

'C' LANGUAGE COURSE (CODING SYLLABUS)

Course Overview

'C' Programming courses offered learners with knowledge on programming fundamentals; ways to solve complex problems by writing computer programs; systematic ways to read and write the C code; understanding of computing processes at a deep level; basics of algorithms and object-oriented software.

Duration: 1 Month

Job Prospects

'C' programming has a very good career like opportunities in different field like robotics, Artificial intelligence, machine learning, etc.

Job Profiles

- Junior Programmer
- Quality Analyst.
- Game Programmer.
- Programming Architect

Course Content

Introduction to 'C'

- What is Language & History of 'C'.
- 'C' language Environment

Basics of 'C' Language

- Identifiers in 'C'
- Variables and Datatypes
- Storage Classes
- Constants and Literal Constant
- Printf and Scanf
- Input and Output Instructions

Operators

- Expressions and Arithmetic Operators
- Relational and Logical Operators
- Bitwise Operators
- Conditional Operator

Decision Making Statements

- If Statement
- Nested If
- If-else-if ladder
- Multiple if
- Switch Statement
- Nested switch
- Unconditional Branching using goto statement

Control Statements (Loops)

- For loop
 - Nested for loop
- While Loop
 - Nested while
- Do-while loop
 - Nested do-while
- Break and Continue

Array in 'C'

- Introduction to Array
- One-D array
- 2-D array
- Array addition, subtraction and multiplication

Pointers & String

- Pointer
- Pointer with string

Functions in 'C'

- Introduction and Writing Functions
- Types of function
- Array with function
- Array as an argument
- Pointer with function
- Call by value and call by reference
- Recursive function
- Formatted function with difference

ENUM

Structure

- About Structure
- Nested structure
- Structure with function
- Pointer with structure
- Structure as Parameter

Union

File Management

- Creation of own library header files

Preprocessor

- Preprocessor directive #define macro
- Preprocessor directive typedef

Dynamic Memory Allocation

- malloc(), calloc(), free() and realloc() etc.

Stream in 'C'

- Reading file
- Writing file
- Appending file
- Retrieving cursor position
- Set cursor position
- Rewind cursor

File Handling with Formatted and Unformatted Function