

Course Specifications

Valid in the academic year 2023-2024

Engineering Project (E099121)

Course size	(nominal values; actual values may depend on programme)				
Credits 3.0	Study time 90 h				
Course offerings and t	eaching methods in academic year	2023-2024			
A (semester 2)	Dutch	Gent	group work		
Lecturers in academic	year 2023-2024				
De Smet, Herbert			TW06	lecturer-in-charge	
Offered in the following programmes in 2023-2024				crdts	offering
Bachelor of Science in Engineering(main subject Electrical Engineering)				3	А

Teaching languages

Dutch

Keywords

Electrical measurements, design of electrical circuits

Position of the course

Contents

- $\boldsymbol{\cdot}$ Usage of measurement equipment (function generator, oscilloscope, multimeter,
- ...) to validate the behavior and non ideal effects in an electrical circuit.
- design of a simple circuit based on predefined I/O behavior
- building a prototype of such a circuit

Initial competences

Final competences

- 1 Using electrical measurement equipment
- 2 Measuring static and dynamic characteristics of electrical components
- 3 Design a simple electrical circuit
- 4 set up a measurement protocol to validate the operation of electrical circuits
- 5 Awareness of the limitations and imperfections of electrical measurement
- equipment (noise, distorstion, frequency range, ...)
- 6 awareness of imperfections of electrical components
- 7 The ability to work in group

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

Group work, Lecture

Extra information on the teaching methods

Presence for this course is compulsory

Learning materials and price

Notes with information on the specific projects. These will be distributed at no cost during the introduction sessions as will as in electronic form through the electronic learning environment.

If applicable, additional information will be provided in electronic form through the

References

• none

Course content-related study coaching

Assessment moments

continuous assessment

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

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

Examination methods in case of permanent assessment

Professional practice, Skills test, Participation, Peer and/or self assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Extra information on the examination methods

(1) During the semester there are around 3 reports that are assessed.

(2) During the practical sessions there will be occasional individual interrogations. Typically every student will be interrogated 2 times.

(3) The functioning of the groups will be assessed by a Peer Assessment.

(4) At the end of the semester there will be a practical skill test.

(5) There is one company visit: participation to this company visit is compulsory.

Calculation of the examination mark