

CTE Course – Introduction to Programming using C

Course Summary

- ❖ Subject : Introduction to C Programming
- ❖ Level : Beginner
- ❖ Objective: To introduce students to the world of programming using C and develop their abilities and help them understand how a computer thinks and how to write pieces of code to get desired outputs.
- ❖ Workload: 3-4 hours/week (includes two-three one hour lectures.)

Instructors

Samarth Jain, Sarthak Moorjani

Course Requirements

- ❖ Laptop with Linux Operating System installed
- ❖ Willing to learn and tackle challenges

Lecture Schedule

- ❖ Lecture 1 : Introduction to Course
- ❖ Lecture 2: Getting Started with C
- ❖ Lecture 3: Introduction to Linux Commands [Expect all of you to attend this lecture to get through with basic linux commands]
- ❖ Lecture 4: Writing Decision Control in C
- ❖ Lecture 5-6: Using Loop-Control Statements [Probable Lab Session after this]
- ❖ Lecture 7: Writing Switch Case in C
- ❖ Lecture 6,7,8 : Using arrays and strings in C [Probable Lab Session after this]

- ❖ Lecture 9,10,11: Making functions and using pointers [Probable Lab Session after this]

- ❖ **Mid Course Exam [Last Week of September] [Programming + Written]**

- ❖ Lecture 12 : Other Data Types and Preprocessors
- ❖ Lecture 13: Structures
- ❖ Lecture 14 and onwards: Basic Data Structures like Linked Listed, Stacks, Queues and algorithms like Selection Sort and Insertion Sort [Probable Lab Session after this]

- ❖ **[Mid – November] [Programming + Written]**

Also we will be having a few lab sessions in Computer Centre in the middle of this.

Assessment

1. No attendance requirement.
2. All graded components are mini-projects.
3. Mini-projects will be uploaded to private repositories on GitHub. Instructors will be given access permission. Code will be reviewed and grade given according to rubric.