

# Programming with C Language (Paid Course)

**Instructor:** Rakibur Rahman, BSc. in Computer Science & Engineering,  
Dhaka International University.

## Course Outline

(APC)

### Introductions

- What is C Language
- History of C
- Features of C
- How to install C
- First C Program
- Flow of C Program
- printf scanf
- Variables in C
- Data Types in c
- Keywords in c
- C Operators
- C Comments
- C Escape Sequence
- Constants in C
- C Fundamental Test

### C Control Statements

- C if-else



PROGRAMMING COURSE  
Instructor: Rakibur Rahman  
BSc. in CSE, DIU

- C switch
- C Loops
- C do-while loop
- C while loop
- C for loop
- C break
- C continue
- C goto
- Type Casting
- C Control Statement Test

## **C Functions**

- What is function
- Call: Value & Reference
- Recursion in c
- Storage Classes
- C Functions Test

## **C Array**

- 1-D Array
- 2-D Array
- Array to Function
- C Array Test

## C Pointers

- C Pointers
- C Pointer to Pointer
- C Pointer Arithmetic
- C Pointers Test

## C Dynamic Memory

- Dynamic memory

## C Strings

- String in C
- C gets() & puts()
- C String Functions
- C strlen()
- C strcpy()
- C strcat()
- C strcmp()
- C strrev()
- C strlwr()
- Cstrupr()
- C strstr()
- C String Test



PROGRAMMING COURSE  
Instructor: Rakibur Rahman  
BSc. in CSE, DIU

## C Math

- C Math Functions

## C Structure Union

- C Structure
- C Array of Structures
- C Nested Structure
- C Union
- C Structure Test

## C File Handling

- C File Handling
- C fprintf() fscanf()
- C fputc() fgetc()
- C fputs() fgets()
- C fseek()
- C rewind()
- C ftell()

## C Preprocessor

- C Preprocessor
- C Macros
- C #include

- C #define
- C #undef
- C #ifdef
- C #ifndef
- C #if
- C #else
- C #error
- C #pragma
- C Preprocessor Test

### **C Command Line**

- Command Line Arguments

### **C Programming Test**

- C Programming Test

### **C Programs**

- Top 10+ C Programs
- Fibonacci Series
- Prime Number
- Palindrome Number
- Factorial
- Armstrong Number
- Sum of digits

- Reverse Number
- Swap Number
- Print "Hello" without ;
- Assembly code in C
- C program without main
- Matrix Multiplication
- Decimal to Binary
- Number in Characters
- Alphabet Triangle
- Number Triangle
- Fibonacci Triangle



### **C Programming Tricks**

- Theory + Practical Lecture

### **C Programming Shortcut**

- Theory + Practical Lecture

### **Problem Solving**

- Theory + Practical Lecture

### **Competitive Programming**

- Theory + Practical Lecture