

CIVIL-465

Research skills for engineers

Cursus	Sem.	Type
Civil Engineering	MA1, MA3	Opt.

Language of teaching	English
Credits	2
Session	Winter
Semester	Fall
Exam	During the semester
Workload	60h
Weeks	14
Hours	2 weekly
Lecture	1 weekly
Exercises	1 weekly
Number of positions	

Remark

Pas donné en 2023-24

Summary

The course prepares students for carrying out research-based Master projects. It teaches basics of scientific writing and presenting as well as concepts and tools that are useful over the course of a research project.

Content**Keywords**

Research skills, scientific writing, scientific presenting, research data management, coding

Learning Prerequisites**Required courses**

A little programming experience would be helpful but is not mandatory.

Learning Outcomes

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

- Plan a research project;
- Structure a research report and a presentation;
- Apply principles of effective scientific writing;
- Apply best practices in research data management, coding and data visualisation;;
- Apply best practices for using citations in scientific writing.

Teaching methods

The course is based on presentations, which are followed by in-class exercises and take-home assignments. Modules of the course will be given by invited lecturers from the EPFL language center, the EPFL library and ENAC IT4Research.

Expected student activities

Active participation in course and exercises.

Assessment methods

The assessment is based on quizzes, on deliverables produced in the exercise hour and on take-home assignments.

Resources

Moodle Link

- <https://go.epfl.ch/CIVIL-465>