

Bachelor's Degree Final Project

Code: 106548
ECTS Credits: 15

2024/2025

Degree	Type	Year
2501233 Aeronautical Management	OB	4

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Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

Note: The contents of this guide are based on the regulations for the Final Degree Project in Aeronautical Management, available on the degree's website. In case of conflict, the regulations prevail over the teaching guide.

To complete the Final Project you must have passed 160 credits of the degree (2/3) and all the subjects of the first course must have been passed.

Objectives and Contextualisation

The final degree project is an autonomous academic work whose overall objective is to deepen the analysis of some aspect of the degree. The work is expected to serve to:

- To develop some question of interest relative to the contents of the subjects studied, linking it with the existing academic debates;
- Apply the criteria and techniques learned in the subjects of a methodological nature, either to carry out their own analysis or to evaluate the other authors.

The main objectives of the Final Degree Project are:

1. Apply the skills acquired during the studies to carry out a project in aeronautical management environments.
2. Learn to develop a coherent, clear, complete project, with interesting results, and to assess its economic, social and environmental impact.
3. Learn to document, structure and write a project

4. (Optional) Learn how to write a scientific article and send it for possible publication in a journal or in proceedings of international congresses.

Competences

- Act ethically and professionally.
- Communication.
- Identify, develop and maintain the necessary resources to meet the tactical and operative needs inherent to air transport activities.
- Personal attitude.
- Personal work habits.
- Thinking skills.

Learning Outcomes

1. Adapt to unexpected circumstances.
2. Communicate knowledge and findings efficiently, both orally and in writing, both in professional situations and with a non-expert audience.
3. Critically assess the work done.
4. Develop critical thought and reasoning.
5. Develop curiosity and creativity.
6. Develop independent learning strategies.
7. Develop systemic thinking.
8. Develop the ability to analyse, synthesise and plan ahead.
9. Generate innovative and competitive proposals in professional practice.
10. Make decisions.
11. Make efficient use of ICT in communicating ideas and results.
12. Manage time and available resources. Work in an organised manner.
13. Plan and execute a project to develop a simple sub-system within the sector.
14. Prevent and solve problems.
15. Take on the social, ethical and professional responsibilities deriving from professional practice.
16. Work independently.

Content

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1. Introduction

The contents associated with the Final Degree Project (TFG) will depend on its subject and scope. There will be three basic types of projects:

1. Projects proposed by degree teachers. They can be generic or specific. Generics can accept proposals from students who fit into the proposed framework. These proposals can be individual or for a group to do it in a coordinated way, in which case the desired number of students will be specified in the proposal.
2. Projects developed in collaboration with companies or other organizations in the sector to respond to a specific need. In this case, it will be necessary to make an agreement with the details. Similarly, they can be individual or in a group.
3. Projects based on proposals made by the student himself. In this case, the proposer will need to submit a first version of the previous report, which is described in the project regulations, to discuss it with the assigned tutor.

The recommended maximum length of the TFG (including appendices and bibliography) is 20,000 words. If it were higher, the reason would have to be justified.

The work can be written in either Catalan, Spanish or English. The title of the report must be in the same language as the main text.

Exceptionally, final degree projects may be developed in groups. The justification will be included in the introduction of the report and the previous report. In these cases, in the training activities, the transversal skills of the CT3 group (Teamwork) would be worked on additionally. If there is a part of common work and a part of individual work, the TFG title will also have a common part at the beginning and an individual part, each student will hand in a report, which may have a common part with the rest of the TFGs that share the title and that it will not be considered plagiarism. It is necessary to clearly indicate in the memory which is the common part and which is the individual part. If the content of the group work does not allow differentiating an individual part, or if this part is not relevant, each student will hand in the same copy of the report signed by all those involved. It must also be clearly stated.

The assignment will be made through the applications provided for that purpose accessible via <https://sia.uab.es/> in the TFE and Thesis Enrollment section. Deliveries and tracking will be done using the tool <https://tfe.uab.cat/> If no record of deliveries and tracking has been left in the tool, it will not be possible to demonstrate the dedication carried out.

