

Course Specifications

From the academic year 2014-2015 up to and including the

Hardware-design Project (E033702)

Course size (nominal values; actual values may depend on programme)

Credits 6.0 Study time 180 h Contact hrs 22.5 h

Course offerings and teaching methods in academic year 2017-2018

A (semester 2)	English	project	30.0 h
B (semester 2)	Dutch		

Lecturers in academic year 2017-2018

Vanfleteren, Jan	TW06	lecturer-in-charge
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Offered in the following programmes in 2017-2018

	crdts	offering
Bridging Programme Master of Science in Electrical Engineering (main subject Electronic Circuits and Systems)	6	A
Master of Science in Electrical Engineering (main subject Communication and Information Technology)	6	A
Master of Science in Electrical Engineering (main subject Electronic Circuits and Systems)	6	A
Master of Science in Electrical Engineering	6	B

Teaching languages

Dutch, English

Keywords

hardware design realisation evaluation debugging

Position of the course

This course is aimed at the effective application, in a team context, of the design principles taught in the compulsory courses, and of the detailed knowledge acquired in the elective courses. It should enable the student to make a design in accordance with his or her choices in the core curriculum. Realisation of the design means actual hardware fabrication, evaluation and debugging. As the course is followed by students from the options ECS (compulsory course) and IS (elective course), projects are offered out of which both groups of students can make an appropriate choice. 1 project for each group of 3 to 4 students is foreseen.

Contents

- Electronic Design Project

Initial competences

Core curriculum of the programme.

Final competences

To transform theoretical knowledge from other courses into practical applications.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Project

Learning materials and price

Consumables must be foreseen for the realisation and testing of the hardware: PCB software design licences, PCB manufacturing cost, components, clean room materials, probe needles, Cost is strongly project dependent and is estimated to amount between 100 and 200 euro per project on average.

References

Course content-related study coaching

Evaluation methods

continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation

Report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible in modified form

Extra information on the examination methods

During semester: graded project reports; graded oral presentation.

Calculation of the examination mark