

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
Number of positions	

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.