

## Design Engineering



### SCHOOL

Polytech Graduate School of  
Engineering



### CAMPUS

Belle-Beille



### LEVEL

Engineering 4th year



### OPEN TO EXCHANGE STUDENTS

Yes



### SEMESTER

Fall (S1)

- > **Degree course:** Quality, Innovation and Reliability Engineering
- > **Teaching unit:** UE 7-3 Quality, Innovation, Reliability methodology
- > **Course language:** English
- > **Duration (hours):** 28
- > **ECTS:** 2
- > **Teacher(s):** Mohamed Ibrahim and Maxime Kachit

#### > Assessment:

- Continuous assessment
- Final exam

#### > Teaching methods:

- Lecture course            hours
- Tutorial course        10 hours
- Practical work        18 hours

- Case study
- Project

## COURSE DESCRIPTION

Reminders of material strength and mechanical tests,  
- Finite element methods,  
- The stress-resistance method,  
- Case studies.

## OBJECTIVES

This course will allow students:

- To understand the results of mechanical finite element simulations and perform the reports for design teams,
- To realize the structural design studies, to define the specifications and to consult the suppliers,
- To be initiated to calculation codes and software such as SOLIDWORKS.

## PREREQUISITES

Resistance of materials

## SELECTIVE BIBLIOGRAPHY