Aspects of Gender

It will be necessary to reflect on how the analysis of gender and sex is integrated in the work in terms similar to those discussed in the European H2020 projects

https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/gender_en.htm

This reflection is advised to appear as a subsection of the first chapter of the report or of the introductory chapter, if that is the case, under an understandable and clear name, such as "Aspects relating to gender"

2. The stages of preparing an academic work

In the preparation of any academic work, the following tasks must be distinguished:

- choice and delimitation of the topic and objectives
- search for sources and bibliography: read what has been written
- elaboration of the structure: order the ideas
- conceptual clarity, analysis and argumentation
- writing drafts and the final version
- take care of the formal presentation

Choice and delimitation of the topic and objectives

It is not always an easy or automatic process. It usually begins by maturing several possibilities that, in this first phase, are usually too broad to be addressed in a single work. Therefore, it is necessary to delimit the object of study as one goes deeper into the chosen field. In order to delimit the object of the work, it is convenient to identify the different aspects and facets of this first topic that interests us. The TFG can focus on a specific question or on a clearly stated intention.

The aim of this phase is to complete the previous report. The preliminary report is a document with the key elements of the Work necessary to understand what it is to do. Obviously, its format will depend on the particularities of each work, however, it is suggested that it meets the following specifications or equivalents:

- Must be short 2-5 pages of content.
- It must be very clear, concrete and summarized, what is intended to be done.
- It would be necessary to justify how, what is intended to be done, aligns with the objectives of the TFG made explicit in the teaching guide.
- It should include a schedule with the main milestones.
- It should include a small risk analysis and possible preventive or palliative measures.

Searching for sources and bibliography: reading what has been written

The first step to obtain information on a subject is usually to carry out a bibliographic search.

In order to facilitate learning and improve the quality of the memories, the student will need to pass the course "Tools and resources offered by the libraries to complete the TFG in Aeronautical Management" with sufficient anticipation. Failure to pass the course will affect the evaluation.

Elaboration of the structure of the work: ordering the ideas

It is difficult to give general guidelines for determining the structure of an academic work, since it largely depends on the topic at hand and the preferences of the author. There is always more than one possible structure, so it is up to the author to assess the advantages and disadvantages of each option. It is common to modify the structure of the work as progress is made in its execution. But it is essential to start from an initial structure.

The structure of a work is reflected in the headings and sub-headings in which the exhibition is organized. In order to progress in its elaboration, it is advisable to make several schemes in which it is decided which are the most relevant aspects of the subject in question, which will become epigraphs. Within each heading, different issues can be distinguished that make up the sub-headings or sections. To guide the reader it is advisable to number the different parts of the structure.

In addition to the central core of the paper whose structure varies depending on the topic of study, there are two parts that must always appear in a paper: the introduction and the conclusions. In the introduction, the topic is presented and the objectives and scope of the work are stated. It is also possible to briefly describe the structure and the way in which the work is carried out to achieve these objectives.

The main findings or fundamental points of the work are summarized in the conclusions. Some reflections can also be added to these most relevant points, which may constitute a reason for future work.

In general, within each heading, one idea is developed per paragraph. Sometimes there is an introductory paragraph in which a fundamental idea is raised and the following ones serve to develop it. Again, there are no hard and fast rules, as there are different writing styles, but you should keep in mind the idea that paragraphs should be between ten and twenty lines. A work in which each page is continuous is not admissible. A work with successive two-line paragraphs in the "ready to buy" or telegram style is also not acceptable.

Footnotes can be useful during writing to make comments or introduce additional information that is not considered essential, or that would overload the main text.

Conceptual clarity, analysis and argumentation

In the work it must be clear what is the meaning of the terms used, particularly if these are controversial.

However, it is not a good idea to articulate a TFG exclusively around a conceptual debate. It is not a matter of creating new definitions, but of knowing the existing ones, and as far as possible adopting the existing ones in order to advance the arguments clearly. Based on the reading, the reflection, and if necessary the analysis of the data we have, we will develop the content of each of the headings and the fundamental ideas that we want to support. It is essential that our claims are supported by data and/or sound arguments from a methodological approach.

