Let's get started

We want to learn more about you

C Programming: Advanced Dat... > Week 1 > Course syllabus

Learn about the tools Interacting on the discussion forum

Technical, general, organisational and other questions

Define structures
Access and modify structures

Pass structures to functions
Work with structures Reflect on your learning progress

Course syllabus

Learning outcomes

In this course, part of the C Programming with Linux Specialization, you will define your own data types in C, and use the newly created types to more efficiently store and process your data.

Many programming languages provide a number of built-in data types to store things such as integers, decimals, and characters in variables, but what if you wanted to store more complex data? Defining your own data types in C allows you to more efficiently store and process data such as a customer's name, age and other relevant data, all in one single variable!

- Define new data types (structures) to store multiple data items in one variable and create, initialize and modify variables of these new types
 Find and explain the memory usage of a structure and use pointers to structures and the direct and indirect member selection operation to access members of structures.
- Create linked lists of structures with dynamic memory allocation at runtime
- Sort or search lined lists of structures

Prerequisites

We recommend you to have taken the first 4 courses of the *C Programming with Linux Specialization*. Regarding the onboarding, you will be able to immediately start coding in C with the help of powerful yet simple coding tools right within the web browser. No need to install anything!

Workload

Students are expected to spend roughly 2 to 3 hours a week watching the videos, tutorials, responding to the activities and participating actively in the forums. This is an estimation based on 3 weeks of learning effort.

Grading and Certificate

This course includes both participants who are auditing the course (T-day free trial) and participants who working toward a Specialization by completing all seven courses in the program. If you wish to have your course work validated for the C Programming with Linux Specialization, you must upgrade to a subscription. Auditing participants will not have access to any of the graded programming exhibits.

If you cannot afford the full price, please note that Coursera may be able to provide financial assistance under certain

To pass the course you need to pass each graded assignment with a grade of at least 80%. You can continue retaking each graded assessment until they successfully pass. All graded assessments need to be passed to earn the certificate.

To pass this course you will have to complete several activities:

- submit C programs through Taskgrader (an automated grading tool that also provides feedback on your code) , gamma newspower ran automated grading tool that also provides feedback on your cod.

 Altempts: Learning code requires writing code and correcting your mistakes. You have unlimited attempts on the Taskgrader coding activities.

Course Schedule

This course is a self-paced. This means that you can start whenever you would like and progress at your own pace. Although there are not activity deadlines, we recommend you spend at least 2-3 hours per week on this course.

Accessibility and Accommodations

"We envision a world where anyone, anywhere can transform their life by accessing the world's best learning experience. This includes learners of all abilities, we strive to ensure that the learner experience on our platform is accessible to individuals with disabilities and that the platform allows on partners to create accessible content, and the platform allows on partners to create accessible content. Cocurans's full Accessibility Statement, including how to contact Learner Support to request accommodations and support.

To go further

Enroll in the next course of the C Programming with Linux Specialization.



