

# **UE** Research project



Level Baccalaureate +5







> Teaching language(s): English

> Open to exchange students: Yes

Code d'export Apogée: YAX9BI11

## Presentation

### Description

The course starts with an introductory lecture that describes how scientific projects are usually performed. Major points discussed are:

- Structure and functioning of a scientific team ("From Einstein to Frankenstein what makes a modern scientist")
- 2) Scientific literature (critical reading of publications, building blocks of a publication, the "hidden" information)
- 3) The "value" of a publication (impact factor and its consequences; ethics in publishing)
- 4) Project planning and funding proposals (including funding agencies and fellowships)
- 5) Financial and structural resources for a scientific project

The students will provide a short initial 10 min presentation of their master project summarizing the field of study, the topic and the project idea followed by 5 min of group discussion identifying the major technological and scientific questions. These will be discussed and explained in detail in subsequent tutorials.

The final goal for each student is to prepare a 4-page proposal on his/her future S4 internship and a potential consecutive PhD project in which he/she describes the rationale and strategy of the project, the research axes, the expected results and alternative strategies in case the original project idea turns out to be not feasible. The students will receive help for the preparation of this project by their lab supervisor (understanding of the subject, feasibility of the proposed experiments) and of regular discussions with the group of students.





The mid-term exam consists in a 30 min oral presentation that summarizes the bibliographic background of the proposal and presents the main technical aspects, followed by questions from the reviewing committee (researchers and faculty members), who will test the understanding of the project.

The final exam consists in:

- a 4-pages written proposal
- a 20 min discussion with the reviewing committee who will test the understanding of the project as well as the scientific culture of the candidate.

### Course parts

UE Research project - CM Lectures (CM) 6h

UE Research project - TD Tutorials (TD) 30h

Period: Semester 9

#### Skills

The students are expected to increase their scientific potentials by improving their analytical skills, their critical and strategic thinking as well as their skills in scientific writing and oral presentations.

# Useful info

#### Contacts

Program director

Thomas Pfannschmidt

■ Thomas.Pfannschmidt@univ-grenoble-alpes.fr

#### Place

> Grenoble

## Campus

Grenoble - University campus

