

MASTERS DEGREE IN

# Nanostructured Materials for Nanotechnology Applications

Universidad de Zaragoza

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### CONTACT

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Instituto Universitario de Investigación  
en Nanociencia de Aragón  
Universidad Zaragoza



Universidad  
Zaragoza

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# Nanostructured Materials for Nanotechnology Applications

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This official Master from Zaragoza University [Spain] has a duration of one academic year and comprises 60 ECTS credits. The course is suitable for graduates with science, engineering, medicine or related degrees keen to develop careers at the forefront of Nanoscience and Nanotechnology.

The course is multidisciplinary and aims to provide students with fundamental knowledge, practical experience, and skills to become a practitioner in Nanotechnology, whether in industry, research or academia.

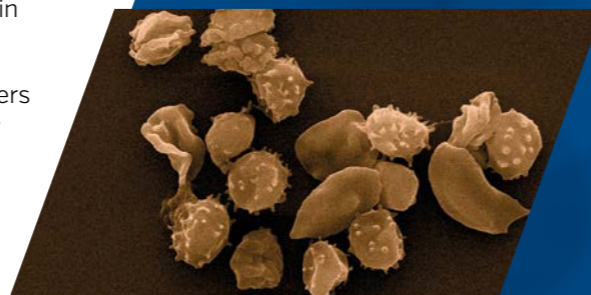
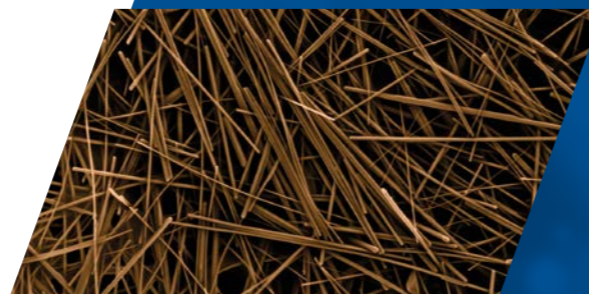
**International, Multidisciplinary, and Postgraduate unique environment.**

The University of Zaragoza and the Institutes of Nanoscience and Materials Science of Aragón (INA and ICMA) have exceptional materials preparation and characterization equipment, including some unique instruments in Spain and Europe.

The course is completely taught in English by highly qualified members of research and academic staff within the INA, ICMA, and the Faculty of Science of Zaragoza University as well as by other national and international departments and industrial representatives.

The master consists of the following units:

- Lectures on fabrication, assembly and characterization of nanostructured materials
- Training in advanced tools for Nanotechnology through laboratory practical work
- Communication and management skills
- Training projects: external industrial involvement, multidisciplinary joint educational project, individual research project working in interdisciplinary research groups



This multidisciplinary program offers career opportunities across a wide range of industry sectors as well as in academia and research

## THE COURSE MODULES ARE:

### CORE MODULES

- 1 *Fundamental Properties of Nanostructured Materials (6 ECTS credits)*
- 2 *Preparation of Nanostructured Materials (6 ECTS credits)*
- 3 *Assembly and fabrication of Nanostructures (6 ECTS credits)*
- 4 *Characterization I: Physical-chemical techniques (6 ECTS credits)*
- 5 *Characterization II: Advanced Microscopies (6 ECTS credits)*
- 6 *Case studies of industrial applications (6 ECTS credits)*

### OPTIONAL MODULES

- 7.a *Introduction to Research in Nanoscience and Nanotechnologies (5 ECTS credits)*
- 7.b *Fabrication of Micro and Nanodevices (5 ECTS credits)*
- 7.c *Multidisciplinary Joint Educational Project (5 ECTS credits )*
- 7.d *Practical work in a Nanotechnology-related company (5 ECTS credits)*

### MANDATORY INDIVIDUAL RESEARCH PROJECT

- 8 *Final Master Project (14 ECTS credits)*