Writing the drafts and the final version

To do a good job, you usually need to write several drafts until you reach the final version. In these successive versions, decisions are made regarding the location of some information, assigning it to one or another heading, and the structure of the work can even be varied. In addition, in this process, the writing is improved, so that the ideas of the work are optimally transmitted. It is not necessary to consider the writing of the work as a superficial aspect, since the words are the vehicle of the ideas that we convey. What is judged when reading a work is what emerges from its reading and therefore it is advisable that the writing be taken care of as much as possible.

You must refer to and comment on the information contained in tables, figures, and graphs. If it is additional or contextual information, and it is not considered necessary to comment on it, the tables, figures and graphs must be placed in an appendix or annex to the work. Sometimes tables can be made to summarize the findings or the analysis scheme. These tables are not a substitute for the explanation of the text, but are used to complete and better convey the author's ideas, giving an overview.

The writing style logically depends on each person. However, in general terms, it is advisable to limit poetic license as much as possible and to use a style that is as neutral, impersonal and clear as possible. More personal styles are suitable for other areas, but not for academic work.

3. Formal presentation criteria

It is necessary to follow the instructions of the TFG regulations. In particular, it is necessary to focus on the following formal aspects:

- They will be presented in pdf format as if it were a document (DIN A4) with all its pages numbered

- Spelling and grammar must be checked, so it is advisable to read the final version several times to detect errors.
- It is important to use uniform styles to clearly identify headings, subheadings, notes, etc.

These aspects are essential conditions for the TFG to be evaluated. Therefore, TFGs with formal defects will not be evaluated

4. Citations, bibliography and plagiarism

Every time you take an idea or information that you did not produce yourself, you must cite its origin. This practice is essential and fundamental for two reasons:

- the honest student or researcher recognizes ideas that are not his own; otherwise you would be committing plagiarism.
- offers its readers the possibility of going to the original sources to contrast the information or to complete it.

TFGs that do not properly cite bibliographic references will not be evaluated.

Cases of plagiarism will involve the automatic suspension of the TFG.

plagiarism

Plagiarism is considered (<http://www.plagiarism.org/>):

- presenting someone else's work as one's own;
- adopting words or ideas from other authors without due acknowledgment (ie without citing);
- do not use quotation marks in a literal quote;
- give incorrect information about the true source of a quote;
- paraphrasing a source without mentioning the source (ie, not citing);
- abusive paraphrasing, even if the source is cited (ie "rehashing")

How to quote

These recommendations or those of any academic journal can be followed.

In the text (following the idea or quotation in quotation marks) a short reference to the work is placed, composed by author, year and page or pages from which the reference was obtained, in parentheses:

Linz distinguishes two phases in the transition process: the first until the approval of the Law for Political Reform and the second until the celebration of the first elections (Linz 1997:75).

Complete references for all works cited are included at the end of the paper in alphabetical order of author's first last name as explained below. When the same author has published several things in the same year, they are differentiated by placing a letter next to the year (for example Linz 1997a, Linz 1997b, Linz 1997c, etc.).

Final bibliography

It is recommended to use a bibliographic manager such as Bibtex, Endnote, Refworks, Mendeley or Zotero to ensure a systematic elaboration of the bibliographies. The library provides training on the Refworks program. Using Zotero or Mendeley (free software, allows you to download references directly from Firefox/Chrome) is very simple and can be learned independently. There are several methods for citing. Whatever the method chosen, it is important to include all the necessary information and to have a homogeneous style throughout the work. Capitalization, styles and punctuation are important and should also be consistent. It is recommended not to use bold and underlined.

5. Language

The language of the written document can be Catalan, Spanish or English. It is necessary for the student and the director to agree on the language at the beginning of the TFG. The language of the defense will be the same as that of the written document, with the following exception: students who write the document in English may choose to do the defense in Catalan or Spanish. The defense can only be done in English if the student and all the members of the court give their consent.

