COURSE DATA

DATA SUBJECT

Code: 46803
Name: Master's Thesis
Cycle: Master's Degree
ECTS Credits: 9
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2269 - Master's Degree in Electronic Engineering	Escola Tècnica Superior d'Enginyeria	1	Indefinite (Individuals)

SUBJECT-MATTER

Degree	Subject-matter	Character
2269 - Master's Degree in Electronic Engineering	Trabajo Fín de Máster	MASTER THESIS PROJECT

COORDINATION

JORDAN MARTINEZ JOSE FRANCISCO

SANCHIS PERIS ENRIQUE J

SUMMARY

The Master's Final Project will link the knowledge acquired in the Master, so that it is the best interface between the university environment and the world of business.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

No enrollment restrictions have been specified with other subjects in the curriculum. However, knowledge of the theoretical modules is expected to understand electronic technology and be able to carry out the Master's Thesis.

COMPETENCES / LEARNING OUTCOMES

2269 - Master's Degree in Electronic Engineering

Apply and integrate the knowledge gained and confront the complexity of making judgments with incomplete or limited information but that includes reflecting on the social and ethical responsibilities linked to the application of knowledge and judgments.

Communicate conclusions (and the knowledge and rationale underpinning these) to specialist and non-specialist audiences clearly and unambiguously.

Conduct a critical analysis, evaluation and synthesis of new ideas to solve problems in complex or unfamiliar environments within broader contexts in the field of electronic engineering and related multidisciplinary fields.

Consider the economic, social and ecological context in electronic engineering solutions, being aware of diversity and multiculturalism and ensuring environmental sustainability and respect for human rights and gender equality.

Create mathematical models and simulations in the field of electronic engineering and related multidisciplinary fields.

Demonstrate a systematic knowledge and a mastery of technical, personal, social and methodological skills in the field of electronic engineering and related multidisciplinary fields.

Demonstrate knowledge and have skills for self-directed or autonomous learning that provide a basis or opportunity to be original in developing or applying ideas, often in a research or lifelong learning context.

Design systems and processes that meet electronic, regulatory, economic, social, ethical and environmental specifications.

Gain the professional skills and cooperation abilities that are suitable for practising in the field of electronic engineering and related multidisciplinary fields.

Handle specialised software and hardware, as well as design, simulation and programming environments in the field of electronic engineering and related multidisciplinary fields.

Identify, formulate and solve problems in the field of electronic engineering and related multidisciplinary fields.

Identify the need for multidisciplinary teams in companies and technological centres in the field of electronic engineering and related multidisciplinary fields.

Interpret technical documentation and regulatory standards for equipment and systems in the field of electronic engineering and related multidisciplinary fields.

Know advanced techniques of digital signal and data processing systems, from conception to implementation in real-time hardware systems.

Know advanced techniques of energy conversion, electromagnetic compatibility and system control in the field of industrial electronics.

Know advanced techniques of instrumentation and design of electronic, photonic and microelectronic

devices.

Know advanced techniques of signal and data propagation through hardware to ensure signal integrity, with an emphasis on case studies.

Manage, plan and supervise multidisciplinary teams in companies and technology centres in the field of electronic engineering and related multidisciplinary fields.

Project, calculate and design products, processes and installations in the field of electronic engineering and related multidisciplinary fields.

Promote technological, social or cultural progress in academic and professional contexts within a knowledge-based society.

DESCRIPTION OF CONTENTS

1. General contents

The contents of the Master's Thesis will be different depending on the specific objectives of the project to be carried out. All those that are specific to the Master's studies can be the subject of the Master's Final Project topic. In particular, all types of electronic systems and devices may be designed by any procedures that current engineering allows. Research and development work, and theoretical or numerical modeling of electronic equipment or systems and their components may also be the subject of the Master's Thesis. Studies related to the contents of the Degree and relating to equipment, factories, facilities, services or their planning, management or exploitation may also be considered as Master's Final Project topics. Therefore, the contents of the subject will be different depending on the specific Master's Thesis that has been selected by the student.

WORKLOAD

PRESENCIAL ACTIVITIES

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

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent preparation of the master's thesis	0,00
Preparation of the master's thesis project	0,00
Total hours	**0,00**

TEACHING METHODOLOGY

In-person work by attending meetings with the director. In-person presence in the center's laboratories to carry out the practical part of the Master's Thesis.

Student non-face-to-face work: preparation of objectives and introduction of work, simulations and designs. Another important part of the remote work will consist of writing the report.

EVALUATION

The master's thesis will be evaluated by a master's thesis panel (SE5). The tribunal will be made up of three members of the Department of Electronic Engineering. The grade for the Master's Final Project will be proposed by the court after the student's defense of his/her project and will take into account both the solutions adopted to resolve the problem posed, as well as the rigor of the report and the clarity of his/her defense. The evaluation procedure and documentation is determined by the ETSE regulations.

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).

In any case, the system of evaluation will be ruled by the established in the Regulation of Evaluation and Qualification of the University of Valencia for Degrees and Masters. (https://webges.uv.es/uvTaeWeb/MuestraInformacionEdictoPublicoFrontAction.do?accion=inicio&idEdictoSeleccionado=5639).

REFERENCES

- Web Máster Ingeniería Electrónica: https://www.uv.es/uvweb/master-ingenieria-electronica/es/programa-del-master/trabajo-fin-master/trabajo-fin-master-1285907725641.html
- Zahera-Pérez, M. (2020). Industria 4.0 y la Dirección e Ingeniería de Proyectos.
- Domingo Alejo, A. (2005). Dirección y Gestión de Proyectos, un enfoque práctico. Ed. Rama.