COURSE DATA

DATA SUBJECT

Code: 34946
Name: Degree final project (EEI)
Cycle: Undergraduate Studies
ECTS Credits: 12
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1404 - Degree in Industrial Electronic Engineering	Escola Tècnica Superior d'Enginyeria	4	Indefinite (Individuals)

SUBJECT-MATTER

Degree	Subject-matter	Character
1404 - Degree in Industrial Electronic Engineering	Degree Final project in EIE	FINAL DEGREE PROJECT

COORDINATION

GARCIA GIL RAFAEL

SUAREZ ZAPATA ADRIAN

SUMMARY

The Final Degree Project is an original exercise to be carried out individually that is presented and defended before a university examining board, consisting of a project in the field of Industrial Electronic Engineering of a professional nature in which the competences acquired in the courses are synthesised and integrated.

The Final Project is proposed as a factor enabling the students to increase their skills, with their personal work done under the guidance of a supervisor, comprehensively covering the skills acquired during their studies.

The type of project to be developed can be very variable, but always within the guidelines set by the objectives and tasks set for the Graduated degree. In any case, we can say that the ultimate aim is to apply the skills acquired during the studies to the activity of industrial electronics engineering.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

The completion of the Final Project require to have passed 180 ECTS curriculum, among which necessarily include all matters scheduled in the first two years of the degree and the subject Projects.

COMPETENCES / LEARNING OUTCOMES

1404 - Degree in Industrial Electronic Engineering

CG10 - Ability to work in a multilingual and multidisciplinary environment.

CG11 - Knowledge, understanding and ability to apply the necessary legislation for practising professionally as a qualified industrial engineer.

CG1 - Ability to write, sign and develop industrial engineering projects in the field of industrial electronics, aimed at the construction, refurbishment, repair, conservation, demolition, manufacture, installation, assembly and operation of structures, mechanical equipment, energy facilities, electrical and electronic installations, industrial installations and plants, and manufacturing and automation processes, in accordance with the knowledge acquired using a specified industrial electronic technology.

CG2 - Ability to manage the activities involved in the engineering projects described in the previous heading.

CG3 - Knowledge of basic and technological subjects that allows students to learn new methods and theories and provides them with versatility to adapt to new situations.

CG4 - Ability to solve problems with initiative, decision-making skills, creativity and critical reasoning and to communicate and transmit knowledge, abilities and skills in the field of industrial engineering (with specific industrial electronics technology).

CG5 - Knowledge to carry out measurements, calculations, assessments, appraisals, surveys, studies, reports, work plans and analogous work.

CG6 - Ability to deal with specifications, regulations and mandatory standards.

CG7 - Ability to analyse and assess the social and environmental impact of technical solutions.

CG8 - Ability to apply the principles and methods of quality control.

CG9 - Ability to organise and plan work in companies and in other institutions and organisations.

CTFG1 - Ability to produce an original project in the field of industrial electronics to be completed individually and presented and defended before a university panel. The project must focus on professional practice and synthesise and integrate the skills previously acquired in the degree.

DESCRIPTION OF CONTENTS

1. Graduation Project Degree in Industrial Electronics Engineering

The contents of the field will be different depending on the specific objectives of the undertaken project.

Can be acceptable fields to be treated on the Final Project all those typical in Industrial Electronics Engineering. Specifically can be projected, among others:

- Design and construction of electronic equipment and systems, or electronic parts thereof.
- Installation, maintenance, alteration and repair of electronic machinery or equipment.
- Automation of the production processes.
- The information processing techniques aimed to improve the operation of industrial equipment or processes.
- The efficient generation, transmission, management and use of electrical energy.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at supplementary activities	0,00
Monitoring and tutoring of the bachelor's thesis	19,00
Presentation and defence of the bachelor's thesis	1,00
Total hours	**20,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent preparation of the bachelor's thesis	170,00
Preparation of the bachelor's thesis project	110,00
Total hours	**280,00**

TEACHING METHODOLOGY

The student must develop a work under the supervision of a faculty member involved in this degree. Both the advisor and the student can propose the work. In any case, the advisor will approve the objectives to be achieved in the project and will ensure that the student work is designed to assess the achievement of the skills set out in the objectives of the Industrial Electronics Engineering degree (CG1, CG2, CG3 CG4, CG5, CG6, CG7, CG8, CG9, CG10, CG11, CTFG1).

