Projet polydaire: expériences didactiques innovantes pour le secondaire

Lecturer
Simon-Pierre GORZA (Coordinator)

Course mnemonic
PROJ-H421

ECTS credits
5 credits

Language(s) of instruction
French

Course period
Academic year

Campus
Solbosch

Course content

Project carried out by groups of 3 students.

The objective is to design and implement an experimental and didactic device in order to support the teaching of a scientific subject in secondary school.

The theme of the project is proposed by a secondary school teacher and the project is carried out in collaboration with him/her. At the end of the project, the students carry out a scientific animation in the teacher's class in order to test their device and the pedagogical scenario that accompanies it.

Objectives (and/or specific learning outcomes)

To develop the student's ability to manage, within a small team, a project integrating technical, scientific and pedagogical content, as well as its ability to communicate and to work independently.

Teaching method and learning activities

French-English

Contribution to the teaching profile

> Express the needs and expectations of a "customer" into the language of the engineer- Manage the development of a project, from the analysis of the needs of the "customer" to the finished product, by integrating all the constraints- Collaborate as part of a team (multidisciplinary)- Be creative in the development of the technical solution- Develop a methodolgy for the design of the technical solution-

Communicate effectively orally by adapting the speech to the objectives and audience (project defense, teaching in a high school classroom)- Develop appropriate and effective written communication in the form of a report, technical documents, user manual and educational booklet

Course notes

Université virtuelle

Other information

Place(s) of teaching

Solbosch

Contact(s)

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Evaluation method(s)

Oral presentation and Written report

Evaluation method(s) (additional information)

Evaluation on the basis of the documents and the final product (see specific evaluation grids in the project guide), and an oral defence at the end of the project in front of a jury.

Main language(s) of evaluation

English

Programmes

Programmes proposing this course at the Brussels School of Engineering

MA-IRAR | Master of science in Architecture and Engineering | finalité Professional/unit 2, MA-IRCB | Master of science in Biomedical Engineering | finalité Professional/unit 2, MA-IRCN | Master of science in Civil Engineering | finalité Professional/unit 2, MA-IREL | Master of science in Electrical Engineering | finalité electronics and information technologies/unit 2, MA-IREM | Master of science in Electromechanical Engineering | finalité Professional/unit 2 and finalité Operations engineering and management/unit 2, MA-IRIF | Master of science in Computer Science and Engineering | finalité Professional/unit 2, MA-IRMA | Master of Science in Chemical and Materials Engineering | finalité Professional/unit 2 and MA-IRPH | Master of science in Physical Engineering | finalité Professional/unit 1 and finalité Professional/unit 2