

Academic Year/course: 2024/25

60846 - Master's Dissertation

Syllabus Information

Academic year: 2024/25

Subject: 60846 - Master's Dissertation

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 532 - Master's in Industrial Engineering

ECTS: 12.0 **Year**: 2

Semester: Second semester Subject type: Master Final Project

Module:

1. General information

The master's final project (MFP) is a 12 ECTS subject.

The objective of the master's final project is to train the student to carry out, present and defend a comprehensive project in industrial engineering, as a demonstration and synthesis of the competencies acquired in the master's degree. The student is expected to carry out an original work, under the supervision of a teacher, in a complete way, including the production of the work, presentation of results, discussion of the same, writing of a report and public defence.

In accordance with the commitment of the 2030 Agenda, the Master's Dissertation will explicitly show its direct contribution to the SDGs of the United Nations 2030 Agenda. In section 6 of this guide, the most frequent SDGs to which the course contributes are listed.

Passing this subject entitles the student to obtain the title of Master's Degree in Industrial Engineering.

2. Learning results

In order to pass this subject, students must prove they are able to:

- Carry out, present and defend an integral project in industrial engineering, as a demonstration and synthesis of the competencies acquired in the degree or master's degree.
- Create a synthesis report of the work done on a research topic, which will include a description of the state of
 knowledge in its specific field, the description of the experimental work carried out and the conclusions derived from it.
- Perform an appropriate public presentation of the completed report.
- Respond appropriately to questions related to the work done and its presentation.

3. Syllabus

The program of the work to be carried out as MFP, as well as the most appropriate typology for its development, is mutually agreed between the student and their director.

The MFP proposal is assessed by the Academic Committee of the degree, which may approve it, reject it or request additional information about it.

The modifications requested with respect to an approved proposal must again have the favourable report of the Academic Committee of the master's degree. The TFM proposal, once approved, will remain valid as long as the student, with the agreement of the director, does not expressly request its modification or cancellation.

4. Academic activities

The student must agree with their MFP director on the training activities, which may consist of academic work, tutoring sessions and evaluation of the follow-up of the work done, depending on the proposed topic and its scope.

Regular meetings will be held to follow up on the work and solve any doubts.

The student must agree with their project director or directors on the training activities, depending on the proposed topic and the scope of the project.

The master's final project will consist of a comprehensive work, with enough elements of personal creation and in which the knowledge, skills, aptitudes and attitudes acquired by the student throughout the degree are demonstrated. The complexity and the level of demand established in its development will be equivalent to a total estimated workload of 12 ECTS.

5. Assessment system

The evaluation of the MFP will be based on the following aspects:

The quality and depth of the work itself, in accordance with the scope and objectives set forth in the proposal and the
deposit made by the student, considering the workload foreseen in the degree's verification report, the assessment

made by its director, co-directors and, if applicable, the presenter in their report

• the public presentation of the work.

After the defence of the MFP, the members of the board of examiners must issue an individual evaluation report, from which the final grade will be assigned.

In the case of a failing evaluation of the MFP, the board of examiners must issue a report detailing the deficiencies, both methodological and of content, that justify this grade, indicating the modifications that must be made to the work, and a new defence will be carried out.

6. Sustainable Development Goals

- 7 Affordable and Clean Energy
- 9 Industry, Innovation and Infrastructure
- 12 Responsible Production and Consumption