

**COURSE DATA****Data Subject**

<b>Code</b>	44291
<b>Name</b>	Projects
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	3.0
<b>Academic year</b>	2023 - 2024

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
2199 - Master's Degree in Electronic Engineering	School of Engineering	1	Second term
3131 - PhD in Electronic Engineering	Doctoral School	0	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2199 - Master's Degree in Electronic Engineering	5 - Projects	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
GIRBES JUAN, VICENT	242 - Electronic Engineering
SANCHIS PERIS, ENRIQUE J	242 - Electronic Engineering

**SUMMARY**

The subject Project has the overall objective that students gain the ability to properly apply all the knowledge necessary for the design, development and evaluation of projects and reports, applying the appropriate methodology and the basic principles of economics, management, quality and business organization as well as legislation, regulation and standardization in the field of studies in Electrical Engineering Master.

The basic objective of the subject is to introduce students to the concepts and techniques commonly employed in the management and direction of transportation projects, including documentary techniques used in the development of projects, as well as the presentation of the legislation applicable in industrial projects related to field of Industrial Electronics.



The subject aims to show students these methodologies and tools so that in their professional future they can tackle an industrial project with solvency. To this end, a series of technical and professional seminars will be held where the current state of electronic technology and related multidisciplinary areas will be revealed, while at the same time how an engineering project is managed in the company will be addressed.

## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

Given that this is a subject of general nature, are not necessary

## COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

### 2199 - Master's Degree in Electronic Engineering

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should demonstrate self-directed learning skills for continued academic growth.
- Take into account the economic and social context in engineering solutions, be aware of diversity and multiculturalism and ensure sustainability and respect for human rights and equality between men and women.
- Diseñar un sistema, componente o proceso que cumpla unas especificaciones desde diferentes puntos de vista: electrónico, económico, social, ético y medioambiental.
- Demostrar una comprensión sistemática de un campo de estudio y el dominio de las habilidades.
- Realizar un análisis crítico, evaluación y síntesis de ideas nuevas y complejas.
- Ser capaz de fomentar, en contextos académicos y profesionales, el avance tecnológico, social o cultural dentro de una sociedad basada en el conocimiento.
- Capacidad para la dirección general, dirección técnica y dirección de proyectos de investigación, desarrollo e innovación, en empresas y centros tecnológicos relacionados con la Ingeniería Electrónica.



- Students should possess and understand foundational knowledge that enables original thinking and research in the field.

## **LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)**

Learning outcomes of the course projects

- 1 Understanding the basic principles of Management and Project Management in the field of Industrial Engineering, Industrial Electronics branch, and be able to use them to create, analyze and select plausible alternatives capable of responding to the problems in their field of work.
- 2 Know the different types of industrial projects
- 3 Know the feasibility analysis techniques in industrial projects
- 4 Learn the techniques of decision making
- 5 Be able to document a project both technical and management side
- 6 Knowing the organizational structure of a company and the functions of an office project
- 7 To learn the techniques of planning and controlling projects
- 8 Know the law applicable to industrial projects branch of Industrial Electronics
- 9 Perform economic evaluation of processes and projects.
- 10 Write and develop projects in the field of Industrial Engineering, Industrial Electronics branch
- 11 Meet the professional organization and basic paperwork. Know the current legislation and, in particular, regarding prevention and equality.
- 12 Being able to work in teams of their field of work or multidisciplinary
- 13 Possess ability to manage information and the use of Information Technology and Communications
- 14 Possess organizational skills and planning, particularly in the field of business. Have applied knowledge of business organization
- 15 Possess critical thinking skills, creativity and decision-making
- 16 Being able to gather and interpret information and make judgments on issues of social, scientific, technological or ethical
- 17 Possessing learning skills to continue and update their training throughout working life with a high degree of autonomy



## DESCRIPTION OF CONTENTS

### 1. introduction to project management

### 2. Technical seminars

## WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	15,00	100
Laboratory practices	15,00	100
Development of group work	10,00	0
Development of individual work	10,00	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	15,00	0
Preparing lectures	5,00	0
<b>TOTAL</b>	<b>75,00</b>	

## TEACHING METHODOLOGY

## EVALUATION

For the two official calls, the evaluation will be carried out as follows:

- Mandatory attendance with active participation, it is necessary to attend a minimum of 80% (weight of 40%)
- Original summary of 3 seminars with an indicative length of between 2 and 5 pages per summary (weight of 60%)

## REFERENCES

### Basic

- 1. Pereña, J. "Dirección y Gestión de Proyectos". Ed. Díaz de Santos (1991).



- Gómez, J. F; Coronel, A.J; Martinez de Irujo, L; Lorente, A. "Gestión de proyectos". FC Editorial. Madrid, 2000. ISBN 8428317747
- Lock, D. "Gestión de proyectos". Ed. Paraninfo. Madrid, 1994. ISBN 8428317747
- 2. Domingo Alejo, A. Dirección y Gestión de Proyectos, un enfoque práctico. Ed. Rama 2005
- 3. Reglamento Electrotécnico de Baja Tensión. Ed. Paraninfo ( 1997) ISBN 84-283-2109-4
- 4. SERCOBE Gestión de la I+D+i- Normas UNE ( 2008) ISBN 978-84-8143-567-2

#### **Additional**

- Amándola, L.J. Gestión de Proyectos de Manufacturera Editoril UPV, ISBN 84-9705-311-7
- 5. Ruiz M., Mandado, E. La innovación Tecnológica y su Gestión Ed. Marcombo ( 1989) ISBN 84-267-0733-5