Bachelor Thesis

Academic Year: (2018 / 2019)   **Review date: 10-05-2018**

Department assigned to the subject: Bioengineering and Aeroespace Engineering Department, Signal and

Coordinating teacher: LLORENTE ROMANO, SERGIO

Type: Bachelor Thesis ECTS Credits : 12.0

Year : 4 Semester :

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

All courses of the degree

OBJECTIVES

The objective of this course is the acquisition by the student of knowledge and competencies in the global aspects of their degree. It is a course that combines a technical, economic and social approach to the profession.

In order to achieve this objective, students must acquire the following generic competencies, knowledge, capabilities and attitudes.

Transversal/Generic competencies:

- Analysis and synthesis capacity
- Ability to organize and plan
- Abstraction and deduction capacity
- Problem-solving
- Teamwork
- Ability to apply knowledge in practice

Specific competencies:

- Use a combination of generalist and specialized knowledge of Biomedical Engineering to perform an application of existing and emerging technologies
- Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.
- Demonstrate a personal commitment to professional principles, recognizing obligations to society, the profession, and the environment
- Conceive and carry out projects of Biomedical Engineering using the principles and methodologies of engineering

Attitudinal Competences:

- Ability to generate new ideas (creativity)
- Critical attitude regarding current knowledge
- Concern for quality
- Motivation of achievement
- Interest in researching and finding solutions to new problems related to Biomedical Engineering.

DESCRIPTION OF CONTENTS: PROGRAMME

Original exercise to be presented and defended in front of an academic committee. The work will be a

professionally oriented integral project in the specialty field, where the different competencies acquired in the degree can be demonstrated; or an innovative work developing an idea, prototype or model of an equipment or system in one of the fields of the specialty.

LEARNING ACTIVITIES AND METHODOLOGY

The learning activities and methodology for the End of Degree Work are specified in the corresponding university regulation: http://www.uc3m.es/ss/Satellite/SecretariaVirtual/es/TextoMixta/1371210936260/

ASSESSMENT SYSTEM

The professor in charge of tutoring the student will perform a continuous assessment of student work.

The final evaluation will be done by an academic committee, chosen for this purpose, after the oral presentation and defense of the work by the student. This academic committee will assess the work of the student, the results obtained, the presentation of them, and the assessment made by the tutor. Previously, the student must write a report that will be delivered to members of the committee sufficiently in advance.

REPORT

The report must be written in English. An extension between 50 pages and 100 pages is recommended (interline space 1.15-1.25, font size 11-12 points).

A possible structure would be:
1. Introduction: Motivation and goals.
2. Problem statement: state of the art, requirements, restrictions, regulatory framework,...
3. Materials, methods and solution design;
4. Results, validation, discussion,...
5. Project scheduling and budget.
6. Conclusions.
7. References.

Additional information may be included as annexes. This structure is merely indicative. It must be the student, with the advice of his tutor, who determines the best way to present the work.
You can find more information about how to write the report and style guidelines in the following link: http://uc3m.libguides.com/TFG/

EVALUATION CRITERIA

In order to evaluate the work, the committee will take into account the work itself, the quality of the report, the presentation and defense before the committee, and the tutor assessment. The evaluation criteria will be set by the evaluation matrix that has been defined for that purpose.

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. If the student has correctly made the appointment and the bibliographic reference of the documents he uses as a source, Turnitin will not mark it as plagiarism.

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