

MSE-491

**Research project in materials II**

Profs divers \*

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

Language of teaching	English
Credits	10
Withdrawal Session	Unauthorized Winter, Summer
Semester Exam	Fall During the semester
Workload	300h
Weeks	14
Hours	<b>10 weekly</b>
Practical work	10 weekly
Number of positions	
<b>It is not allowed to withdraw from this subject after the registration deadline.</b>	

**Remark**

This project can be taken in Autumn or Spring semester

**Summary**

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

**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.
- Collect data.

- Access and evaluate appropriate sources of information.
- Assess progress against the plan, and adapt the plan as appropriate.
- Summarize an article or a technical report.

### **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.