Hindi to English by using high technical words
C111.5	To analyze the development of one act play

YEAR/ SEM: I/II – CLZ2K – ENGLISH II

NO.	COURSE OUTCOME
C112.1	To make a detailed study of a few sample masterpieces of English poetry
C112.2	To apply critical frameworks to analyze the linguistic, cultural and historical background of texts written in English
C112.3	To get familiar with the conventions of diverse textual genres including fiction, nonfiction, poetry, autobiography, biography, plays, etc.
C112.4	The ability to transfer information in the writing tasks
C112.5	To perform various speaking and writing tasks, such as roleplays, debates, group discussions apart from the use of correct spelling, punctuation

YEAR/ SEM: I/II – SAE1A – PROGRAMMING IN C

NO.	COURSE OUTCOME
C113.1	To understand the basics of C language
C113.2	To understand the structure of conditional and looping statements in C
C113.3	To grasp concepts related to functions and storage classes
C113.4	To learn about arrays and their different types
C113.5	To explore file operations and pointers in C programming

YEAR/ SEM: I/II - SAE11 - PROGRAMMING IN C LAB

NO.	COURSE OUTCOME
C114.1	To understand the basics of C Programming
C114.2	To comprehend the manipulation of strings through practice



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C114.3	To gain knowledge of recursion in programming
C114.4	To improve skills in matrix manipulations through practical exercises
C114.5	To practice sorting and searching algorithms

YEAR/ SEM: I/II – SBAMN – MATHEMATICS II

NO.	COURSE OUTCOME
C115.1	To gain knowledge about basic concepts of Differential Equation, Laplace Transforms, Vector Analysis and Calculus.
C115.2	To acquire the knowledge of mathematics in Computer studies
C115.3	To understand the different methods of solving. Laplace and Inverse Laplace Transforms problems and applying it on solving Differential Equations
C115.4	To understand the Types of Integration and Reduction Formula
C115.5	To apply ideas in Vector Analysis and understanding the interpretation in Science

YEAR/ SEM: I/II – SNE24 – HTML - LAB

NO.	COURSE OUTCOME
C116.1	To Practice the basic tags of html
C116.2	To understand how to use the image tags and its attributes
C116.3	To learn about the list tags
C116.4	To practice format of tables
C116.5	To practice frame tags



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YEAR/ SEM: I/II – NLT2D – BASIC TAMIL

NO.	COURSE OUTCOME
C117.1	தமிழ் இலக்கியங்களை அறிந்துகொள்ளுதல்
C117.2	அற இலக்கியங்களைத் தெரிந்துகொள்ளுதல்
C117.3	திருக்குறளின் சிறப்புகளை அறிந்துகொள்ளுதல்
C117.4	தமிழர்களின் பண்பாடு, நாகரிகம் போன்றவற்றைத் தெரிந்துகொள்ளுதல்
C117.5	தமிழகத்தின் விழாக்களை அறிந்துகொள்ளுதல்

YEAR/ SEM: I/II – TSSEC – ESSENTIALS OF SPOKEN AND PRESENTATION SKILLS

NO.	COURSE OUTCOME
C118.1	To develop effective communication skills (spoken and written).
C118.2	To develop effective presentation skills.
C118.3	To conduct effective business correspondence and prepare business reports which produce results.
C118.4	Soft skills are in direct correlation with improved academic achievement.
C118.5	To develop them both for the sake of their education, and the sake of them professional careers.

YEAR/ SEM: II/III – SAZ3A – PROGRAMMING IN C++ AND DATA STRUCTURES

NO.	COURSE OUTCOME
C201.1	To understand the basic syntax and structure of C++ programs
C201.2	To apply object-oriented programming principles to design and implement efficient code
C201.3	To understand and implement fundamental data structures such as arrays, linked lists, stacks, queues and trees
C201.4	To apply algorithmic design techniques, such as divide and conquer and dynamic programming to solve problems



C201.5	To analyze and optimize code for time and space complexity

YEAR/ SEM: II/III – SAZ3B – MICROPROCESSOR AND ITS APPLICATIONS

NO.	COURSE OUTCOME
C202.1	To learn the difference between low- and high-level languages and to know about mnemonics and opcode
C202.2	To learn about how to write simple Assembly Language Programs
C202.3	To understand the concepts of counters, stack and subroutine
C202.4	To describe about number system conversions with example
C202.5	To understand the concepts of interrupts and memory interfaces

YEAR/ SEM: II/III – SAZ3C – NUMERICAL AND STATISTICAL METHODS

NO.	COURSE OUTCOME
C203.1	To implement various concepts of numerical analysis and statistics to solve real life problems
C203.2	To analyze algebraic and transcendental equation by numerical methods
C203.3	To derive numerical methods for various mathematical operations such as differentiation and integration
C203.4	To communicate statistical concepts clearly and professionally in oral form
C203.5	To recognize, describe, and calculate the measures of location and measures of variation

YEAR/ SEM: II/III – SAZ31 – PROGRAMMING IN C++ USING DATA STRUCTURES (PRACTICAL)

NO.	COURSE OUTCOME
C204.1	To gain hands-on experience with array and pointer implementations to reinforce stack operations
C204.2	To explore the utilization of arrays and pointers in practicing queue operations for a deeper understanding.



