

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
<b>Hours</b>	<b>28</b>
Lecture	14
Exercises	14
<b>Number of positions</b>	<b>20</b>

**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.