uc3m | Universidad Carlos III de Madrid

Bachelor Thesis

Academic Year: (2022 / 2023)   **Review date: 31-05-2022**

Department assigned to the subject: Signal and Communications Theory Department

Coordinating teacher: LÓPEZ SANTIAGO, JAVIER

Type: Bachelor Thesis ECTS Credits : 12.0

Year : 4 Semester :

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

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.

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 will defend their Project in front of 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.

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 its presentation, 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 their bachelor thesis completely in English.

Every student must provide evidence of B2 level English language proficiency. This can be achieved by producing an official certificate or by passing an English level test. Having passed in the UC3M a number of courses taught in English that are worth 60 credits or more is also considered a valid proof of proficiency. English level can never be demonstrated through the final report (by, e.g., appending an extended summary written 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

- Antonio Sánchez Asín Trabajos fin de grado y de postgrado: guía práctica para su elaboración, Aljibe, 2016

- 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, Sintesis, 2014

BASIC ELECTRONIC RESOURCES

- UC3M . Virtual Secretary: Final degree project:
https://www.uc3m.es/ss/Satellite/SecretariaVirtual/en/TextoMixta/1371210936260/Trabajo_de_Fin_de_Grado
- UC3M Library . Guide for students doing their TFG: http://uc3m.libguides.com/TFG

- UC3M Library . Turnitin guide: https://uc3m.libguides.com/EN/Turnitin