

# TH Köln

## Course

# EM2 - Electronic Media 2

Version: 4 | Last Change: 17.12.2019 11:48 | Draft: 0 | Status: vom verantwortlichen Dozent freigegeben

# General information

Long name	Electronic Media 2
Approving CModule	EM2 BaMT
Responsible	Prof. DrIng. Klaus Ruelberg Professor Fakultät IME
Level	Bachelor
Semester in the year	winter semester
Duration	Semester
Hours in self-study	60
ECTS	5
Professors	Prof. DrIng. Klaus Ruelberg Professor Fakultät IME
Requirements	Basic knowledge mathematics: Basic knowledge integral and differential mathematics, complex numbers  Electronics, Electronic Media 1, Mathematics 1
Language	German
Separate final exam	Yes

### Final exam

#### **Details**

Exam - The students apply their knowledge to several practival exercises. Furthermore, they describe and explain some of the technical concepts which were presented in the lecture.

#### Minimum standard

Simple calculations of SNR (Signal to Noise Ratio) and data rates of audio and video signals

Describe concepts of digitalization and compression of audio and video signals

#### Exam Type

Exam - The students apply their knowledge to several practival exercises. Furthermore, they describe and explain some of the technical concepts which were presented in the lecture.

## Lecture / Exercises

### Learning goals

Knowledge
Basic concepts of electronic communication techiques and signal theory
Basic concepts of electronic TV and image scanning/sampling
Analog video technology
Digital video technology

#### Skills

Analysis and description of analogue and digital systems for sampling and processing of audio and video signals

### Expenditure classroom teaching

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

### Separate exam

none

# Practical training

## Learning goals

### Knowledge

Ilustration of teaching content and technical phenomena

#### Skills

Exemplary application of the course contents to practical tasks

## Expenditure classroom teaching

Туре	Attendance (h/Wk.)
Practical training	3
Tutorial (voluntary)	0

### Separate exam

none

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