

EE-708

Advanced topics in electromagnetic compatibility

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Cursus	Sem.	Type
Electrical Engineering		Opt.

Language of teaching	English
Credits	2
Session	
Exam	Oral presentation
Workload	60h
Hours	28
Lecture	14
Exercises	14
Number of positions	20

Frequency

Every 2 years

Remark

Next time: Fall 2024

Summary

After a series of common introductory topics covering an introduction to electromagnetic compatibility, modeling techniques and selected chapters from EMC, each student will study a specific topic, which will be presented and discussed.

Content**Common introductory topics:**

- Introduction to EMC and modeling techniques
- Representation of EMI signals

Other topics to be selected (non-exhaustive list):

- Printed circuit board design
- High frequency electromagnetic field coupling to transmission lines
- Grounding techniques
- Shielding
- Modeling of a lightning discharge
- Biological effects of electromagnetic fields

Keywords

Electromagnetic Compatibility.

Learning Prerequisites

Recommended courses

Electromagnetism, Circuit Theory.

Assessment methods

Oral presentation.