MICRO-406

Products design & systems engineering

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Cursus	Sem.	Type
Microtechnics	MA1, MA3	Obl.

Language of teaching	English
Credits	10
Withdrawal	Unauthorized
Session	Winter
Semester	Fall
Exam	During the semester
Workload	300h
Weeks	14
Hours	**10 weekly**
Lecture	5 weekly
Project	5 weekly
Number of positions	

Il n'est pas autorisé de se retirer de cette matière après le délai d'inscription.

Summary

This course will cover all the aspects of product design and system engineering from learning relevant methods to the actual implementation in a hands-on practice of product development.

Content

The course will be sub-divided in lectures covering the various aspects of product designs (technical aspect such as system engeering, production engineering, quality control as well as organisational aspects such as project planning, including general knowledge about the structure of a company, IP, and innovations).

Keywords

Product desgin, project planning, system engineering, hands-on practice

Learning Outcomes

By the end of the course, the student must be able to:

- Design a product
- Elaborate a plan for an efficient product design cycle
- Plan a prototype realization
- Coordinate a team-work strategy

Transversal skills

- Chair a meeting to achieve a particular agenda, maximising participation.
- Communicate effectively, being understood, including across different languages and cultures.
- Evaluate one's own performance in the team, receive and respond appropriately to feedback.
- Identify the different roles that are involved in well-functioning teams and assume different roles, including leadership roles.

Assessment methods

The assessment will be based on three elements: a report, oral presentations as well as a final prototype.

Supervision

Office hours	No
Assistants	Yes
Forum	Yes