

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

Credits 3.0 **Study time** 90 h **Contact hrs** 30.0 h

Course offerings and teaching methods in academic year 2016-2017

A (semester 2)	group work	25.0 h
	lecture	5.0 h

Lecturers in academic year 2016-2017

Rombouts, Pieter	TW06	lecturer-in-charge
De Smet, Herbert	TW06	co-lecturer

Offered in the following programmes in 2016-2017

Bachelor of Science in Electrical Engineering	crdts	offering
	3	A

Teaching languages

Dutch

Keywords

Electrical measurements, design of electrical circuits

Position of the course

Contents

- 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, distortion, frequency range, ...)
- 6 awareness of imperfections of electrical components

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

References

- Geen

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**

Participation, 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.

Calculation of the examination mark

1 mark out of 20 of the exam grades is attributed to participation in the excursions.