BACHELOR'S DEGREE IN INDUSTRIAL DESIGN ENGINEERING

SYLLABUS
FINAL YEAR PROJECT

ACADEMIC YEAR: 2026-27
GRADE: 4th
CHARACTER: Final Year Project
SEMESTER: 2nd
ECTS: 12
TEACHING HOURS: 98
HOURS OF SELF-EMPLOYMENT: 202
TOTAL HOURS: 300
LANGUAGE/S: Castellano/Català/English
CODE: 17058

TEACHING TEAM: Marta González mgonzalez@elisava.net

PRESENTATION OF SUBJECT / OBJECTIVES

The Final Year Project summarizes the training acquired by the student in the course of the degree. It must allow the student to individually show the level of acquisition of the competences of the degree and the principles that will underpin their future professional activity.
In the Bachelor's Degree in Industrial Design Engineering, the FYP can be included in one of the following areas: Entrepreneurship work, research/innovation work or development/experimental work.
The general objectives of the FYP consist of:
- Integrating the knowledge and skills acquired throughout the training in the subjects of the degree.
- Applying these competencies in an academic project.
- Developing a coherent and reasoned discourse on the topic being discussed.
- Participating in situations typical of a professional activity.

The fourth-year subjects are aligned to complement the Final Degree Project, through extending research skills (Design Research), communication skills (Communication and academic writing) and business vision (Innovation and entrepreneurship).

SUSTAINABLE DEVELOPMENT GOALS (SDGS)

In the FYP, the link to the SDGs is proposed to be done for each work individually. The student, advised by his or her FYP tutor, can mark which SDGs will work on in his or her proposal, and this should be made explicit in the objectives of the work, specifying the SDG with its corresponding goal.

CONTENTS

In general, the student is responsible for choosing the topic of his/her FYP. The topic, however, can come from the initiative of the student, or from proposals suggested by the academic coordination, from both the research generated by Elisava's research groups, the needs or concerns of companies or institutions, as well as Elisava's strategic projects.

The completion of the FYP is made up of two distinct parts: the development of the activities to achieve the objectives of the work and the writing of a report. The report must explain the process of preparing the work and the results obtained.

Content block

- Integration of the strategic, conceptual, sociocultural, formal, technological, communicative and management aspects of the product, system, and/or service proposed in a comprehensive project.
- Completing design process: from research and ideation for an innovative value proposition, to implementation for project viability and project communication.
- Theoretical formulation and scientific analysis of the results.
- Project management, task planning, and problem solving.
- Tools specific to the discipline for the development of the project.
- Oral, visual and written communication tools.
- Collaboration strategies with institutions, companies or research centres.

TEACHING METHODOLOGIES

- Work sessions with the whole group, class with the teacher. (PA)

COMPETENCIES

- Developing a creative attitude of experimentation, under scientific and humanistic criteria, which favours the exploration of relevant and innovative contributions. (G1)
- Configuring new realities based on the interpretation of the historical, social, cultural, economic and technological context. (G2)
- Integrating formal sensitivity as a fundamental part of the project process. (G3)
- The student must know how to apply their knowledge to their work or vocation in a professional way and to possess the competencies that are usually demonstrated through the elaboration and defence of arguments and the resolution of problems within their area of study. (CB2)
- Students must have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant social, scientific or ethical issues. (CB3)
- That students can transmit information, ideas, problems and solutions to both a specialised and non-specialised audience. (CB4)
- Students must have developed those learning skills necessary to undertake further studies with a high degree of autonomy. (CB5)
- Acting with a spirit and critical reflection in the face of knowledge in all its dimensions, showing intellectual, cultural and scientific concern and commitment to rigour and quality in professional demand. (T1)
- To project the values of entrepreneurship and innovation in the exercise of the personal, academic and professional career, through contact with different realities of practice and with motivation towards professional development. (T2)
- Projecting the values of entrepreneurship and innovation in the exercise of the personal, academic and professional trajectory, through contact with different realities of practice and with motivation towards professional development. (T2)
- Showing skills for professional practice in multidisciplinary and complex environments, in coordination with networking teams, either in face-to-face or virtual environments, through the computer and informational use of ICTs. (T4)

