**Advanced topics in electromagnetic compatibility**

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**Cursus**

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<tr>
<th>Type</th>
<th>Genie electrique</th>
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**Sem.**

- Obl.

**Type**

- English

**Credits**

- 2

**Session**

- Oral presentation

**Exam**

- 60h

**Workload**

- 28 hours
  - Lecture: 14
  - Exercises: 14

**Number of positions**

- 20

**Frequency**

- Every 2 years

**Remarque**

- Next time: Spring 2020

**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.