Introduction to Embedded Systems Software and Development Environments [1]

About This Course:

Introduction to Embedded Systems Software and Development Environments is the first course of the upcoming Embedded Software Essentials Specialization. This course is focused on giving you real world coding experience and hands on project work with ARM based Microcontrollers. You will learn how to implement software configuration management and develop embedded software applications. Course assignments include creating a build system using the GNU Toolchain GCC, using Git version control, and developing software in Linux on a Virtual Machine. The course concludes with a project where you will create your own build system and firmware that can manipulate memory. Later courses of the Specialization will use hardware tools to program and debug microcontrollers with bare-metal firmware. Using a Texas Instruments MSP432 Development Kit, you will configure a variety of peripherals, write numerous programs, and see your work execute on your own embedded platform!

Language
English

How to Pass
Pass all graded assignments to complete the course.

User Ratings
Average User Rating 4.5

Level
Intermediate
Commitment?

5-6 hours/week

Who is this class for:

This course is for motivated learners who have some background in computer engineering and software design and who want to break into the field of embedded systems design.

For More Information or to Enroll [2]

[2]

Created by:

University of Colorado Boulder

Groups audience:
Colorado Learning and Teaching with Technology

Right Sidebar:

MOOC Introduction to Embedded Systems Software and Development Environments

Links

[1] https://www.cu.edu/coltt/introduction-embedded-systems-software-and-development-environments
[2] https://www.coursera.org/learn/introduction-embedded-systems