- Exercising active citizenship and individual responsibility with a commitment to democratic values, sustainability and universal design, based on practices based on learning, service and social inclusion. (T5)
- Using different forms of communication, both oral and written or audiovisual, in their own language and in foreign languages, with a high degree of correctness in use, form and content. (T6)
- Becoming the main actor in the training process itself with a view to personal and professional improvement and the acquisition of a comprehensive training that allows learning and coexist in a context that respects linguistic diversity, with diverse social, cultural, gender and economic realities. (T7)
- Applying basic techniques of graphic expression, technical drawing and standardization for the proper visualisation and communication of design and development during the production process. (E4)
- Using the basic fundamentals of economics and business for the correct management, organization and planning of any business model or self-employment. (E5)
- Using different methodologies and work tools to correctly design any product, system or service. (E6)
- Developing prototypes for experimentation, as well as formal and technical testing that allows the communication of the concept and the technical justification of the project. (E7)
- Solving technical problems creatively in the fields of Industrial Design Engineering to respond to new situations. (E8)
- Recognising scientific methods to integrate research sources into decision-making. (E9)
- Understanding the present industrial reality in order to function in the professional environment. (E10)
- Identifying emerging technologies that can add value to the project. (E11)
- Carrying out and communicating an original project in the field of industrial design engineering, of a professional nature, in which the competencies acquired in the bachelor's degree courses are synthesised and integrated. (E12)

LEARNING OUTCOMES

- Applying their knowledge to solve problems in complex or professional and specialized work environments that require the use of creative and innovative ideas.
- Collecting and interprets data and information on which to base their conclusions, including reflections on social, scientific or ethical issues in the field of Industrial Design Engineering.
- Communicating knowledge, methodology, ideas, problems and solutions to all types of audiences (specialized or not) in a clear and precise way.
- Identifying their own training needs, and organising their own learning with a high degree of autonomy in all types of contexts (structured or not).
- Showing skills for critical reflection in the processes linked to the exercise of the profession.
- Solving problems and situations typical of professional performance with entrepreneurial and innovative attitudes.
- Applying procedures typical of scientific research in the development of training and professional activity.
- Designing interventions that meet the needs of the field in a multidisciplinary way.
- Proposing interventions in coherence with democratic values and universal design, showing respect for the fundamental rights of people.

Facultat de Disseny i Enginyeria
ELISAVA

- Preparing reports and written documents (mainly of a technical nature) with spelling and grammatical correction.
- Using audiovisual language and its different resources to express and present content linked to specific knowledge in the field
- Showing skills for the analysis of situations from a global and comprehensive perspective, relating social, cultural, economic and gender elements, as appropriate.
- Generating the necessary technical documentation to justify the viability of the project.
- Justifying the differentiating elements of the project that make it competitive in relation to existing research and/or the market.
- Proposing and executing the project from start to finish, justifying the necessary methodologies during the process.
- Making prototypes during the process suitable for the understanding and justification of the project.
- Providing technically resolute solutions to innovate and expand the field of opportunities.
- Applying scientific research methodologies "for", "through" or "about" design.
- Communicating in a professional way the value of the project developed in an academic and work environment.
- Justifying the selection of emerging technologies through innovative future scenarios.

TRAINING ACTIVITIES

Each subject will present at the beginning of the course its WORK PLAN where the didactic activities per week / session / autonomous work are recorded. The subject Final Degree Project consists of a complementary document called Index of the FYP / research report.

EVALUATION

EVALUATION SYSTEMS

The evaluation of the subject will be based on continuous monitoring of the student's academic work throughout the course.

