

## Department of Computer Science

### Lesson Plan Session 2024-2025

#### BACS Semester-I

#### Fundamentals of Computer and Programming in C (C24COS101T)

July 2024 to November 2024	Topics
1 <sup>st</sup> Week	Basics of Computers: Definition of a Computer - Characteristics and Applications of Computers, Block Diagram of a Digital Computer – Classification of Computers based on size and working Central Processing Unit – I/O Devices
2 <sup>nd</sup> week	Storage: Primary, Auxiliary and Cache Memory – Memory Devices.
3 <sup>rd</sup> Week	Software, Hardware, Firmware. Operating System – Definition and Functions of an Operating System – MS-DOS, MS Windows – Desktop, Computer, Documents, Pictures, Music, Videos, Recycle Bin, Task Bar – Control Panel.
4 <sup>th</sup> Week	C Programming Fundamentals: Keywords, Variables and Constants, Structure of a C Program, Input/Output
5 <sup>th</sup> Week	Operators & Expressions: Arithmetic, Unary, Logical. Bit-wise, Assignment & Conditional Operators
6 <sup>th</sup> Week	Decision Making: Decision making using if...else. Else If Ladder; Switch, break. Continue and Goto statements.
7 <sup>th</sup> Week	Loop Control Structure: While and do-while, for loop and Nested for loop. Decision using switch; goto, break and continue statements.
8 <sup>th</sup> Week	Functions: Introduction, using functions – Function declaration/prototype – Function definition
9 <sup>th</sup> Week	function call – return statement – Passing parameters, Recursive functions
10 <sup>th</sup> Week	Arrays: Introduction, Declaration of Arrays , Accessing elements of the Array – Storing Values in Array
11 <sup>th</sup> Week	Passing array element to a function: Call by Value and Call by Reference,
12 <sup>th</sup> Week	One dimensional array -declaration, initialization, Accessing one dimensional array, Two dimensional Arrays-declaration, initialization, Accessing two dimensional arrays.
13 <sup>th</sup> Week	Strings: Introduction, String and Character functions, String Operations using String functions- strcat() , strcmp() , strcpy() , strlen().
14 <sup>th</sup> Week	Pointers: Declaring Pointer Variable, Pointer Expressions and Pointer Arithmetic, Passing Arguments to Functions using Pointers.
15 <sup>th</sup> Week	Dynamic Memory Allocation: malloc(), calloc(), realloc(), free() functions
16 <sup>th</sup> Week	Structures and Unions: Declaration of structures, Structure Initialization, Accessing structure members, Arrays of structure, Nested structures, Structure with pointers, Union
17 <sup>th</sup> Week	Doubt Clearance

**Department of Computer Science**  
**Lesson Plan Session 2024-2025**  
**Skill Enhancement Course**  
**Semester-I**  
**C24SEC106T: Office Tools**

<b>July 2024 to November 2024</b>	<b>Topics</b>
1 <sup>st</sup> Week	Operating System - Definition, Functions, Types of Operating System
2 <sup>nd</sup> week	Basics of Popular Operating Systems, The User Interface
3 <sup>rd</sup> Week	Exploring Computer, Icons, taskbar, desktop, Using Menu and Menu-selection
4 <sup>th</sup> Week	managing files and folders
5 <sup>th</sup> Week	Control panel – display properties, add/remove software and hardware, Common utilities.
6 <sup>th</sup> Week	Word Processing - Introduction to Word Processing,
7 <sup>th</sup> Week	Menus, Creating, Editing & Formatting Document,
8 <sup>th</sup> Week	Spell Checking, Printing, Views, Tables
9 <sup>th</sup> Week	modifying page setup, applying document themes,
10 <sup>th</sup> Week	applying document style sets, Inserting headers and footers
11 <sup>th</sup> Week	Spread Sheet: Elements of Electronics Spread Sheet, Applications
12 <sup>th</sup> Week	Creating and Opening of Spread Sheet, Menus
13 <sup>th</sup> Week	Manipulation of cells: Enter texts numbers and dates, Cell Height and Widths, copying of cells
14 <sup>th</sup> Week	Mathematical, Statistical and Financial function
15 <sup>th</sup> Week	Drawing different types of charts, Sort and Filter Data.
16 <sup>th</sup> Week	Creating Presentation, Type of presentation views. Using sound, Animation, Working with Objects, Printing.
17 <sup>th</sup> Week	Doubt Clearance