

### **Master's degree year 1 - semester 1**

Thermomechanics (6 ECTS)  
Digital analysis and calculus 1 (5 ECTS)  
Tools for digital calculus (2 ECTS)  
Acoustic wave (4 ECTS)  
Advanced fluid dynamics (4 ECTS)  
Digital simulation of solid mechanics (3 ECTS)  
Digital simulation of fluid mechanics (3 ECTS)  
English (3 ECTS)

### **Master's degree year 1 - semester 2**

Digital analysis and calculus 2 (6 ECTS)  
Mechanical wave (3 ECTS)  
Heat transfer (3 ECTS)  
Language techniques (2 ECTS)  
Option (16 ECTS) choose between:  
\* Structure mechanics (6 ECTS)  
\* Mechanical tests (5 ECTS)  
\* Features of inelastic materials (5 ECTS)  
\* Convective heat and mass transfers, heat exchanger (6 ECTS)  
\* Experiments and introduction to experiment plans (6 ECTS)  
\* Thermal system simulation (4 ECTS)  
\* Internship (6 ECTS)

### **Master's degree year 2 - semester 1**

Mechanics and transfers in porous media (3 ECTS)  
Preparation to English language certificate (2 ECTS)  
Seminars and search for job (2 ECTS)  
Digital simulation (4 ECTS)  
Transfers in multiphase materials (5 ECTS)  
Finite volume methods (4 ECTS)  
Physics and digital modelling of turbulent flows (4 ECTS)  
Modelling and simulation of radiative transfers (3 ECTS)  
Simulation techniques and software (3 ECTS)

### **Master's degree year 2 - semester 2**

Internship (30 ECTS)