Bachelor Thesis

Academic Year: (2022 / 2023) **Review date: 02-09-2022**

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: BELLUCCI , ANDREA

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.
More information: http://www.uc3m.es/ss/Satellite/SecretariaVirtual/es/TextoMixta/1371210936260/

SKILLS AND LEARNING OUTCOMES

¿ Conceive, design, build and evaluate solutions based on the application of Computer Engineering to problems arising in the fields of Science, Engineering, Economics and other Social Sciences.
¿ Drafting technical documents describing projects for the application of Computer Engineering to problems arising in the fields of Science, Engineering, Economics and other Social Sciences.
¿ Correctly present projects on the application of Computer Engineering to problems arising in the fields ofScience, Engineering, Economics and other Social Sciences.
¿ Know and use different techniques to manage bibliographic information and locate documents in digital format on the Internet

OBJECTIVES

By the end of this subject, students will be able 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 databases 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. recognise 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 competencies acquired during the degree courses should be demonstrated or an innovative work developing an idea, prototype, or a model of systems or equipment within the field developed during the Bachelor degree.

The TFG may be written in either Spanish or English. To obtain the mention of bilingual studies, the TFG is excluded from the calculation of the credits needed to calculate the 50%.

For the students of the 2011 plan, it will be mandatory to demonstrate English language skills by including in the report of the final degree project a summary of the project in English of at least 10 pages, including the introduction and conclusion sections, being recommended the writing of the complete report in English.

LEARNING ACTIVITIES AND METHODOLOGY

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/1371210936260/

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 in front of 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.

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, 2016

- Juana Mª González García Cómo escribir un trabajo de fin de grado, Sintesis, 2014

ADDITIONAL BIBLIOGRAPHY

- Dawson, Christian W. El proyecto fin de carrera en ingeniería informática : una guía para el estudiante ., Prentice Hall, 2002

BASIC ELECTRONIC RESOURCES

- Biblioteca UC3M . TFG Paso a Paso: http://uc3m.libguides.com/TFG

- Biblioteca UC3M . Guía Turnitin: https://uc3m.libguides.com/c.php?g=666632&p=4726190
- Secretaría Virtual UC3M - TFG . TFG - Escuela Politécnica Superior Leganés.: https://www.uc3m.es/ss/Satellite/SecretariaVirtual/es/TextoMixta/1371210936260/Trabajo_de_Fin_de_Grado