

Academic Year/course: 2022/23

62945 - Master's Dissertation

Syllabus Information

Academic Year: 2022/23

Subject: 62945 - Master's Dissertation

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 562 - Master's in Product Development Engineering

ECTS: 12.0

Year: 1

Semester: Second semester

Subject Type: Master Final Project

Module:

1. General information

1.1. Aims of the course

The subject and its expected results meet the following approaches and objectives:

The Final Master Work is a work done by the student under the supervision of a lecturer of the Master in some (s) of the themes addressed in the subjects of the master.

The main objective of the Final Master is to train students to perform, present and defend a comprehensive project of Engineering Product Design, as a demonstration and synthesis of skills acquired in the teachings. It is intended that the student make the development of a completely original work, including the preparation of work, presentation of results, discussion of them, documentation in a memory and public defense.

In accordance with the commitment of both the University of Zaragoza and EINA to the 2030 Agenda that promotes sustainable human development, the TFE will explicitly show their contribution / direct relationship with the Sustainable Development Goals and their goals (they can be consulted in the link). (<https://www.un.org/sustainabledevelopment/en/>)

1.2. Context and importance of this course in the degree

This is the last course of the degree; overcoming it the student will be credited for obtaining the title of Master in Product Design Engineering.

1.3. Recommendations to take this course

The subject is preferably coursed during the second semester of the year. It is recommended to have passed all compulsory subjects of the master to start the Master's Thesis

2. Learning goals

2.1. Competences

Passing the course, students will be more competent to:

- Bringing together the demands of research, development and led to the design and product development in relevant areas of economic, industrial, professional and academic innovation activity.

- Accomplishment, presentation and defense, once obtained all the credits of the curriculum, of an original exercise performed individually before a university tribunal, consisting of a comprehensive project of Engineering of Product Design, of professional nature or research, in which synthesise the skills acquired in the teachings.

2.2. Learning goals

The student, for passing this subject, should demonstrate the following results:

He/She is able to perform, present and defend a comprehensive project of engineering industrial design, as a demonstration and synthesis of skills acquired in the teachings, bringing together the demands of research, development and innovation led to the design and product development in relevant areas of economic, industrial, professional and academic activity.

2.3. Importance of learning goals

The TFM should allow the student to prove the acquisition of the skills developed throughout the lessons, so overcoming it will be credited for obtaining the title of Master in Product Design Engineering.

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that has achieved the intended learning outcomes through the following evaluation activities:

The student should proceed with the preparation of a report of work performed in accordance with current legislation and its public defense before a university tribunal, which will assign the appropriate rating.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The Master's Dissertation is a work in which each student synthesizes and shows the total of the skills acquired in the Master's. This course has no teaching sessions, but students will be supervised and guided during the dissertation process. Therefore the dissertation is developed under the supervision of a professor of any of the research fields involved in the Master's, according to the current regulation.

4.2. Learning tasks

The course includes the following learning tasks:

- Tutorials.
- Preparation of the dissertation. It should be an original piece of work in the Engineering of Product Design field, of practical/professional nature or research-oriented, where the skills acquired in the Master's degree are synthesized.
- The individual presentation and public defense, once obtained all the ECTS of the curriculum, of the dissertation before a university committee.

4.4. Course planning and calendar

The course is 12 ECTS, equivalent to 300 hours of student work, assigned and distributed in the form agreed with the supervisor of the Master's Dissertation.

The activities developed in the Master's Thesis (TFM) will be agreed between the student and the Director. These activities will preferably take place during the second semester (spring).

Activities and key dates of the course are those that mark the time of registration, deposit and defense, and are found on the website of the Center: eina.unizar.es

4.5. Bibliography and recommended resources

It will be detailed specifically for the project to be developed.