SUBJECT TEACHING GUIDE

G996 - Industrial Production and Organisation

Degree in Industrial Electronic Engineering and Automatic Control Systems

Academic year 2026-2027

1. IDENTIFYING DATA					
Degree	Degree in Industrial Electronic Engineering and Automatic Control Systems			Type and Year	Compulsory. Year 4
Faculty	School of Industrial Engineering and Telecommunications				
Discipline	Subject Area: Industrial Organisation and Production Module in Common with the Industrial Branch				
Course unit title and code	G996 - Industrial Production and Organisation				
Number of ECTS credits allocated	6	Term		Semester based (1)	
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS
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Other lecturers	

3.1 LEARNING OUTCOMES

- - Obtaining knowledge about processes and technologies used in the manufacturing of electrical machines, MEMS and electronic integrated circuits..
-The purpose of the course is to teach the student the principal technologies and methods applied in Industrial Organization.

4. OBJECTIVES

The students should know different technologies and techniques used in the manufacturing processes of electronic integrated circuits, MEMS systems, and electrical machines.
The students should be able to select and use appropriate tools and equipment to control of manufacturing processes.
Regarding the content of the Subject under the profile of Administration of Companies , the students know the criteria and the tools in order to perform an economic and financial diagnosis of the company and develop actions that allow the improvement of the competitiveness.
Regarding the content of the Subject under the profile of Production Management, the students must know the criteria and the tools of Lean Procurement in order to obtain the balance load - capacity.

6. SUBJECT PROGRAM

CONTENTS	
1	Manufacturing processes of electrical machines.
2	Manufacturing processes of electronic integrated circuits, MEMS and integration processes.
3	Quality Management
4	Stocks Management
5	Aggregated Planning
6	Short and medium term operations planning. MRP, JIT.
7	Production Control.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Exam 1 (Written examination).	Written exam	No	Yes	40,00
Exam 2 (Written examination).	Written exam	Yes	Yes	40,00
Project (Written work with oral exposition)	Work	No	No	10,00
Daily work/activities	Work	No	No	10,00
TOTAL				100,00

Observations

In order to pass the subjet must be met each and every one of the following requirements:
1) The mark of Exam 1 must be higher than or equal to 4.
2) The mark of Exam 2 must be higher than or equal to 4.
3)The mark calculated based on the following formula, 0.4*Mark of Exam 1 + 0.1 * Mark of Project + 0.4*Mark of Exam 2+0.1*Mark Works 2 , must be higher or equal to 5.

'The remote evaluation of the works, laboratory practical exercises and written tests is foreseen, in the case of a new health alert by COVID-19 making it impossible to carry out the evaluation in person.'

Observations for part-time students

The continuous evaluation is replaced by works and exams in the final evaluation.

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Fundamentos de manufactura moderna. Autor: Mikell P. Groover.
Precision Engineering. Autor: Venkatesh V.C..
Mems & Microsystems. Design and Manufacture. Autor: Tai-Ran Hsu.
Mechanical Design of Electric Motors. Autor: Wei Tong.
Análisis del Balance: Editorial Deusto.
Aspectos Tácticos de la Planificación de Operaciones (Tomo II): Autor: Machuca.
Apuntes propios de la Asignatura.