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C204.3	To acquire knowledge on expression evaluation techniques for effective problem- solving.
C204.4	To engage in practical exercises to master linked list operations and enhance programming skills.
C204.5	To apply BFS and DFS traversal algorithms in practical scenarios for a comprehensive understanding of graph operations.

YEAR/ SEM: II/III – SBZ3C – FINANCIAL ACCOUNTING

NO.	COURSE OUTCOME
C205.1	To understand the basic principles of accounting. To understand the system of keeping financial accounting records
C205.2	To understand the meaning and types of Depreciation and its Applications
C205.3	To understand about branch accounting and departmental accounts
C205.4	To analyze the relevance of hire purchase and installment system
C205.5	To understand in detail about partnership, reconstitution, and the accounts in relation with that.

YEAR/ SEM: II/III – TSSEG - PERSONALITY ENRICHMENT

NO.	COURSE OUTCOME
C206.1	To develop and exhibit an accurate sense of self.
C206.2	To demonstrate knowledge of personal beliefs and values and a commitment to continuing personal reflection and reassessment
C206.3	To evaluate and improve upon personal leadership strengths and weaknesses
C206.4	To build self-awareness, personal development, and life skills.
C206.5	To assert strengthened personal character and further, an enhanced ethical sense.

YEAR/ SEM: II/IV -SAZ4A - PROGRAMMING IN JAVA

NO.	COURSE OUTCOME
C207.1	To acquire fundamental knowledge of the Java programming language



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C207.2	To explore classes, objects, methods and strings through practical examples
C207.3	To grasp the concept of interfaces, packages and their various types
C207.4	To demonstrate skills in handling files and managing errors and exceptions
C207.5	To gain insights into network basics, AWT controls, AWT events and event handling

YEAR/ SEM: II/IV - SAZ4B - OPERATING SYSTEM

NO.	COURSE OUTCOME
C208.1	To understand the fundamentals of operating system and its functions
C208.2	To learn about process synchronization, semaphore and deadlock
C208.3	To understand the concept of memory, memory management and its types
C208.4	To implement the concept of virtual memory, file system and its types
C208.5	To explore the intricacies of I/O systems and secondary storage structures

YEAR/ SEM: II/IV – SAZ4C – COMPUTER GRAPHICS

NO.	COURSE OUTCOME
C209.1	To learn the brief survey of Computer Graphics, CRT, LED, LCD & plasma panel displays
C209.2	To learn about various algorithm like DDA, Bradenham's for generating basic geometric shapes
C209.3	To understand the 2D(basic) transformations using matrices and viewing co- ordinates
C209.4	To understand the 3D transformations using matrices and display methods
C209.5	To learn about viewing pipeline and coordinates, Hidden surface and hidden line elimination methods



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YEAR/ SEM: II/IV – SAZ41 – JAVA PROGRAMMING LAB

NO.	COURSE OUTCOME
C210.1	To showcase programs involving the String class and Stream class
C210.2	To engage in exercises for random number generation and utilizing the Calendar class
C210.3	To exhibit programs for database creation, vector classes, and packages
C210.4	To create programs for threads, exception handling and file operations
C210.5	To develop programs focusing on threads, exception handling and file manipulation

YEAR/ SEM: II/IV - SBZ4A - COST AND MANAGEMENT ACCOUNTING

NO.	COURSE OUTCOME
C211.1	To learn the theory and practices of cost and management accounting
C211.2	To understand about the material management and pricing methods
C211.3	To understand in detail about Labour cost and wage payment methods.
C211.4	To study about Overhead and its apportionment
C211.5	To study in detail about the marginal costing and the types of budgeting

YEAR/ SEM: II/IV – TSSEN - QUANTITATIVE APPTITUDE

NO.	COURSE OUTCOME
C212.1	To apply Quantitative Reasoning and Mathematical Methodologies to understand and to solve problems
C212.2	To understand Brief Description of Learning Objective
C212.3	To acquire Mental Alertness and have a sharp mind
C212.4	To ensure testing ability in various Competitive Examinations
C212.5	To enable the important measure for prospective business executives abilities.



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YEAR/ SEM: II/IV – ENV4B – ENVIRONMENTAL STUDIES

NO.	COURSE OUTCOME
C213.1	To know the scope and importance of environmental studies and to create public awareness for environmental protection
C213.2	To elucidate the problems created by the over utilization of resources and to suggest alternate energy to meet our energy crisis/demand.
C213.3	To give a neat sketch explanation of ecosystem, ecological succession, ecological pyramid, food chain and food web.
C213.4	To know the different methods of biodiversity conservation
C213.5	To analyze the effects of pollution and the role of individual for pollution control programme

YEAR/ SEM: III/V – SAZ5A – DATABASE MANAGEMENT SYSTEM

NO.	COURSE OUTCOME
C301.1	To acquire fundamental concepts of DBMS and Normal Forms
C301.2	To comprehend the basic and general principles of SQL
C301.3	To explore the generation of forms and reports
C301.4	To understand user interface features and methods of data storage
C301.5	To learn about database administration and different database types

