

Course guide

2500057 - GECTFGECIV - Bachelor's Thesis

Last modified: 01/10/2023

Unit in charge: Barcelona School of Civil Engineering
Teaching unit: 751 - DECA - Department of Civil and Environmental Engineering.
Degree: BACHELOR'S DEGREE IN CIVIL ENGINEERING (Syllabus 2020). (Project subject).
Academic year: 2023 **ECTS Credits:** 12.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: GONZALO RAMOS SCHNEIDER

Others: GONZALO RAMOS SCHNEIDER

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

14427. Original exercise to be carried out individually and presented and defended before a university court, consisting of a project in the field of specific Civil Engineering technologies of a professional nature in which the competences acquired in the teaching are synthesized and integrated. (End of Degree Work Module)

TEACHING METHODOLOGY

The TFG will be developed in the area of specialization chosen by the student and may include:

- Construction project
- Basic
- Study or work on some aspect of the engineering construction

In any case it must be original work of the student.

If the TFG is a basic project consist of:

1. Memory and Schedules
2. Planes
3. Tender Specifications (may not exist)
4. Budget (there will be at least an economic assessment)

Basic projects are considered, for example, studies of alternative routes, economic feasibility studies of works, background studies, etc ... Your basic character makes it unnecessary to reach the detail in all documents, as in a construction project, but require greater effort in specific aspects of the blueprint, as alternative studies or economic studies.

In case of a construction project will consist of:

1. Memory and Schedules
2. Planes
3. Specification
4. Budget

In this case particularly value that the project is complete in its documents and the student has applied knowledge of various branches of engineering construction: layout, ground engineering, hydraulic engineering structures showing an overview of the constructive development, but with more emphasis on his specialty.

In case of a study must comprise at least:

- * Summary
- * Introduction and Objectives
- * Conclusions
- * References

Besides all those sections deemed necessary.

The estimated time of writing the TFG is 2 months full time.

The development of the TFG will always be guided by a tutor from the School. That guardian must perform a function of student guidance and advice throughout the writing process, from the time of the selection of the topic. It is also responsible for authorizing or not the presentation of the TFG in a public court. You may not submit any TFG without the express approval of the tutor. Additionally, the student may have an external fixator, not linked to the University. In this case, the external fixator report on the student prior to the filing of the TFG.

The TFG can be written in Catalan, Spanish or English. The use of other languages must be approved by the professor.

Although most of the sessions will be given in the language indicated, sessions supported by other occasional guest experts may be held in other languages.

LEARNING OBJECTIVES OF THE SUBJECT

Develop an original work of individual form, that has to be presented and defended in front of a panel, consisting of a project of professional nature or a work of investigation in which the competences acquired in this bachelor should be synthesized and integrated.

Develop the bachelor thesis in the field of civil engineering of a professional nature and where the competences acquired are synthesized and integrated throughout degree.

To obtain the title of Graduate or Graduate in Civil Engineering from the Polytechnic University of Catalonia, it will be an essential requirement to study the Final Degree Project of 12 ECTS, to close the eighth and last four-month period of the degree.

The contents of this subject are described below:

1. Final Degree Project. Consisting of carrying out an original exercise to be carried out individually in the field of specific engineering technologies Civil of a professional nature in which the skills acquired in the teaching are synthesized and integrated. This work must be presented and defended before a university court.

See, in Lectures Notes section, the Rules of the TFG

STUDY LOAD

Type	Hours	Percentage
Guided activities	24,0	8.00
Self study	275,0	91.67
Hours small group	1,0	0.33

Total learning time: 300 h

CONTENTS

TFG

Description:

TFG

Full-or-part-time: 286h 39m

Laboratory classes: 120h

Self study : 166h 39m

GRADING SYSTEM

The grade is decided by a board of three professors from the School after the public presentation of the TFG. This defense will consist of an oral presentation of the work for 20 minutes. Finally, the board will ask questions and comments about the public presentation.

BIBLIOGRAPHY

Basic:

- Morilla Abad, I. Guía metodológica y práctica para la realización de proyectos. 3a ed. Madrid: Colegio de Ingenieros de Caminos, Canales y Puertos, 2001. ISBN 8438001955.