



# **C Programming syllabus**

**DURATION – 2 MONTHS**

**MODE OF TRAINING – OFFLINE/ONLINE**



# C Programming



- **Introduction to C**
- **History of C language**
- **Structure of a C program**
- **Compilation and execution process**
- **Basic syntax**
- **Keywords and identifiers**
- **Variables and constants**
- **Data types in c**
- **Input/output functions.**



# C Programming



## Operators and Expressions

- Arithmetic operators
- Relational operators
- Arithmetic operators
- Relational operators
- Logical operators
- Assignment operators
- Increment and decrement operators
- Bitwise operators
- Conditional operators
- Operator precedence and associativity
- Type conversion



# C Programming



## Control Structures

- **if, if-else, nested if-else**
- **switch statement**
- **Increment and decrement operators**
- **while, do-while loops**
- **for loop**
- **break, continue and goto statements**



# C Programming



## Functions

- **Defining and declaring functions**
- **Function call (call by value and call by reference)**
- **Recursion**
- **Scope and lifetime of variables**
- **Storage classes (auto, static, extern, register)**



# C Programming



## Arrays and Strings

- **One-dimensional and multi-dimensional arrays**
- **Array initialization**
- **String handling functions (strlen, strcpy, strcat, strcmp, etc)**
- **Character arrays and strings**
- **String input/output**



# C Programming



## Pointers

- Basics of pointers
- Pointer arithmetic
- Pointers and arrays
- Pointers and strings
- Pointers to functions
- Pointers to structures



# C Programming



## Structures and Unions

- **Defining and using structures**
- **Arrays of structures**
- **Nested structures**
- **Structures and functions**
- **Introduction to unions**
- **Differences between structures and unions**





# C Programming



- **Dynamic Memory Allocation**
- **malloc(), calloc(), realloc(), and free()**
- **Memory leaks and their prevention**
- **File Handling in C**
- **File operations: opening, reading, writing, closing**
- **File modes**
- **File I/O functions (fopen, fclose, fgetc, fputc, fscanf, fscanf, etc)**
- **Binary file handling**

# Key Feature

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- **Trainer with 12+ Years of Experience**
- **200 hours of high-quality course**
- **Best Quality Training**
- **Live Project Experience**
- **Demo Lectures are available**
- **In-depth Course Contents**
- **100 % Placement Assistance**
- **Internship support**

# Orange Itech Offer You



# THANK YOU

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**317,B wing 3rd Floor, Rajdhani Complex,  
Near Shankar Maharaj Math, Pune - Satara  
Road, Balajinagar, Pune  
9975708774/9623922545  
website - <http://orangeitech.in>**