Objectives

Training in Nanotechnology for future managers, engineers and research scientists, to master recent developments in nanotechnology and biology. Graduates will be ready to manage multidisciplinary international projects on the interface of these various disciplines.

Main opportunities

- **Industrial** : Electronics, Materials (Development and Applications), Biotechnology (Analysis and Pharmacology), Tools and Processes (Characterization and Processes).
- **PhDs and Scientific careers** : most NSE graduates go on with PhD studies. High demand for Master’s level teachers in NSE for young scientists in the early stages of training.

Scientific fields


Prerequisites

- **Bachelor of Science**. (Preferably in Physics, Chemistry, Bioengineering, Electronics, Materials Science, Mechanical Engineering).
- Certified B1 level in English (CEFRL).
A major focus on developing scientific communication skills in English, thanks to high-level scientific teaching given in English. Opportunities for internships and employment abroad.

Five laboratories involved in the Lyon area: the Lyon Institute of Nanotechnology (INL), the Institute of Light and Matter (ILM), Materials: Science and Engineering (MATEIS), the Laboratory of Multimaterials and Interfaces (LMI), and the Institute of Analytical Sciences (ISA).

Regular interactions with internationally renowned research groups and a wide range of contacts in industry and universities abroad.

The Master’s degree is awarded by Université de Lyon. Training courses and projects throughout the academic year for high-level scientific and managerial careers in research laboratories and industry.

### Key points of the NSE program

**An international, multicultural program** for French and international students.

- A major focus on developing **scientific communication skills in English**, thanks to high-level scientific teaching given in English. Opportunities for internships and employment abroad.
- Five laboratories involved in the Lyon area: the Lyon Institute of Nanotechnology (INL), the Institute of Light and Matter (ILM), Materials: Science and Engineering (MATEIS), the Laboratory of Multimaterials and Interfaces (LMI), and the Institute of Analytical Sciences (ISA).
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### Master’s Degree in Nanoscale Engineering

<table>
<thead>
<tr>
<th>S1</th>
<th>Micro and Nano Fabrication</th>
<th>Characterisation Tools for Nanostructures</th>
<th>Surface Physics</th>
<th>Fundamental Basis of Science</th>
<th>Transcultural Project</th>
<th>Language</th>
<th>Internships and lab projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2</td>
<td>Nanomechanics Drug Delivery Systems Introduction to System Design</td>
<td>Project Management Workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>Internship + Thesis</td>
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<td></td>
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</tbody>
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**Wide-range of skills**

- Working effectively in the field of Nanostructures, with solid knowledge of Nanoscience and Nanotechnology: Characterization, Modelling, Engineering.
- Creating.
- A grasp of complex problems.
- Designing, setting up and managing cross-disciplinary and international projects.
- Taking on board socioeconomic factors and market requirements.

### Contacts

Program managers

Bertrand Vilquin (ECL), Vincent Salles (UCBL)
Patrice Chantrenne (INSA)

Management of applications

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