

MSE-490

Research project in materials I

Profs divers *

Cursus	Sem.	Type
Materials Science and Engineering	MA1, MA2, MA3, MA4	Obl.

Language of teaching	English
Credits	10
Withdrawal Session	Unauthorized Winter, Summer
Semester Exam	Fall During the semester
Workload	300h
Weeks	14
Hours	10 weekly
TP	10 weekly

Number of positions

It is not allowed to withdraw from this subject after the registration deadline.

Remark

This project can be taken in Autumn or Spring semester

Summary

The student applies the acquired skills to an academic or industrial project.

Content

The students are confronted with the realization of an engineering project integrating several aspects of Materials science. This project will allow them to apply, to concrete problems, skills of domain and transversal skills acquired during their studies. The projects are available on the web sites of IMX laboratories or other laboratories approved by SMX Section.

Learning Outcomes

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

- Manage an individual research project
- Apply the competences to a specific subject
- Design 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
- Develop expertise in a specific area of research
- Present data coherently and effectively

Transversal skills

- Communicate effectively, being understood, including across different languages and cultures.
- Write a literature review which assesses the state of the art.
- Summarize an article or a technical report.

- Assess progress against the plan, and adapt the plan as appropriate.
- Collect data.
- Access and evaluate appropriate sources of information.

Assessment methods

Continuous assessment (report)

- Research project in Autumn semester : the written report has to be submitted at last, Friday of the second week after the end of the teachings.
- Research project in Spring semester : the written report has to be submitted at last, Friday of the first week after the end of the teachings.