

Master's Degree Dissertation

Code: 44417
ECTS Credits: 15

Degree	Type	Year	Semester
4314939 Advanced Nanoscience and Nanotechnology	OB	0	2

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

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Use of Languages

Principal working language: english (eng)

Prerequisites

None

Objectives and Contextualisation

The structure of this module is common to all specializations. Yet, each specialization sets specific research topics and procedures, closely related to students' performance during the internships that are part of the practicum module.

The Masters Dissertation, namely TFM, is conceived as a learning activity whose main objective is to get students to integrate the knowledge and the skills acquired during the Masters. It takes the form of a small research study based on data obtained during the internship. It should combine theory and reflections upon data obtained through processes of observation or during the implementation of the teaching unit students need to design and put into practice as part of the requirements of the practicum module.

Competences

- Analyse research results to obtain new products or processes, assessing their industrial and commercial viability with a view to transferring them to society
- Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- Continue the learning process, to a large extent autonomously
- Design, plan and carry out a research project in nanoscience and nanotechnology.
- Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
- Show expertise in using scientific terminology and explaining research results in the context of scientific production, in order to understand and interact effectively with other professionals.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.

Learning Outcomes

1. Analyse research results to obtain new products or processes, assessing their industrial and commercial viability with a view to transferring them to society.
2. Apply concepts and theories appropriately to prepare a research paper on a topic related to nanoscience and nanotechnology.
3. Carry out a research project.
4. Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
5. Continue the learning process, to a large extent autonomously
6. Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
7. Interpret experimental findings from a research project related to nanoscience and nanotechnology and reach reasoned conclusions.
8. Set and prioritise objectives, resources and processes to carry out a successful research project.
9. Show expertise in using scientific terminology and explaining research results in the context of scientific production, in order to understand and interact effectively with other professionals.
10. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
11. Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
12. Write a scientific paper and present and defend it before an audience.

Content

Each TFM has its own content

Methodology

Under the supervision of each coordinator

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
The proper of each TFM	375	15	1, 2, 8, 9, 12, 3, 7, 6, 10, 4, 5, 11

Assessment

The panel of judges will evaluate the exposition and the answer to the correspondent questions that will be asked

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Public oral presentation judged by a competent panel	100%	0	0	1, 2, 8, 9, 12, 3, 7, 6, 10, 4, 5, 11

Bibliography

None