



# **COURSE CURRICULUM**

# INTRODUCTION TO C

- History of C language
- Features of C language
- Importance of C language
- Procedural approach

# **C LANGUAGE ENVIRONMENT**

- Introduction to compiler, interpreter, assembler
- Working of compiler
- Compiling, linking and running process
- IDFs

# **BASICS OF C LANGUAGE and Buzzwords**

- Preprocessor directives
- Data type
- Variables
- Constants
- Identifiers
- Tokens
- Key words

# **INPUT AND OUTPUT INSTRUCTIONS**

- Reading and writing functions
- Built in functions

# **FLOW CONTROL STATEMENTS**

- Jump statements(goto, break, continue)
- If statement
- If else statement
- Nested if else statement
- If else if ladder statement
- Switch case statement
- Loops(for, while, do while)

# **POINTERS**

- Introduction to pointers
- Pointer expressions
- Types of Pointers
- Void Pointer
- NULL Pointer
- Wild Pointer
- Dangling Pointer
- Various examples of pointers
- Pointer Arithmatics

- Array using pointers
- String using pointers
- Pointers in Functions

#### ARRAY AND STRING

- Introduction to array
- One, two, multi-dimensional arrays
- Various operations on array
- Applications of array
- Sorting and searching in array
- Introduction to string
- Various operations on strings
- Applications of string

### **FUNCTIONS**

- Introduction to functions
- Types of functions
- Nesting of functions
- Various examples of functions
- Integer passing is functions
- Strings passing is functions
- Function returning address
- Recursion
- Storage classes

# **STRUCTURE**

- Introduction to structure
- Advantages of structure
- Array of structure
- Structure using pointer
- Structure with functions
- Applications of structure

#### UNION

- Introduction to union
- Advantages of union

# DYNAMIC MEMORY ALLOCATION

- Introduction to dynamic memory allocation
- Advantage of dynamic memory allocation
- Malloc(), calloc(),realloc(),free();
- Array implementation using dynamic memory allocation

Partners:







**ENUM** 

Introduction to enum

**FILE MANAGEMENT** 

Error handling

**PREPROCESSOR** 

File inclusions

Macros

File opening modes

Various examples of enum

Opening and closing a file

Command line arguments

Compiler control directives

Input output operations on file

Applications of file management

Introduction to file management

Java



E-mail: info@ducatindia.com Visit us: www.ducatindia.com www.facebook.com/ducateducation

GURGAON

A-43 & A-52, Sector-16, Noida - 201301, (U.P.) INDIA 70-70-90-50-90 □/**○** +91 99-9999-3213

1808/2, 2nd floor old DLF,

# **GHAZIABAD**

1, Anand Industrial Estate, Near ITS College, Mohan Nagar, Ghaziabad (U.P.)

70-70-90-50-90

# PITAMPURA (DELHI)

Plot No. 366, 2nd Floor. Kohat Enclave, Pitampura ( Near- Kohat Metro Station) Above Allahabad Bank, New Delhi- 110034. 70-70-90-50-90

#### **SOUTH EXTENSION** (DELHI)

D-27.South Extension-1 New Delhi-110049

70-70-90-50-90

+91 98-1161-2707

Near Honda Showroom, Sec.-14, Gurgaon (Haryana) 70-70-90-50-90