

Academic Year: ( 2023 / 2024 )

Review date: 28-04-2023

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: RAIOLA , MARCO

Type: Bachelor Thesis ECTS Credits : 12.0

Year : 6 Semester :

## REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Basic courses and all courses from the mandatory engineering module.

Those required by the University in relation to the conditions to start and present the Bachelor Thesis.

<http://www.uc3m.es/ss/Satellite/SecretariaVirtual/es/TextoMixta/1371210936260/>

## OBJECTIVES

By the end of this subject, students will be prepared to have:

1. A systematic understanding of the key aspects and concepts of their branch of engineering;
2. The ability to apply their knowledge and understanding to identify, formulate and solve engineering problems using established methods;
3. An understanding of design methodologies, and an ability to use them.
4. The ability to conduct searches of literature, and to use data bases and other sources of information;
5. The ability to select and use appropriate equipment, tools and methods;
6. An understanding of applicable techniques and methods, and of their limitations;
7. An awareness of the non-technical implications of engineering practice.
8. Use diverse methods to communicate effectively with the engineering community and with society at large
9. Demonstrate awareness of the health, safety and legal issues and responsibilities of engineering practice, the impact of engineering solutions in a societal and environmental context, and commit to professional ethics, responsibilities and norms of engineering practice;
10. Recognize the need for, and have the ability to engage in independent, life-long learning.

## DESCRIPTION OF CONTENTS: PROGRAMME

Original exercise to be presented and defended in front of an academic committee. The work will be an integral project in the field of the Bachelor degree that will be professionally oriented where the different competences acquired during the degree courses should be demonstrated or an innovative work developing an idea, prototype or a model of systems or equipments within the field developed during the Bachelor degree.

**IMPORTANT:** Bilingual students **MUST** write the Project memory in English.

## LEARNING ACTIVITIES AND METHODOLOGY

Students apply competences and knowledge acquired during their studies in a Project from an area of the degree program, concluding with a written report. The foregoing reflects the corresponding project's analysis, resolution of issues and conclusions. The Project represents 299 hours/0% on-site

The student defends their Project before a tribunal, clearly presenting the corresponding points with resolution of any problems arising in the Project. 1 hour/100% on-site

The tutor for the Bachelor's Degree Final Project helps and guides the student in all aspects necessary to carry out a solid final Project, and to write a corresponding clear and professional report. The tutoring sessions can be on-site or on line

The students of 2011 plan should make self-study activities to acquire the English competences. In the university there are facilities to acquire the desired English level. Some are described below:

\* All students can make English level test since they start the program, existing resource to acquire the different levels (on-line portal for idioms, conversation club, and idioms grants). All students will have available an IDIOM course in AULA GLOBAL with all the information and materials.

\* Each academic course, each student can make twice an autodiagnosis for his/her level. The result allows to the Centro de Idiomas de la universidad to advice the student with the best options to enhance his/her skills.

The learning activities and methodology for the Trabajo Fin de Grado are specified in the corresponding university regulation: <http://www.uc3m.es/ss/Satellite/SecretariaVirtual/es/TextoMixta/1371212629223/>

## ASSESSMENT SYSTEM

This is done through an oral Bachelor's Degree Final Project defense before a tribunal selected to assess the student's work, the learning outcomes, and the presentation of the same, according to an evaluation model.

Prior to the defense, the student must have duly presented their written report to the tribunal members.

The students of the English track must write and defend the bachelor thesis completely in English.

The students of 2011 plan must fulfil the competencies of the english language by including in the final report a summary written in English with a minimum length of 10 pages. This summary must include the following sections: introduction and conclusions. It is recommended to write the full text in English.

In addition, the originality of the Bachelor Thesis is evaluated. The University uses the Turnitin Feedback Studio program within the Aula Global for the delivery of student work. This program compares the originality of the work delivered by each student with millions of electronic resources and detects those parts of the text that are copied and pasted.

Represents 100% of the evaluation.

## BASIC BIBLIOGRAPHY

- Iria Da Cunha El trabajo de fin de grado y de máster: redacción, defensa y publicación, Editorial UOC, S.L., 2016
- Juana Mª González García Cómo escribir un trabajo de fin de grado, Síntesis, 2014

## BASIC ELECTRONIC RESOURCES

- . Biblioteca: <http://uc3m.libguides.com/TFG>
- . Biblioteca: <a href="https://uc3m.libguides.com/c.php?g=666632&p=4726190" target="\_blank">https://uc3m.libguides.com/c.php?g=666632&p=4726190</a>
- . Secretaría Virtual:  
[https://www.uc3m.es/ss/Satellite/SecretariaVirtual/es/TextoMixta/1371210936260/Trabajo\\_de\\_Fin\\_de\\_Grado](https://www.uc3m.es/ss/Satellite/SecretariaVirtual/es/TextoMixta/1371210936260/Trabajo_de_Fin_de_Grado)
- . UC3M Bachelor Thesis: <https://uc3m.libguides.com/TFG/EN/Home>
- . Turnitin guide: [http:// https://uc3m.libguides.com/EN/Turnitin](http://https://uc3m.libguides.com/EN/Turnitin)

