

GUÍA DOCENTE ABREVIADA DE LA ASIGNATURA

595 - Economic Analysis in Engineering

Máster Universitario en Ingeniería de Caminos, Canales y Puertos

Curso Académico 2025-2026

1. DATOS IDENTIFICATIVOS					
Título/s	Máster Universitario en Ingeniería de Caminos, Canales y Puertos			Tipología v Curso	Obligatoria. Curso 1
Centro	Escuela Técnica Superior de Ingenieros de Caminos, Canales y Puertos				
Módulo / materia	ANÁLISIS ECONÓMICO Y FINANCIERO EN LA INGENIERÍA TECNOLOGÍA ESPECÍFICA EN PLANIFICACIÓN, EXPLOTACIÓN Y GESTIÓN				
Código y denominación	595 - Economic Analysis in Engineering				
Créditos ECTS	4,5	Cuatrimestre	Cuatrimestral (1)		
Web					
Idioma de impartición	Inglés	English friendly	Sí	Forma de impartición	Presencial

Departamento	DPTO. ADMINISTRACION DE EMPRESAS				
Profesor responsable	PEDRO DIAZ SIMAL				
E-mail	pedro.diaz@unican.es				
Número despacho	Edificio IH Cantabria. Planta: + 2. DESPACHO (228)				
Otros profesores					

3.1 RESULTADOS DE APRENDIZAJE
- Master the economic language applied to engineering, incorporating the tools of economic analysis into their discourse.
- Determine the advantages and disadvantages of different organisational models specific to companies.
- Compare different financial situations of the company, as well as investment possibilities, analysing their suitability and viability.
- Describe the functioning of the economic sectors closest to engineering and model the economic behaviour of the technical decisions of the company. economic behaviour of the technical decisions of the engineer. of the engineer.

4. OBJETIVOS

Master the economic language applied to engineering, incorporating the tools of economic analysis into their discourse.

Determine the advantages and disadvantages of different organisational models specific to companies.

Compare different financial situations of the company, as well as investment possibilities, analysing their suitability and viability.

Describe the functioning of the economic sectors closest to engineering and model the economic behaviour of the technical decisions of the company. economic behaviour of the technical decisions of the engineer. of the engineer.

6. ORGANIZACIÓN DOCENTE
CONTENIDOS

1	Economics applied to engineering. Sectorial Economics. Micro and Macro Analysis. Input Output Analysis, National Accounts. Economic Growth
2	Economic engineering. Financial analysis and its application to engineering.analytical tools for decision-making. Risk analysis, decision theory, strategic game theory.

7. MÉTODOS DE LA EVALUACIÓN

Descripción	Tipología	Eval. Final	Recuper.	%
Class practice	Trabajo	No	Sí	30,00
Exam	Examen escrito	Sí	Sí	60,00
Tests del curso	Actividad de evaluación con soporte virtual	No	No	10,00
TOTAL				100,00

Observaciones

In relation to the agreements adopted at the ordinary session of the School Board held on 10 June 2010, it is established that, with regard to the assessment activities that are recoverable,

-As a general criterion and unless otherwise specified in this guide, a student may only sit for the recovery of those activities that he/she has not passed, that is to say, those in which he/she has not obtained a minimum mark of five out of ten.

- As a general criterion and unless otherwise specified in this guide, in the recovery period the procedure for the evaluation of activity will be the same.

- As a general criterion and unless otherwise specified in this guide, in the recovery period the assessment procedure for an activity will be the same as that of the activity that gives rise to it. Note: According to Royal Decree RD 1125 /2003 on the European credit system and the grading system for official university degrees valid throughout the national territory, the results obtained by the student in each of the subjects of the syllabus will be graded according to the following numerical scale from 0 to 10, to one decimal place, to which the corresponding qualitative grade may be added: 0.0-4.9: Failure (SS). 5.0-6.9: Pass (AP). 7,0-8,9: Good (NT). 9.0-10: Outstanding (SB).

Given the uncertain situation that the social distancing measures established by the health authorities do not allow for any evaluation activity to be carried out in person in the classroom for all the students enrolled, these may be adapted to be carried out virtually, mainly through the use of the MOODLE platform.

If necessary, all the necessary precautions and actions will be taken to ensure the correct development of these activities.

Crterios de evaluación para estudiantes a tiempo parcial

Part-time students will attend the exam and hand in the equivalent work, which will be adapted in terms of content and length.

8. BIBLIOGRAFÍA Y MATERIALES DIDÁCTICOS

BÁSICA

Principles of Economics: Timothy Taylor, Saint Paul, Minnesota Steven A. Greenlaw, Fredericksburg, Virginia Eric Dodge, Hanover, Indiana 2017, Publisher: OpenStax

Introduction to Business Lawrence J. Gitman Carl McDaniel Amit Shah Monique Reece Linda Koffel Bethann Talsma James C. Hyatt 2018 Publisher: OpenStax

Fundamentals of Engineering Economics Chan S. Park Pearson Ed 2ª ed o later.

Esta es la Guía Docente abreviada de la asignatura. Tienes también publicada en la Web la información más detallada de la asignatura en la Guía Docente Completa.