





# CIVIL ENGINEERING

Advanced modeling and experiments







### MASTER IN CIVIL ENGINEERING

Advanced Modeling and Experiments



2 semesters taught in French, including 4 months of internship in coaccreditation with École Centrale de Lyon, Université de Lyon 1 and ENTPE.

## **Description**

The Advanced Modeling and Experimentation in Civil Engineering track is fully in line with the civil engineering sciences.

The students enrolled in single and double courses will be able to follow this track alone. For these students, this track will combine several courses from the curriculum of the Civil Engineering degree and other courses shared with the co-accredited establishments and the companies/internship laboratories.

### **Objectives**

This track in Civil Engineering is designed to broaden and deepen the mastery of design, tools and methods in the field of remediation while consolidating the scientific foundations of engineering science, either for materials and structures or soils and infrastructures.







#### **COMMON COURSES\***

12 ECTS



Behaviour of materials



Materials for civil engineering

## SPECIALIZATION COURSES\*

12 ECTS



Advanced calculation tools



Structures and infrastructures

#### **OPENING COURSES\***

6 ECTS



Seismic engineering

## COMPLEMENTARY COURSES\*

6 ECTS



English for business communication level 2



Socio-economics of business



Internship preparation. Bibliography

### INTERNSHIP\*

24 credits



Minimum 16 weeks



Written report



Oral presentation

\* All the courses are taught **exclusively in French**