

CIVIL-465

**Research skills for engineers**

<b>Cursus</b>	<b>Sem.</b>	<b>Type</b>
Civil Engineering	MA1, MA3	Opt.

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

**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>