



MASTER OF SCIENCE

Inorganic Materials Design and Processing

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

January to March

3 months courses

December

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

April to August

5 months internship



PRICE: 7 300€

APPLY ONLINE AT
enscbp.bordeaux-inp.fr

BORDEAUX INP

and its partner schools

Give engineering
a french touch

8 graduate schools
of Engineering
in France

3400*
students

(selected through national
competitive exam)

+900⁺ students
graduate*
each year

12% international
students

19 programs
including 5 by
apprenticeship

230
faculty
members

11 joint
research centers

140 partnerships
worldwide

*groupe Bordeaux INP
Nouvelle-Aquitaine

ENSCBP - Bordeaux INP

Graduate School of Chemistry,
Biology and Physics

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

PROGRAMS

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

INTERNATIONAL

75% graduate students
with international experience

10% international students

Involved in several
international programs :
ERASMUS+, FITEC...

RESEARCH & TECHNOLOGY TRANSFER

8 joint research centers

in the following fields : Chemistry, physics, Nutrition, Neuroscience, Oenology, Polymer, Condensed Matter, Molecular Science, Materials & System Integration, Nano Objects

64 academics and researchers

100 PhD, post-docs

2 industrial chairs

- Nanostructured materials based on carbon nanotubes or block co-polymers
- Valorization of Maritime Pine chemistry

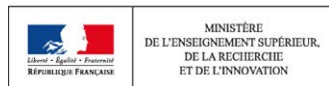
2629m² dedicated to technology transfer activities

CONTACT

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