



THE INTELLIGENT INSTITUTE OF EDUCATION

C PROGRAMMING LANGUAGE

Course Syllabus

Fundamentals of C Language

About C tutorial
Important points about C
Why Use C
Applications of C
C Language and English Language
Features of C
C, C++ and Java

Overview of C Language

History of C
First Program in C Hello World
Basic Structure of C Programming
Tokens in C
Keywords in C
Identifiers in C
Format Specifiers
Format Specifiers Examples

Data Types in C Language

Introduction to Data Types in C
int Data Type in C
float Data Type in C



double Data Type in C

char Data Type in C

Variable in C Language

Variable Introduction in C

Variable Declaration and Initialization

Variable types and Scope in C

Local Variable in C

static Variable in C

Global variables in C

Storage Class in C

Constant in C Language

Constants in C

Operators and Enums in C Language

Introduction to Operator

Arithmetic Operators in C

Relational Operators in C

Bit-wise Operators in C

Logical Operators in C

Assignment Operators in C

Conditional Operator in C

sizeof() Operator in C

Operator Precedance

Decision Making of C Language

Decision Making in C Introduction

if Statement



if-else Statement

Nested if Statement

if else if Ladder

switch case

Loop control in C Language

Loop Introduction in C

while loop in C

do while Loop In C

for Loop in C

Control Flow in C Programming

break Statement in C

continue Statement in C

goto Statement in C

Array in C Language

Single Dimensional Array

Two-Dimensional Array

Multi-Dimensional Array in C

String in C Language

Introduction to String

Function in C Language

Function in C

Function Calling in C

return type in Function

Call by Value in C



User Define Function

Predefined Functions

String functions in C

All String Functions

strcat() function

strncat() function

strcpy() function

strncpy() function

strlen() function

strcmp() function

strcmpi() function

strchr() function

strrchr() function

strstr() function

strrstr() function

strdup() function

strlwr() function

strupr() function

strrev() function

strset() function

strnset() function

strtok() function

Recursion in c

Introduction to Recursion

Direct and Indirect Recursion



Pointer in C Language

Pointer in C

types of pointer

NULL pointer

Dangling Pointer

Void/Generic Pointers

Wild Pointer

Near, Far and Huge Pointer

Pointer Expressions and Arithmetic

Pointer and Array

Strings as pointers

Pointer to Function

Call by Reference in C

Structure in C Language

Structure in C

Nested Structure in C

Array of Structures in C

Pointer to Structure

Structure to Function in C

typedef in C

typedef vs #define in C

Union in C Language

Union in C

File Input/Output

Introduction to File



File Operation in c

Dynamic Memory Allocation

Introduction to DMA

calloc() and free() function

realloc() and free() function

C Pre-processor

Introduction about Pre-processor

Command Line Arguments

Introduction CLAs

