# **Technology Arts Sciences**

## TH Köln

## Course

## GE2 - Electrical Engineering 2 (Basics)

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## General information

Long name	Electrical Engineering 2 (Basics)
Approving CModule	GE2 BaET
Responsible	Prof. Dr. Rainer Kronberger Professor Fakultät IME
Level	Bachelor
Semester in the year	summer semester
Duration	Semester
Hours in self-study	78
ECTS	5
Professors	Prof. Dr. Rainer Kronberger Professor Fakultät IME
Requirements	math, physics
Language	German
Separate final exam	Yes

#### Final exam

**Details** 

written exam

Minimum standard

4.0

Exam Type

written exam

## Lecture / Exercises

## Learning goals

#### Knowledge

Voltage, current, resistance, inductance and capacitance power in AC circuits, analysis of AC circuits, capacitors, inductors, resonances

#### Skills

learn the principles of electrical currents and voltages in AC circuts learn to to calculate AC curents and voltages learn how to analyse AC circuits learn how to design AC circuits

## Expenditure classroom teaching

Туре	Attendance (h/Wk.)
Lecture	2
Exercises (whole course)	1
Exercises (shared course)	0
Tutorial (voluntary)	1

## Separate exam

none

## Practical training

## Learning goals

Measurement of the complex electric current, voltage, power as	nd impedance
Design of electronic AC circuits consisting of resistors, capacito	rs and inductors

#### Skills

Learn the complex interaction of voltage and current in/on electronic components in AC circuits Learn how to design and analyse AC circuits

Learn how to use electronic measurement equipment for anlysis, design and measurment of AC circuits

Learn how to display, analyse and compare measurment results

## Expenditure classroom teaching

Туре	Attendance (h/Wk.)
Practical training	1
Tutorial (voluntary)	0

## Separate exam

none

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