

MSE-599

**Master project in Materials Science and Engineering**

Profs divers \*

Cursus	Sem.	Type
Materials Science and Engineering	PME, PMH	Obl.

Language of teaching	English
Credits	30
Session	Winter, Summer
Semester	Fall
Exam	Oral
Workload	900h
Weeks	
Project	900 weekly
<b>Number of positions</b>	

**Summary**

The student carries out an academic or industrial research project. He/she has to display the knowledge and capability required for independent work in the field of Materials Science & Engineering.

**Content**

The Master thesis is a personal and original work covering theoretical and practical aspects of materials science using the knowledge of the student acquired during his/her studies and enable him/her to develop deeper knowledge, understanding, capabilities and attitudes in the field of materials science. This project is made under the supervision of a professor of the section of Materials Science and Engineering.

**Learning Outcomes**

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

- Formulate and deal with complex issues critically, independently and creatively by applying a holistic view
- Plan and use adequate methods to conduct qualified tasks in given framework
- Manage an individual research project
- Apply the competences to a specific subject
- Present data coherently and effectively
- Develop expertise in a specific area of research
- Assess / Evaluate the results critically
- Compose the project in written form in a scientific report
- Expound the project in oral form for a scientific audience

**Transversal skills**

- Set objectives and design an action plan to reach those objectives.
- Use a work methodology appropriate to the task.
- Communicate effectively, being understood, including across different languages and cultures.
- Assess progress against the plan, and adapt the plan as appropriate.
- Give feedback (critique) in an appropriate fashion.
- Take feedback (critique) and respond in an appropriate manner.
- Collect data.
- Access and evaluate appropriate sources of information.

**Teaching methods**

The student will have to write a report which will be evaluated by a jury. An oral defense will take place after submitting the report.