

## C Training



### Course Curriculum and Duration:

We provide both Class-room Training and Offline Training.

Duration: 40Hrs.

Week days (Mon- Fri 2Hrs per day)

Weekend batches (Sat-Sun 4Hrs per day)

### About INNOVATIVE ACADEMY

INNOVATIVE ACADEMY's best C training institute in Bangalore is designed so Innovative to help you clear understanding on C programming. You will gain excellent knowledge on C data types, control statements, function, pointers, structure, union, file handling and processor.

### About Course

In common, C language is considered as mother of all object oriented programming languages. Our experienced programmers would train you in C, **Your programming skills will enhance by a huge difference.** You will be able to develop C programs using structures, pointers & dynamic memory allocation and also you will be able to create command-line applications to access and manipulate data in files.

## C SYLLABUS

### UNIT 1: What is C

**Learning Objectives** -In this module you will learn C language basics, Environment Setup, Program Structure, Basic Syntax, literals, data types, Variables, Constants, How to write program in C and Execution of the program

**Topics** -History of C, Features of C, How to install C, My first C Program, Flow of C program, C syntax, C input/output, Data types in C, Keywords in C, Operators in C, Comments, Escape sequence, Constants in C and Hands on programs

**Practical's to be covered**-Installation of turbo c, Simple C program examples

### UNIT 2: C Control Statements

**Learning Objectives** -In this module you will work with C Control statements with Examples. You will also learn about Typecasting in C.

**Topics** – C if-else, Switch, do-while, while loop, for loop, break, Continue, GOTO, Type casting and Hands on programs

**Practical's to be covered**- Programs on If Else, while, do while, for loop, break, continue and Goto statement

### UNIT 3: C Functions

**Learning Objectives** –In this module you will understand what is function? You will learn parameter passing techniques and also about recursion.

**Topics** – What is function, Call by Value, Call by Reference, Recursion in Storage Classes? And Hands on programs

**Practical's to be covered**- Programs on function, call by value, call by reference and recursion

### UNIT 4: C Array

**Learning Objectives**- In this module you will to declare, initialize and access array elements with the help of examples.

**Topics**- 1D Array, 2D Array, multi-dimensional Array, Array to Function and Hands on programs

**Practical's to be covered**- Programs on 1D array, 2D array, multi dimensional array

### UNIT 5: C Pointers

**Learning Objectives**- In this module you will learn what pointers are and how to use pointers in C to work with memory, with examples

**Topics-** C Pointers, pointer to pointer, pointer Arithmetic, pointer with function and Hands on programs and Hands on programs

**Practical's to be covered-** Programs on pointers, pointer functions

### **UNIT 6: C Dynamic Memory**

**Learning Objectives-** In this module you will learn about the process of allocating memory during program execution

**Topics-** Dynamic memory allocation, storage classes and Hands on programs

**Practical's to be covered-** Programs on Dynamic memory allocation and storage classes

### **UNIT 7: C Strings**

**Learning Objectives-** In this module you will understand declaration and initialization create a string

**Topics-** String in gets(), functions strlen(), strcpy(), strcat(), strcmp(), strrev(), strlwr(),strupr(), strstr() and Hands on programs

**Practical's to be covered-**programs on String and its function

### **UNIT 8: C Structure Union**

**Learning Objectives--** In this module you will learn structure with examples. You will learn unions with examples and typedef

**Topics-** Structure, Array of structures, nested structures, Typedef, unions

**Practical's to be covered-** programs on structures, typedef, unions

### **UNIT 9: C File Handling**

**Learning Objectives--** In this module you will learn to handle standard I/O (High level file I/O functions) in C.

**Topics-**File input /output, fprintf(), fscanf(), fputc(), fgetc(), fputs(), fgets(), fseek(), rewind()

**Practical's to be covered-** Programs on File handling and its functions

### **UNIT 10: C Preprocessor and Command Line**

**Learning Objectives--** In this module you will learn

**Topics-** Preprocessor, #include, #define, #undef, #ifdef, #ifndef, #if, #else, #error, Command line arguments, important c programs

**Practical's to be covered-** Programs on command line argument, preprocessor