

## SUBJECT TEACHING GUIDE

### G760 - Manufacturing Processes II

### Degree in Mechanical Engineering

Academic year 2023-2024

1. IDENTIFYING DATA					
Degree	Degree in Mechanical Engineering			Type and Year	Optional. Year 4
Faculty	School of Industrial Engineering and Telecommunications				
Discipline	Subject Area: Design and Manufacturing Optional Module: Mechanical Engineering				
Course unit title and code	G760 - Manufacturing Processes II				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS				
Name of lecturer	MARIANO LAZARO URRUTIA				
E-mail	mariano.lazaro@unican.es				
Office	E.T.S. de Ingenieros Industriales y de Telecomunicación. Planta: - 3. DESPACHO (S3042)				
Other lecturers					

### 3.1 LEARNING OUTCOMES

- The students should know about systems in manufacturing processes by CNC programming.
- The students should know about systems in manufacturing processes by CAD-CAM.

### 4. OBJECTIVES

- Ability to develop a program in ISO code for machining of parts in CNC machines by the manual system.
- Ability to develop a program in ISO code for machining of parts in CNC machines by the automatic system (CAD-CAM).
- Ability to transmit and launch programs in CNC machine.

## 6. COURSE ORGANIZATION

CONTENTS	
1	Cutting theory and tool-machine
2	Programming machine tools by CNC
3	Automatic programming CAD-CAM

## 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Description Laboratory evaluation	Laboratory evaluation	No	Yes	100,00
TOTAL				100,00
Observations				
'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				
Students enrolled on a part-time basis will be evaluated by an examination in the laboratory on the dates of the official calls.				

## 8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC
El Control Numerico en Maquinas Herramientas por Julian Muñoz Marqué.