6. Use of Natural Language Models

In the case of using natural language models such as ChatGPT to generate or modify content, a section must be included in the TFG where the process is explained. This may include information about the models used, configuration parameters, and any other relevant considerations.

If model-generated snippets are used it is essential to properly cite the sources. It is the responsibility of the student to critically evaluate the text generated.

It is important to be transparent about the use of technology and ensure that the work does not infringe copyright or other legal considerations.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Supervised			
Project Plan preparation	16	0.64	2, 4, 7, 11, 12, 13, 14
Validation and verification of the methodology or model	22	0.88	1, 3, 4, 5, 7, 8, 9, 10, 12, 15
Type: Autonomous			
Development of the state of the art and of an original methodology	226	9.04	1, 4, 5, 6, 7, 8, 10, 12, 14, 16
Writing of memory (or a scientific paper) and material for the defense	110	4.4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

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1. The role of tutors

Each student will be assigned a tutor among the professors of the degree who will guide the student in a personalized way in the realization of the TFG. The student will have to agree with the tutor a subject to do his Final Degree Project. Students should contact their tutor to arrange the meetings they will hold throughout the semester. It is always advisable for students to send pre-written documents to meetings to their tutors.

Once the subject is agreed upon, the student will make four deliveries during its execution:

1. A Work Plan that will contain the description of the problem, the objectives to be achieved, the methodology, and the basic bibliography.
2. A review of the state of the art on the chosen topic and design a methodology or original model that will serve to solve the considered problem.
3. A section of experiments/development that allows to validate and verify the proposed methodology or solution.
4. The final version of the memory (or, alternatively, of the scientific article), as well as the corresponding powerpoint and, where appropriate, the associated code.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Content and difficulty	20%	0.25	0.01	1, 3, 4, 5, 7, 8, 9, 10, 14, 15
Director assessment	40%	0.25	0.01	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
Final Report	20%	0.25	0.01	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
Presentation	20%	0.25	0.01	1, 2, 3, 4, 7, 9, 11, 16

FINAL DEGREE PROJECT ASSESSMENT

The evaluation of the Final Degree Project will be carried out by the director and a committee. The director will evaluate and evaluate the work done during the course, the objectives achieved and the final result of the Final Degree Project. Once qualified by the director, it will be considered as presented in the subject for all academic purposes. The evaluation committee will assess the report, the presentation and other general aspects such as the difficulty, originality and level achieved in the work.

EVALUATION COMMISSION CRITERIA

The maximum grade will be 10 points and can be provided with a single decimal. These points are distributed as follows:

- Director's assessment: maximum of 4 points (in no case will the exhibition or the report be evaluated here). The principal will evaluate and evaluate the student's work during the course, the objectives achieved and the final result. The following aspects will be taken into account, among others: student attitude, interest, organization and planning, ability to understand, rigor, ability to solve problems, degree of innovation, ..
- Evaluation committee assessment: 6 points
 - Presentation: maximum 2 points. Please note that the student has a maximum of 20 minutes for the presentation. After this time, the presentation can be terminated. It will be appreciated that a real demonstration is made, whenever possible, if the project involves a SW or HW development. The following aspects will be taken into account, among others: quality and balance in the exhibition, agility and exhibition safety, use of the support material, quality of the elaborated material, explanation and technical justification, rigor in the answers, ..
 - Report and annexes: maximum 2 points. The following aspects will be taken into account, among others: follow-up of the structure, capacity for synthesis (it is recommended that the memory has between 50 and 75 pages), clarity and argumentative balance, linguistic and lexical correction, ...
 - Content, level, difficulty: maximum 2 points.

The notes of the evaluation committee will be given unanimously and not individually.

If the student does not make the presentation of the Final Degree Project on the day and time that has been cited and there are no exceptional reasons that prevent it, the evaluation committee's grade will be zero (of the 6 possible).

Bibliography

n/a

Software

n/a

Language list

Information on the teaching languages can be checked on the CONTENTS section of the guide.

PROVISIONAL