

## Learn C Programming from Scratch

**Modality: Self-Paced Learning**

**Duration: 5 Hours**

**SATV Value:**

**CLC:**

**NATU:**

**SUBSCRIPTION: Learn, Master**

This course is aimed at anyone with a desire to learn the C, with the goal of building a solid knowledge of the language. Some previous programming experience is helpful, but not necessary.

### **Course Outline:**

#### **Introduction**

- Course Introduction (1:56)
- Section Introduction (1:09)
- About the C Language (1:54)
- IDEs (6:02)
- Hello World (2:54)
- Section Summary (0:42)

#### **Language Fundamentals**

- Section Introduction (1:22)
- Variables and Constants (8:20)
- printf and scanf (2:37)
- Data Types (6:10)
- Command Line Arguments (7:11)
- Arithmetic Operators (12:19)
- Flushing the input buffer (7:08)
- Loops (9:07)
- Arrays (1D) (9:04)
- Arrays (2D) (9:16)
- Challenge (9:48)
- Section Summary (0:55)

#### **Logical Flow**

- Introduction (0:48)
- Conditionals (7:18)
- Switch (4:16)
- Module Challenge - Part 1 (11:07)

- Module Challenge - Part 2 (4:00)
- Section Summary (0:25)
- Strings, chars and pointers
- Section Introduction (1:24)
- Pointers (10:25)
- Stack and Heap (6:46)
- Strings, Pointers, Null-terminations (7:35)
- Char Arrays and Pointers (4:17)
- Char Arrays and Functions (12:02)
- Challenge (10:02)
- Section Summary (1:09)

## Functions

- Section Introduction (0:39)
- Basic Functions & Arguments (8:52)
- Pass By Value and Reference - Part 1 (6:18)
- Pass By Value and Reference - Part 2 (5:38)
- Challenge (12:22)
- Section Summary (0:37)

## File I/O

- Section Introduction (0:54)
- Opening and Closing Files (8:07)
- Reading All Content Of A File (5:12)
- Searching for Content Within A File (8:41)
- Binary Files (6:12)
- Binary File Challenge (7:22)
- ASCII File Challenge (9:33)
- Section Summary (0:41)

## Macros

- Section Introduction (0:40)
- Constants, Functions, Aliases (9:04)
- Conditionals and Strings (5:10)
- Challenge (10:19)
- Section Summary (0:33)
- Course Summary (1:25)