1. OVERVIEW

Subject area	Final Degree Project
Degree	Bachelor's Degree in Computer Engineering
School/Faculty	Architecture, Engineering and Design
Year	4º
ECTS	18
Type	Compulsory
Language(s)	Spanish
Delivery mode	On campus / Online
Semester	S1, S2
Year	2022/2023
Coordinating professor	Gonzalo Mariscal

2. INTRODUCTION

The Final Degree Project consists of a project developed by a student or a group of students, under the guidance of one or more professors/tutors. The first step of the development process requires a pre-project draft presentation. The work is considered to really start once the draft has been formally approved. Once the objectives set in the draft have been achieved, students may request, with the agreement of their tutors, the defence and final assessment of the project.

The final assessment of the project will require the submission of a report describing in detail the work carried out. Likewise, the project's oral defence in public before an examining board will be required. Any additional material deemed necessary, depending on the type of project, may also be evaluated.

The Final Degree Project may only be carried out in the online delivery mode in those cases where it does not involve the study/development of Hardware and/or Systems that are not available to the lecturer/tutor for their correct monitoring and assessment. The professor/tutor of the project and, where appropriate, the evaluation committee for the draft will decide on the possibility of carrying out the work online, as it is normally carried out in-person. This will depend on the subject and scope of the project, as well as the resources available to monitor it remotely.

3. SKILLS AND LEARNING OUTCOMES

Basic skills (CB, by the acronym in Spanish):

- CB5: Students have developed the learning skills necessary to undertake further study in a much more independent manner.

Transversal skills (CT, by the acronym in Spanish):

- CT01: Independent Learning: Ability to choose the most effective strategies, tools and opportunities for independent learning and implementation of what has been learnt.
- CT10: Initiative and entrepreneurial spirit: Ability to undertake difficult or risky actions with resolve. Ability to anticipate problems, propose improvements and persevere to ensure they are implemented. Willingness to take on and carry out tasks.
- CT11: Planning and time management: Ability to set objectives and choose the right means to fulfil them through efficient use of time and resources.
- CT15: Responsibility: Ability to fulfil commitments to themselves and others when undertaking a task and try to meet a range of objectives within the learning process. Ability to face and accept the consequences of actions taken freely.
- CT18: Use of information and communication technology (ICT): Ability to effectively use information and communication technology, such as tools for searching, processing and storing information, and for developing communication skills.

Specific skills (CE, by the acronym in Spanish):

- CE32: Original exercise to be carried out individually and presented and defended before a university examining board, consisting of a project in the field of specific Computer Engineering technologies of a professional nature in which the skills acquired in the course are synthesised and integrated.

Learning outcomes (RA, by the acronym in Spanish):

- RA1: The students' behaviour and attitude in the development of the project, applying techniques, methods and tools, in accordance with good practice, necessary for the development of a computer engineer's project.
- RA2: Ability to carry out projects using techniques, methods, tools and domains that are new to the student.
- RA3: Ability to work independently and in a group to develop a computer science project.
- RA4: The implementation of a pre-project draft and the deliverables necessary to develop a computer science project.

The following table shows how the skills developed in the subject area match up with the intended learning outcomes:

Skills	Learning outcomes
CG02, CG03, CG05, CG06, CG07, CG11, CT15, CE32	RA1
CG01, CG03, CG04, CG05, CG06, CT18	RA2
CB5, CG08, CG09, CG12, CT01, CT10, CT11	RA3
CG01, CG10, CG12, CE32	RA4

4. CONTENTS

Final degree projects on subjects related to the knowledge, skills and competences developed in this degree will be accepted.

5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

1. Survey on aims and interests. This survey is used to establish the aims of the subject and gather the student's interests on the subject. We will then make reference to it throughout the year for the students to evaluate the achievement of the aims and interests.

In the online delivery mode, an initial questionnaire will be carried out with the same objective. Throughout the year, reference will be made to this survey, and a final reflective questionnaire will be carried out for the students to check their learning progress of the subject.

2. Lectures, subjects of study and seminars. The "lectures" taught in the on-campus delivery mode are called subjects of study and seminars in the online delivery mode, and are conducted through readings on the topic, technical notes and webinars (which are recorded for students to access). In addition, students will be given a motivating introduction to each subject area, with multimedia presentations looking at specific topics of the subject, finally followed by forums.

4.a) Group research (jigsaw) and/or b) group problem-solving. This learning method will be used for the development of both declarative and procedural knowledge. In method type a), a different topic will be assigned to each group to be investigated. Later, new groups will be formed with students who have all studied a different topic, and these new groups will be proposed comprehension and problem-solving activities. In method type b), a series of short questions and problems will be proposed to be solved in groups. To develop these methods, students have different synchronous and asynchronous tools at their disposal in the online delivery mode, such as forums and group work chats which are only accessible to members of the group, as well as web conferences.

