



MF2095 Programming in C for Embedded Systems 3.0 credits

Programmering i C för inbyggda styrsystem

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

On 04/15/2022, the Dean of the ITM School has decided to establish this official course syllabus to apply from autumn term 2022 (registration number M-2022-0418).

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Completed course MF1016 Basic Electrical Engineering, or the equivalent.

Completed course DD1321 Applied programming and computer science, or the equivalent.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After passing the course, the students should be able to:

1. Explain the structure of embedded processors
2. Design and develop sequential programmes in C, of relevance to mechatronics product development
3. Use and utilise development tools for programming and troubleshooting of embedded systems

Course contents

The following modules are included in the course:

- Computer models, von Neumann and Harvard architecture, CISC and RISC
- Low level programming in C

Examination

- LABA - Laboration, 3.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.