

MASTER OF SCIENCE

Micro
& Nanotechnology



From January to March, three month courses in microand nanotechnology including different laboratory courses (AFM, STM, Microfluids...), a 1 week hands-on training in clean room conditions and a personal project in cooperation with an industrial partner.

COURSES

With the participation of industrial partners : Arkema, BASF, Merck, Rhodia, Thalès...

MODULE 1 [76H]

FABRICATION TECHNIQUES AND CHARACTERIZATION

- ¬ NEAR-FIELD SCANNING TECHNIQUES
- → CHARACTERIZATION TECHNIQUES
- HIGH-RESOLUTION SPECTROSCOPY
- NANO- AND MICROFABRICATION TECHNIQUES
- ENGINEERING OF SURFACES AND INTERFACES
- NANOBIOTECHNOLOGIES

MODULE 2 [62H]

NANO-OBJECTS AND AUTO-ORGANISATION

- INORGANIC, POLYMER AND METAL NANOPARTICLES
- ¬ NANOTUBES AND NANOFIBRES
- NANOSTRUCTURED MATERIALS AND APPLICATIONS
- TOXICOLOGY OF NANOMATERIALS AND NANOTECHNOLOGIES

MODULE 3 [78H] APPLICATIONS

- MICRO-AND NANOFLUIDS
- → ANALYTICAL NANOSYSTEMS
- → SENSORS AND MICROSYSTEMS
- ¬ NANOPHONICS
- ORGANICS ELECTRONICS
- LAB COURSE ON MICROFABRICATION AND CLEAN ROOM TECHNOLOGY

CALENDAR

September to November

International students start with a **3 months internship** in one of the academic partner laboratories.

French lessons

January to March

April to August

3 months courses

5 months internship

December

1 month opening module

Geoeconomy / Marketing &

Aromas, Flavour...

to choose among: Innovation/

purchasing / Wine & Marketing /



PRICE: 7 300€

APPLY ONLINE AT enscbp.bordeaux-inp.fr



and its partner schools



graduate schools of Engineering in France

3400 * Students

(selected through national competitive exam)

+900 students graduate* each year

12% international students

programs

including 5 by
apprenticeship

230 faculty member



ipoint 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

SKAMS

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

UHSAS 186

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

TECHNOLOGY

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

2629m² dedicated to technology transfer activities



75% graduate students

with international experience

10% international students

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



CONTACT

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