

Time duration 33days

Introduction

- Introduction to Programming Language
- Generations of Languages
- Features of C
- History
- Structure of C Program
- Keywords, Identifiers

Data Types

- Primitive Data types
- Derived Data Types
- User Defined Data Types

Operators

- Unary Operators
- Binary Operators
- Ternary Operators
- Order of Evaluation
- Implicit Type Casting
- Explicit Type Casting
- Formatted Functions
- Non Formatted Functions
- Format Specifiers
- Escape Sequences

Conditional Statements

- Simple if
- if .. else
- Nested if
- if .. else ladder
- Goto Statement
- Switch .. case

Iterative Statements

- while

- do .. while
- for
- break and continue statements
- Nested loop Statements

Arrays

- Introduction
- Need for Arrays
- Single Dimensional Arrays
- Double Dimensional Arrays
- Multi Dimensional Arrays

Strings

- Declaration
- Initializing Strings
- String Functions
- Multiple Strings

Functions

- Introduction
- Need for functions
- Classification of Functions
- Function Prototype
- Defining Function
- Calling Function
- Function with Arrays
- Function with Strings
- Recursive Functions

Storage Classes

- Automatic
- Extern
- Static
- Register

Structures, Unions

- Introduction
- Declaration and Initialization of Structures
- Structures with Arrays
- Structures with Functions
- Nested Structures

- Introduction to Unions
- Difference between structure and union
- Enumeration
- Typedef

Pointers

- Introduction to Memory
- Introduction to Pointers
- Declaration and Operation
- Pointer to Pointer
- Arrays and Pointers
- Call by value and Call by reference
- Passing and returning pointers to functions
- Pointers and structures
- Self Referential Structures

Dynamic Memory Allocation

- Malloc
- Calloc
- Realloc
- free

Files

- Introduction
- File input and output Operations
- Sequential Files
- Random Access Files
- Command line Arguments
- Database vs FileSystem

Graphics

- Introduction to Graphics
- Initializing Graphics
- Graphic Drivers and Modes
- Graphics functions

Note:- Test is compulsory After the course completion