YEAR/ SEM: III/V - SAZ5B - SOFTWARE ENGINEERING

NO.	COURSE OUTCOME
C302.1	To gain understanding of the fundamentals of Software Engineering
C302.2	To assess software cost estimation and various techniques associated with it
C302.3	To familiarize yourself with the basic and general concepts of Software Requirement Specifications
C302.4	To grasp fundamental design concepts
C302.5	To explore verification, validation techniques and the principles of software maintenance



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YEAR/ SEM: III/V – SAZ5C – RESOURE MANGEMENT TECHNIQUES

NO.	COURSE OUTCOME
C303.1	To design a mathematical model for an optimization problem in real life by adopting the techniques of OR
C303.2	To solve shortest route problem
C303.3	To evaluate the concepts in linear programming
C303.4	To make use of simplex method to solve optimization problems
C303.5	To utilize PERT and CPM in project management

YEAR/ SEM: III/V – SAZ51 – RDBMS LAB

NO.	COURSE OUTCOME
C304.1	To utilize DDL commands to construct a database and tables
C304.2	To employ DML, DCL, and TCL commands for various operations
C304.3	To construct applications for payroll, marksheet, and bank account
C304.4	To engineer systems for inventory management, invoicing and library management
C304.5	To design and code for student information, income tax processing, electricity bill, and telephone directories

YEAR/ SEM: III/V – SEZ5A – VISUAL PROGRAMMING

NO.	COURSE OUTCOME
C305.1	To learn about how to customize a form
C305.2	To learn about how to display information and control structures
C305.3	To understand the concepts of arrays, lists, sorting and searching methods
C305.4	To generate the various dialog boxes and working with graphics
C305.5	To learn about Event Handling and File Handling methods



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YEAR/ SEM: III/V – VAE5Q – VALUE EDUCATION

NO.	COURSE OUTCOME
C306.1	To understand the importance and of value education
C306.2	To learn about salient values for life and problem-solving and decision-making skills
C306.3	To know the importance of human rights & social values
C306.4	To know the importance of environment and ecological balance
C306.5	To learn about social evils and how to tackle them.

YEAR/ SEM: III/VI - SAZ6A – WEB TECHNOLOGY

NO.	COURSE OUTCOME
C307.1	To understand the basic concepts of VB Script
C307.2	To implement Java Script basics and its control structures
C307.3	To get knowledge about Java Script DOM
C307.4	To understand the structure of ASP.NET and its basic controls
C307.5	To learn about request and response objects & OLEDB connection

YEAR/ SEM: III/VI - SAZ6B - DATA COMMUNICATION AND NETWORKING

NO.	COURSE OUTCOME
C308.1	To understand about data communication, protocols, topologies and the OSI model
C308.2	To apply error detection and correction methods
C308.3	To acquire knowledge in multiplexing and switching
C308.4	To understand the principles of ISDN and ATM networks
C308.5	To utilize various routing algorithms



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YEAR/ SEM: III/VI - SAZ6C - SOFTWARE TESTING

NO.	COURSE OUTCOME
C309.1	To understand basic concepts of software testing and its purposes, debugging and its types of bugs
C309.2	To enumerate the applications of flow/graphs, path testing and flow testing techniques
C309.3	To understand the strategies of data flow testing and interface testing
C309.4	To learn about the metrics, path products and its expressions, Test cases
C309.5	To develop logic-based testing and to prepare state graphs and decision tables

YEAR/ SEM: III/VI - SAZ61 - WEB APPLICATION LAB

NO.	COURSE OUTCOME
C310.1	To apply VB Script to enhance client-side scripting capabilities, enabling efficient user interactions
C310.2	To implement dynamic and interactive web features using Java Script
C310.3	To master the concepts and practices of ASP.NET programming for developing robust and scalable web solutions
C310.4	To exhibit the ability to analyze, design and implement effective solutions using this programming language within the ASP.NET framework
C310.5	To integrate Java Script, VB Script and ASP.NET to create comprehensive and feature-rich web projects

YEAR/ SEM: III/VI – SEZ6H – DATA MINING

NO.	COURSE OUTCOME
C311.1	To acquire understanding of fundamental data mining functionalities, data warehousing and data preprocessing
C311.2	To explore knowledge about data mining primitives, languages, data generalization and system architecture
C311.3	To study mining association rules, relational databases and data warehouses
C311.4	To gain insights into classification, its types, prediction and classifier accuracy



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C311.5	To comprehend	cluster	analysis,	its	methods	and	model-based	clustering
	techniques							

YEAR/ SEM: III/VI - SEZ6G - DISTRIBUTED COMPUTING

NO.	COURSE OUTCOME				
C312.1	To learn about distributed database, security & integrity, distributed processing, models for distributed computing				
C312.2	To gain knowledge about hardware concepts, software concepts, design issues				
C312.3	To learn about communications in distributed system.				
C312.4	To understand the concepts of synchronization, mutual exclusion, deadlock, and thread.				
C312.5	To understand about Distributed file system, implementations of new trends i distributed file systems				