1SL8000 – Project S6

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Department: DÉPARTEMENT DÉVELOPPEMENT PROFESSIONNEL ET MÉTIERS DE L'INGÉNIEUR
Language of instruction: FRANCAIS, ANGLAIS
Campus: CAMPUS DE METZ, CAMPUS DE RENNES, CAMPUS DE PARIS - SACLAY
Workload (HEE): 100
On-site hours (HPE): 60,00

Description

A project is a collective work modality used to apprehend complex open problems. Its effectiveness depends on the individual skills of each person and on the team's operating practices ; the objective being to produce a final product for a sponsor in a given time. The projects proposed in the engineering training program allow the learning of this modality through increasingly complex situations. The objective of this activity is to collectively implement the different stages of a project, from the definition of the need to the return of the product, in order to produce a deliverable for a client.

Quarter number

SG3 and ST4

Prerequisites (in terms of CS courses)

Project management, API workshops

Syllabus

The projects run from January to June. They follow the usual phases of a project:
* Define and frame the project
* Program the actions
* Define roles and responsibilities
* Measure progress and proceed to feedback loops
* Develop technical and organizational skills
* Communicate your achievements
* Capitalize on the experience gained

Class components (lecture, labs, etc.)

As the project progresses, there are many and varied interactions with the project environment. It is based on individual and collective actions. There will be (1) collective times at the level of the cluster for the transmission of good practices and knowledge, (2) personal work to be defined within the group, (3) collective work to align and manage the project group. The

supervisors will monitor the project regularly to ensure that no blockages appear and to validate the steps taken.

Grading

The evaluation covers the ongoing participation during the year, the quality of the written report and the oral presentations made during the project. These contributions will be viewed from four different angles: involvement, content and deliverables, communication, and team functioning in project mode. A validated project implies that the student has validated at least 2 out of 3 competencies from the set {C4, C7, C8}.

Resources

Projects are carried out by groups of 5 students. Each project is attached to a cluster where projects of the same nature are grouped together. The clusters provide supervision and software and hardware resources. At the beginning of the year, the clusters are presented at a Project Forum. Students can ask to join a cluster. They can also propose to carry out a personal project with a team that will be hosted in a cluster. All students participate in an online assignment campaign. The cluster leaders help select the most motivated students.

Learning outcomes covered on the course

At the end of this teaching, the student will be able to:
* interact with a client remotely and in person (telephone discussion, exchange of electronic messages, oral presentation, conduct of progress meetings, etc.)
* identify the value of their work in solving a complex problem
* present scientific work in written and oral form (in particular, the proper management of bibliographic resources)
* clarify the conditions for effective teamwork
* describe and illustrate through experience the meaning of working in project mode

Description of the skills acquired at the end of the course

Milestones will be achieved in the following competencies throughout the project:
* C3 – Act, undertake, innovate in a scientific and technological environment
* C4 – Have a sense of creating value for your company and your customers
* C7 – Knowing how to convince
* C8 – Leading a project, a team
* C9 – Think and act as an ethical, responsible and honest engineer, taking into account environmental, social and societal dimensions

Depending on the nature of the project, competencies C1, C2, C5 and C6 may also be targeted.