EVALUATION SYSTEM	FINAL WEIGHTING
P2-Follow-up of the work done	0
P5-Completion of required work or projects	50
P6-Public defence of projects	50

EVALUATION CRITERIA

The final grade of the subject will be the weighted average of the grades of the assessable activities according to the following table

ASSESSABLE ACTIVITY	WEIGHT	RETRIEVABLE (up to 50%)	EVALUATION SYSTEM
Activity-1 Task management (tutor)	0%	NO	P-2
Activity-2 Problem, area of study and methodology	10%	NO	P-5
Activity-3 Experimentation / Project	40%	NO	P-5 / P-6
Activity-4 Implementation/White Paper	20%	YES*	P-5 / P-6
Activity-5 Complementary documentation	10%	YES*	P-6
Activity-6 Presentation of the project	20%	YES*	P-6

For the evaluation of the FYP, the following are taken into account:

- Follow-up
  The general adequacy of the work plan and its development, the personal autonomy of the student in decision-making and the overcoming of difficulties, attitude, interest or the degree of compliance with ethical aspects and research or intervention are taken into consideration in the monitoring of the process. Activity 1 - Homework management will be assessed by the academic tutor through a rubric.

- Proposal
  The proposal of the work has to be clear, with well-defined objectives, a correct timing of the entire work plan and the methodology to be followed.

- Memory
  With regard to the written report, the presentation and adequacy to the formal aspects, the strategies of written expression, the quality of the contributions and the rigour shown in the analysis of the information, as well as the student's reflections on the process itself or in the professional context, are taken into consideration, among other aspects. It is evaluated through a rubric.

- Physical and/or digital elements
  The project can be accompanied, if required, by samples of the work process, technical demonstrators, as well as prototypes (formal and/or functional) of different levels of detail for final proposal.

- Defence
  The public defence of the FYP will be carried out in person before the tribunal. The dynamics of the defence foresees that the student makes an oral presentation of the project in which the entire process carried out is described and the objectives and results obtained are specified. In the oral defence, order, clarity and the ability to express oneself are highlighted, as well as the adequacy of the terminology used, the use of audiovisual or support resources during the presentation and the ability to answer questions posed by the court. For the defence, the student will have a limited time of 15 minutes. After this time, the panel will make the comments or questions it deems appropriate so that the student can demonstrate, through a new intervention, the level of achievement and development of the entire FYP. It is evaluated through a rubric.

Students will have the option of retaking the retake tests. The retake tests will be carried out in the period of the semester allocated to this function, not being able to recover more than 50% of the subject.
* In the event that the Recoverable Assessable Activities exceed 50%, the student body may choose, up to a limit of 50%.
The unjustified non-submission of any assessable activity implies a grade of 0, even if the activity has been classified as Recoverable.
Recoverable Activities can only be recovered when they have been submitted by the student body on the indicated date and with a grade equal to or greater than 3.
** In order to calculate the final grade of the subject, it will be necessary to obtain a minimum grade of 4 in the weighted average of the exams (P-4 evaluation system).
If access to the retake test is waived, the grade achieved in the first instance will be maintained.
In case of taking the recovery, the grade obtained will be the last, even if it is lower than the first.
Plagiarism or copying of other people's work is penalised in all universities and, according to the Rules of Coexistence of the University of Vic-Central University of Catalonia, they constitute serious or very

serious offences. That is why in the course of this subject any indication of plagiarism or misappropriation of texts or ideas other people (What is considered plagiarism?) as well as the improper or undeclared use of Artificial Intelligence in an activity, automatically translates into a suspension and/or other disciplinary measures (Normes de Convivencia de la Universitat de Vic-Universitat Central de Catalunya).
For any questions or queries, see the (Academic Regulations of the Bachelor's Degree of the Faculty of Design and Engineering Elisava UVic-UCC).

BIBLIOGRAPHY AND TEACHING RESOURCES

The bibliography corresponding to the subject will be the one that has been provided during the subjects taken throughout the degree.

The tutor will provide a specific bibliography at the beginning of the subject, adapted to the subject and particular requirements of each Final Degree Project.

Facultat de Disseny i Enginyeria
ELISAVA