# uc3m Universidad Carlos III de Madrid

## **Bachelor Thesis**

Academic Year: (2023 / 2024) Review date: 01-12-2023

Department assigned to the subject: Aerospace Engineering Department, Mechanical Engineering Department

Coordinating teacher: RAIOLA , MARCO
Type: Bachelor Thesis ECTS Credits : 12.0

Year: 4 Semester:

# REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

All the compulsory courses off the Bs, except Aircraft Design and Space Vehicles and Orbital dynamics, which are delivered simultaneously with the Bs. thesis. In addition, students must comply with the regulations of the university in relation to the conditions prior enrollment and thesis defense that are available at

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

#### **OBJECTIVES**

Generic and Transversal Outcomes:

- Ability to analyze and synthesise
- Ability to organize and schedule
- Capacity for abstraction and deduction.
- Troubleshooting
- Ability to apply knowledge
- Ability to communicate the results of technical work in oral and written form

# Specific Outcomes:

- Use a combination of general and specialized knowledge of Aerospace Engineering for application of existing and emerging technologies
- Apply appropriate theoretical and practical methods to analyze and solve engineering problems
- Demonstrate a personal commitment to professional standards, recognizing obligations to society, the profession and the environment
- Develop and carry out projects of Aerospace Engineering using the principles and methods of engineering

### **Attitudinal Outcomes:**

- Ability to generate new ideas (creativity)
- Critical attitude towards current knowledge
- Concern for quality
- Will to succeed
- Interest to investigate and find solutions to new problems related to Aerospace Engineering.

# **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 he 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 students will defend 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.

#### 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.

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, Aljib, 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

- Library UC3M . TFG Paso a Paso: http://uc3m.libguides.com/TFG
- Library UC3M . Turnitin: <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>
- Virtual Secretariat . Final Degree Project:

https://www.uc3m.es/ss/Satellite/SecretariaVirtual/en/TextoMixta/1371210936260/Trabajo de Fin de Grado