

29732 - Undergraduate Dissertation

Syllabus Information

Academic year: 2024/25

Subject: 29732 - Undergraduate Dissertation

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 107 - Mobility for Degree
434 - Bachelor's Degree in Mechanical Engineering

ECTS: 12.0

Year:

Semester: Second semester

Subject type: End of Grade Dissertation

Module:

1. General information

The Degree Final Project (DFP) is a subject of 12 ECTS

The objective of the DFP is to train the student to carry out, present and defend a comprehensive Mechanical Engineering project, as a demonstration and synthesis of the skills acquired in the degree. The student is expected to carry out an original work, under the supervision of a teacher, in a complete way, including the elaboration of the work, presentation of results, discussion of the same, elaboration of a report and public defence.

In accordance with the commitment of the 2030 Agenda, the Undergraduate 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 is mandatory to obtain the Degree in Mechanical Engineering, according to the current regulations and procedures

2. Learning results

In order to pass this subject, the student must demonstrate the following results:

Is able to elaborate, present and defend individually an original exercise of professional character in the field of Mechanical Engineering as a demonstration and synthesis of the competences acquired in the subjects

Applies the acquired competencies to the performance of a task in an autonomous manner.

Identifies the need for continuous learning and develops its own strategy to carry it out.

Plans and uses the necessary information for a project or academic work based on a critical reflection on the information resources used

Is able to employ the techniques, skills and tools of mechanical engineering necessary for the practice of mechanical engineering

Communicates clearly and efficiently in oral and written presentations on complex topics, adapting to the situation, type of audience and communication objectives.

3. Syllabus

The student must demonstrate achievement of the intended learning results through the following assessment activities:

The student must develop a project, prepare a report and make an oral defence before a Board of Examiners constituted according to the rules and requirements established by the University of Zaragoza and the Centre

It is reminded that the DFP is an original exercise to be carried out individually, which will have sufficient elements of personal creation. In the case of joint work with another student, this must be expressly justified in the proposal, differentiating the work of each of the students so that the individual evaluation of each one is possible.

The DFP will be graded in the same way as the other subjects (quantitative and qualitative grading). The grade will be assigned by the board appointed by the Centre, following the indications set forth in the aforementioned DFP regulations; it will take into account the report made by the director or the speaker.

4. Academic activities

The student must agree with their DFP 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.

5. Assessment system

The evaluation of the TFG 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, and considering the workload foreseen in the degree's verification report, - the evaluation made by the director, co-directors and, if applicable, the lecturer, in the report, and

-the public presentation of the work.

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

In the case of a failing evaluation of the DFP, the board of examiners must issue a report detailing the deficiencies, both methodological and of content, which 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

8 - Decent Work and Economic Growth

9 - Industry, Innovation and Infrastructure