Student and advisor will be in regular contact. In any case, the advisor must maintain a minimum of two meetings with the student, one to set the objectives of the project and another during the preparation of the final document, to assess the level of fulfillment of the objectives. However, if they consider it appropriate, additional meetings may be conducted to analyze the evolution of the work.

The Bachelor Thesis can be carried out in an institution external to the UVEG. In any case, always under the approval and supervision of a faculty member of the UVEG.

The student will be involved in all the stages of the project. However within large teams is normal a tasks division in which some aspects of a project are carried out by other team members or even other groups. In this case, the student must explain in the final report these matters indicating his direct or indirect participation in the different phases of the work.

EVALUATION

The organisation and assessment of final degree projects (TFG) is regulated in accordance with the current regulations indicated in the Regulations for final degree projects, approved by the Governing Council of the Universitat de València and by the instructions developed by the Escola Tècnica Superior d'Enginyeria de la Universitat de València (ETSE-UV). See more details in the section Degree Studies -> Final Degree Project on the ETSE-UV website (https://www.uv.es/etse).

The TFG should be defend in public session in front of a university committee composed of the student's advisor and two faculty members from areas of knowledge related to the degree appointed by the Commission of the TFG of the degree. The student will have 15 minutes to present to the court the work developed, and then the commitee members will discuss with the student aspects considered relevant for their work. After the defense, the court will constitute the qualifying committee and proceed to qualify the project following the schedule of the Commission of the TFG of the degree. Basically, this scale indicates that the committe together, evaluated up to 80% of the student's grade divided into the following aspects:

- Scientific-technical quality (40%) (CG1, CG2, CG3, CG4, CG5, CG6, CG7, CG8, CG9, CG11).
- Quality of documentation (20%) (CG1, CTFG1).
- Presentation and defense (20%) (CG10, CTFG1).

In addition, the tutor shall deliver a specific assessment of the work done by the student to complete 20% of the grade. This report, evaluated between 0 and 10 points, shall contain the following assessments:

- Scientific-technical quality (CG1, CG2, CG3, CG4, CG5, CG6, CG7, CG8, CG9, CG11).
- Learning Outcomes of Engineering Projects (ENAEE) (CG1, CG3, CG4).
- Quality of the documentation(CG1, CTFG1).
- Attitude of the student (CG4, CTFG1).

Finally, the three members of the examination panel shall sign an official record indicating the final numeric grade assigned to the project.

Students participating in academic mobility programs may undertake their TFG at the host institution. In such cases, the project must be previously approved by the exchange coordinator of the degree program, acting by delegation of the Final Project Committee, and an academic supervisor from the Universitat de València shall be appointed. Should a defense of the TFG be conducted at the host institution and the student's public presentation competence duly certified, the Final Project Committee shall delegate the recognition of the final grade to the exchange coordinator. Otherwise, the student shall defend the project publicly at the Universitat de València under the same conditions as the other students, with recognition of the work and report submitted at the host institution, which will be weighted together with the public defense grade awarded at the Universitat de València.

The evaluation system will be based on the guides stated in the "Reglament d'Avaluació i Qualificació de la Universitat de València per a Graus i Màsters" (ACGUV 108/2017).

Copying or plagiarism of any activity that is part of the evaluation will result in the impossibility of passing the course, and the student will then be subject to the appropriate disciplinary procedures indicated in the ACTION PROTOCOL FOR FRAUDULENT PRACTICES AT THE UNIVERSITY OF VALENCIA (ACGUV 123/2020).

REFERENCES

Core:

- Cunha, Irida da., and Ma. Teresa Cabré. El trabajo de fin de grado y de máster [Recurso electrónico]: redacción, defensa y publicación / Iria da Cunha.Teresa Cabré. Editorial UOC, 2016. https://trobes.uv.es/permalink/34CVA_UV/um6gse/alma991009392357306258

- Sánchez Asín, Antonio. Trabajos de fin de grado y de postgrado: guía práctica para su elaboración /Antonio Sánchez Asín...[et. al.]. Aljibe, 2016.

- Baelo Álvarez, Manuel. El arte de presentar trabajos académicos ante un tribunal: TFG, TFM y tesis doctoral: guía práctica para estudiantes universitarios / Manuel Baelo Álvarez. 2a ed, Círculo Rojo, 2017.

Complementary:

- Aprèn a fer el TFG (treball fi de grau): fons i organització de la informació (APRÈNTFG)

https://www.uv.es/uvweb/servicio-bibliotecas-documentacion/es/formacion/cursos-linea-apren-ci2-apren-tfg/formacion-linea-1285915536101.html