

Course: Embedded Programming

credits: 5

Course code ELVP22EMP
Name Embedded Programming
Study year 2022-2023
ECTS credits 5
Language Dutch, with parts in English
Coordinator P.J. Kamphuis

Modes of delivery Problem-based learning
Assessments Embedded Programming - Assignment

Learning outcomes

Defining

The student clearly identifies a problem or customer need, contextualizes it, consults relevant sources, and converts it into a goal, problem statement, and electrical engineering requirements.

Designing

The student considers various solution directions to arrive at a detailed and well-founded electrical engineered product/service/process based on the program of requirements, using appropriate design methodologies and taking into account societal interests and engineering standards.

Realizing

The student realizes and validates a (prototype of) a product/service/process based on a technical design, using the appropriate materials/techniques/instruments.

Content

The student is able to:

- define and specify an the goal of an embedded programming assignment as well as contextualize it, while providing examples of input/output and use-cases.
- create a graphical representation of an algorithm, based on the definition phase, while making sure this is understandable by the client and programmer. This serves as a intermediary step before the coding.
- write code based on the algorithm and maintain a clear relationship between algorithm and coding.
- testing of the code based on examples and use-cases as defined by the assignment.

Included in programme(s)

Electrical Engineering Major Sensor Technology
Electrical Engineering Major Electronics
Electrical Engineering Major Mechatronics

School(s)

Institute of Engineering