From January to March, three month courses in materials design and processing, including practical case studies in laboratories and projects in cooperation with industrial partners.

**COURSES**

With the participation of industrial partners: Arcelor Mittal, Areva, EADS, Renault, Snecma...

**MODULE 1** [78H]
FROM MATERIALS SELECTION TO MATERIALS DESIGN
- MATERIALS (Engineering alloys, composite materials, functional materials)
- MATERIALS SELECTION (Material property charts, selection strategy, life-cycles of materials)
- MATERIALS BY DESIGN

**MODULE 2** - [66H]
FROM MICROSTRUCTURE MODELLING TO MICROSTRUCTURE CHARACTERIZATION
- MICROSTRUCTURE FORMATION
- PHASE DIAGRAM, COMPUTATIONAL THERMODYNAMICS, PHASE TRANSFORMATION MODELLING
- MICROSTRUCTURAL CHARACTERISATION OF MATERIALS
- NON-DESTRUCTIVE TESTING OF STRUCTURES

**MODULE 3** - [72H]
MATERIALS PROCESSING
- FORMING PROCESSES
- SURFACE TREATMENT PROCESSES
- NUMERICAL SIMULATION OF PROCESSES

**CALENDAR**

- **September to November**
  - International students start with a 3 months internship in one of the academic partner laboratories.
  - French lessons

- **December**
  - 1 month opening module to choose among: Innovation/Geoeconomy / Marketing & purchasing / Wine & Marketing / Aromas, Flavour...

- **January to March**
  - 3 months courses

- **April to August**
  - 5 months internship

**PRICE**: 7 300€

**APPLY ONLINE AT** enschp.bordeaux-inp.fr
The Master of Science « Applied Formulation of Polymers and Colloids », delivered by Bordeaux INP, is fully in English and has been established by ENSCBP - Bordeaux INP as an answer to the rapid evolution on today’s needs in industry and academics, allowing the students to adapt efficiently to the most recent technological innovations. It is based on the well-established know-how of ENSCBP - Bordeaux INP and its partner laboratories concerning topics at the interface between Chemistry, Physics and Biology. ENSCBP - Bordeaux INP is one of the 7 graduate schools of Bordeaux INP.

KEY FIGURES

5 engineering training courses (Master)
- Chemistry - Physics
- Food Science
- Materials Engineering
- Structural Analysis of Composite Materials
- Food Production

3 Masters of Science
- Applied Formulation of Polymers and Colloids
- Inorganic Materials Design and Processing
- Micro- and Nanotechnology

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