

Academic Year: ( 2023 / 2024 )

Review date: 12-02-2024

Department assigned to the subject: Electronic Technology Department

Coordinating teacher: PLEITE GUERRA, JORGE

Type: Compulsory ECTS Credits : 3.0

Year : 4 Semester : 1

## SKILLS AND LEARNING OUTCOMES

CB1. Students have demonstrated possession and understanding of knowledge in an area of study that builds on the foundation of general secondary education, and is usually at a level that, while relying on advanced textbooks, also includes some aspects that involve knowledge from the cutting edge of their field of study.

CB2. Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.

CB3. Students have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgements which include reflection on relevant social, scientific or ethical issues.

CB4. Students should be able to communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.

CB5. Students will have developed the learning skills necessary to undertake further study with a high degree of autonomy.

CG1. Analyze and synthesize basic problems related to physics and engineering, solve them and communicate them efficiently.

CG2. Learn new methods and technologies from basic scientific and technical knowledge, and being able to adapt to new situations.

CG3. Solve problems with initiative, decision making, creativity, and communicate and transmit knowledge, skills and abilities, understanding the ethical, social and professional responsibility of the engineering activity. Capacity for leadership, innovation and entrepreneurial spirit.

CG5. Use the theoretical and practical knowledge acquired in the definition, approach and resolution of problems in the framework of the exercise of their profession.

CG6. Develop new products and services based on the use and exploitation of new technologies related to physical engineering.

CE22. Design, plan and estimate the costs of an engineering project.

CT1. Work in multidisciplinary and international teams as well as organize and plan work making the right decisions based on available information, gathering and interpreting relevant data to make judgments and critical thinking within the area of study.

RA1. To have acquired sufficient knowledge and proved a sufficiently deep comprehension of the basic principles, both theoretical and practical, and methodology of the more important fields in science and technology as to be able to work successfully in them.

RA2. To be able, using arguments, strategies and procedures developed by themselves, to apply their knowledge and abilities to the successful solution of complex technological problems that require creating and innovative thinking.

RA3. To be able to search for, collect and interpret relevant information and data to back up their conclusions including, whenever needed, the consideration of any social, scientific and ethical aspects relevant in their field of study.

RA6. To be aware of their own shortcomings and formative needs in their field of specialty, and to be able to plan and organize their own training with a high degree of independence.

## OBJECTIVES

- ¿ Being able to plan, direct and estimate the costs of an engineering project
- ¿ Being able to make a proposal for a call for projects

## DESCRIPTION OF CONTENTS: PROGRAMME

1. What is a Project
2. Basic Stages Of A Project
3. Types Of Projects
4. Activities Related With Industrial Projects
5. Activities Related With RDI Projects
6. Actors In A Project
7. Responsibilities Of The Project
8. NDA, Patents, Author Rights, Exploitation Rights, Publications
9. Project Management Tools
10. Good Practices Tips

## LEARNING ACTIVITIES AND METHODOLOGY

AF1. THEORETICAL-PRACTICAL CLASSES.  
AF3. STUDENT INDIVIDUAL WORK OR GROUP WORK.  
AF8. WORKSHOPS AND LABORATORY SESSIONS.  
AF9. FINAL EXAM.  
MD1. THEORY CLASS.  
MD2. PRACTICAL CLASS.

## ASSESSMENT SYSTEM

- Theory Test (40%) liberatory
- Practical exercise (60%)

<b>% end-of-term-examination:</b>	40
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	60

## BASIC BIBLIOGRAPHY

- Manuel de Cos Castillo Dirección de Proyectos, Project Management., Universidad Politécnica de Madrid. E.T.S. de Ingenieros Industriales de Madrid. Sección de Publicaciones .
- Rafael Heredia Scasso Dirección Integrada de Proyectos, Project Management. , Universidad Politécnica de Madrid. E.T.S. de Ingenieros Industriales de Madrid. Sección de Publicaciones .
- Rafael Heredia Scasso y Juan Ramón Catalina Calle Un caso de aplicación de D.I.P. (Project Management) ¿La construcción de las instalaciones del INSIA de la UPM¿, Universidad Politécnica de Madrid. E.T.S. de Ingenieros Industriales de Madrid. Sección de Publicaciones..

## BASIC ELECTRONIC RESOURCES

- European Commission . Funding & tender opportunities - Horizon Europe (HORIZON): <a href="https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;callCode=null;freeTextSearchKeyword=;matchWholeText=true;typeCodes=0,1,2,8;statusCodes=31094501,31094502,31094503;programmePeriod=null;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destinationGroup=null;missionGroup=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState" target="\_blank">https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;callCode=null;freeTextSearchKeyword=;matchWholeText=true;typeCodes=0,1,2,8;statusCodes=31094501,31094502,31094503;programmePeriod=null;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destinationGroup=null;missionGroup=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState</a>
- Project Management Institute . PMBOK® Guide: [https://www.pmi.org/pmbok-guide-standards/foundational/pmbok?sc\\_camp=D750AAC10C2F4378CE6D51F8D987F49D](https://www.pmi.org/pmbok-guide-standards/foundational/pmbok?sc_camp=D750AAC10C2F4378CE6D51F8D987F49D)