

SUBJECT TEACHING GUIDE

G599 - Energy Projects

Degree in Energy Resources Engineering First Degree in Energy Resources Engineering

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Degree in Energy Resources Engineering First Degree in Energy Resources Engineering			Type and Year	Compulsory. Year 3 Compulsory. Year 4
Faculty	School of Mines and Energy Engineering				
Discipline	Subject Area: Engineering Projects Module: Training in Common with the Mining Branch				
Course unit title and code	G599 - Energy Projects				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS				
Name of lecturer	SANTIAGO SALGUERO PEREDA				
E-mail	santiago.salguero@unican.es				
Office					
Other lecturers					

3.1 LEARNING OUTCOMES

-By passing the subject, the student will have gained skills required for the development of Project Management, and can be applied to the management, drafting and development of energy projects.

4. OBJECTIVES

The specific objectives are to provide knowledge in organizational and management matters, drafting and implementing projects, and learning methodologies and regulations applicable to the drafting projects.

6. SUBJECT PROGRAM

CONTENTS

1	<p>THEMATIC BLOCK I: GENERAL THEORY ABOUT PROJECTS AND MAIN CONCEPTS</p> <p>Issue 1: IDEA AND PROJECT DEFINITION Idea and concept definition The application of Idea or thought to the project.</p> <p>Issue 2: Dessing theory Definition of Design Relationship with the idea of design. Structure Design. Main objetives. Phases of design. Design Methodology.</p> <p>Issue 3: DESIGN METHODOLOGY APPLIED TO THE PROJECT. - Definition of the Cartesian Method. - Project methodology.</p> <p>Issue 4: THEORY OF PROJECTS. - Applicable regulations for the drafting of projects. - Types of projects. - Inputs, outputs related to the drafting and preparation of projects. - Structure and project documents. - Software applied to project development.</p>
2	<p>THEMATIC BLOCK II: PROJECT MANAGEMENT AND ORGANIZATION.</p> <p>Issue 5: ORGANIZATION PROJECT. - Definition of documentary and productive organization. - Direction, strategy, operations forecast. - Life-cycle of the project and organization. - Planned production capacity dedicated to the project.</p> <p>Issue 6: PROJECT MANAGEMENT AND SCOPE - Techniques of productive organization. - Project Planning (CPM). - Project Scheduling (PERT / CPM, ROY, GANTT). - Time Acceleration Project (Reducing Critical Path). - Software applied to the organization.</p> <p>Issue 7: MANAGEMENT OF PROJECT COSTS. - Definition of project costs and behavior. - Concept overhead. - Control of costs.</p>

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Individual essay on specific matters	Work	No	Yes	20,00
Group work essay through practical case resolution	Work	No	Yes	20,00
The structure of the final exam consists of a 30 min test of duration and questions of theoretical development of 2 h duration. The test will have a weight of 25% and development questions 75% of the final exam. In those cases in which the student has n	Written exam	Yes	Yes	60,00
TOTAL				100,00
Observations				
<p>The structure of the final exam consists of a 30-minute test of duration and theoretical development questions of 2 hours duration. The test will have a weight of 25% and the development questions 75% of the final exam.</p> <p>According to the new regulations, if a student does not obtain the minimum grade required to pass an evaluation test, the overall grade for the subject will be the lowest value between 4.9 and the weighted average of all the evaluation tests (article 35), not the written exam grade.</p> <p>The grading of coursework is respected until the last official course call.</p>				
Observations for part-time students				
Part-time students will be evaluated according to the Regulations of the University of Cantabria.				

8. BIBLIOGRAPHY AND TEACHING MATERIALS
BASIC
La redacción del proyecto. Aspectos previos y metodología. Fernando Cañizal Berini, M ^a Antonia Pérez Hernando
Manual de diseño de explotaciones mineras. M. Bustillo Revuelta, C. López Jimeno.
Manual de evaluación técnico-económica de proyectos mineros de inversión. IGME