7. Practical case studies. These will be used for the development of conditional knowledge. In the online delivery mode, case studies will be used to develop the practical contents of the subject through forums and seminars. This method is also applicable in the classroom for the on-campus modality.

8. Fieldwork, conferences, visits to companies and institutions. These will be used for the development of conditional knowledge. In the on-campus delivery mode, all learning methods may be used, while only conferences can be used in the online delivery mode, as they will be available for remote access in real time (via streaming technologies) or recorded and broadcast afterwards.

6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

1. (For the on-campus delivery mode) Lectures, reading on main topics and complementary materials, implementation of activities carried out independently and collectively (including participation in collaborative learning forums).

2. (For the on-campus delivery mode) Integrative group work, consisting of participation in debates and seminars, and group implementation of integrative activities, mainly in the classroom.

3. (For the on-campus and online delivery mode) Individual work

4. (For the on-campus delivery mode) Tutorials, academic monitoring and assessment, both in the classroom and on the Campus Virtual.

5. (For the on-campus and online delivery mode) Professional internships. For students who choose the online delivery mode, the internships will follow the same procedure as for external internships (depending on the needs of the companies and the student's availability), and the same monitoring method: they will have an academic tutor (in addition to the company tutor), who will guarantee skills acquisition.

6. (For the online delivery mode). Independent reading on complementary topics and materials and implementation of activities carried out independently. Subsequently, asynchronous group discussion on the Campus Virtual forum, and Webinars with the synchronous e-learning tools on the Campus Virtual.

7. (For the online delivery mode) Integrative group work, consisting of participation in debates and seminars, and the implementation of integrative activities carried out in groups. Carried out with the support of the Campus Virtual (the debates are held via forums, the seminars are online). In addition, each group will have asynchronous communication tools to prepare the group work (mainly forums), as well as synchronous communication tools (mainly virtual meeting tools).

8. (For the online delivery mode). Tutorials, academic monitoring and assessment through the Campus Virtual. Some assessment tests which require it (e.g. exams) will be carried out on-campus.

On campus:

Learning activity (AF, by the acronym in Spanish)	Number of hours
Lectures, Reading, Activities	50
Integrative group work	25
Independent working	50
Tutorials, academic monitoring and assessment	25
TOTAL	**150**

Online:

Learning activity (AF, by the acronym in Spanish)	Number of hours
Independent working	50
Individual reading, activities, debates and seminars	50
Integrative group work	25
Tutorials, academic monitoring and assessment	25
TOTAL	**150**

7. ASSESSMENT

The assessment systems, plus their weighting in the final grade for the subject area, are as follows:

On campus/ online:

Assessment system	Weighting
(For the on-campus and online delivery mode). The Final Degree Project will be presented and defended in the format established by the academic coordination of the degree programme, and assessed by a university examining board. The defence will be presented in-person.	100%

On the Campus Virtual, when you open the subject area, you will find all the details of your assessable tasks and the deadlines and assessment procedures for each task.

7.1. Ordinary exam period

To pass the subject area in the ordinary exam period, you must obtain a grade higher than or equal to 5.0 out of 10.0 for the final grade of the subject area.

7.2. Extraordinary exam period (resits)

To pass the subject area in the ordinary exam period, you must obtain a grade higher than or equal to 5.0 out of 10.0 for the final grade of the subject area.

8. TIMELINE

In the subject area's content CALENDAR on the Campus Virtual, the dates for the defence are available in each of the defence assessment periods established by the School. Here, you will also find dates of previous deliverables and monitoring milestones throughout the final degree project, starting with the publication of topics and tutors and ending with the defence of the Final Degree Project.

The timeline may be subject to change for logistical reasons related to the activities. Students will be informed of any changes in due time and course.

9. BIBLIOGRAPHY

The bibliographic search is part of the student's independent work. The professor/tutor of the project may guide the student in this search.

10. DIVERSITY AWARENESS UNIT

Students with special educational needs:

To ensure equal opportunities, curricular adaptations or adjustments for students with special educational needs will be outlined by the Diversity Awareness Unit (UAD, Spanish acronym).

As an essential requirement, students with special educational needs must obtain a report about the curricular adaptations/adjustments from the Diversity Awareness Unit by contacting unidad.diversidad@universidadeuropea.es at the beginning of each semester.

11. STUDENT SATISFACTION SURVEYS

Your opinion matters!

Universidad Europea encourages you to complete our satisfaction surveys to identify strengths and areas for improvement for staff, degrees and the learning process.

These surveys will be available in the survey area of your campus virtual or by email.

Your opinion is essential to improve the quality of the degree.

Many thanks for taking part.