Sem	Course code	Course Name	Type	L	T	P	credit
1ST Sem	**CSL101**	**Computer Programming**	**DC**	**3**	**0**	**2**	**4**

Course Outcomes:
CO1-Outline basics of programming and developlogical thinking of students.
CO2-To illustrate how to model real world problems into the software and develop practical programming skills of students.
CO3-Touse mathematical and statistical applications into programming.

Course Contents:

Module 1: Introduction –Computer generation and evolution, flowcharts, algorithm, What is C?, constants, variables, scope of variable, data types, operators, arithmetic expression, Hierarchy of operators, control flows, conditional operator, loops, switch concept. **Program Structure**– Basic programs to illustrate structure of C program and its flow in execution.

Module 2: Function –Introduction to function and parameter passing, returning value, recursive functions, macros.

Module 3: Arrays –One-dimension and multi-dimension arrays, array initialization, how arrays are stored in memory, array as parameter in functions, programs based on arrays.

Module 4: Pointers –Initialization, accessing a variable through pointers, pointers as function arguments, pointer to array, arrays of pointers, pointers to pointers.

Module 5: Structure and Union –Defining a structure, accessing structure members, Array of structure, unions.

Module 6: File Handling-reading from and writing to a file.

Text books:
1) The C Programming Language by Brian W. Kernighan and Dennis M. Ritchie, PHI.
2) Programming in C by E. Balguruswamy, Tata Mcgraw Hill Publishing.

List of Lab Assignments / Experiments
1. Programs using function.
2. Programs using arrays.
3. Programs on structures.
4. File Handling