

## SUBJECT TEACHING GUIDE

G793 - Computer-Aided Design in Chemical Engineering

Degree in Chemical Engineering

Academic year 2019-2020

1. IDENTIFYING DATA					
Degree	Degree in Chemical Engineering			Type and Year	Optional. Year 4
Faculty	School of Industrial Engineering and Telecommunications				
Discipline	Subject Area: Option A: Fundamental Chemical Engineering Optional Module				
Course unit title and code	G793 - Computer-Aided Design in Chemical Engineering				
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. INGENIERIA GEOGRAFICA Y TECNICAS DE EXPRESION GRAFICA				
Name of lecturer	FERNANDO FADON SALAZAR				
E-mail	fernando.fadon@unican.es				
Office	E.T.S. de Ingenieros Industriales y de Telecomunicación. Planta: - 2. DESPACHO (S2004)				
Other lecturers	MARIA ESTHER VALLEJO LOBETE JOSE ENRIQUE CERON HOYOS				

### 3.1 LEARNING OUTCOMES

- Designing and obtaining graphic documentation required by 3D modeling, applied to the design of equipment and facilities related to chemical engineering, such as reactors, piping, etc.

### 4. OBJECTIVES

Graphically designing facilities and equipment related to Ind. Chemistry

Getting drawings and graphics of equipment and systems

Presentation and defense of the work performed.

6. COURSE ORGANIZATION	
CONTENTS	
1	CAD / CAM / CAE systems. Specialized CAD applications. Initiation into Autodesk Inventor
2	Representation of chemical facilities: exchangers, piping, boilers, reactors, etc. 3D modeling in Autodesk Inventor. Planning and development of work.
3	PLM (Product Lifecycle Management) Development work on chemical facilities: exchangers, piping, boilers, reactors, etc. Presentation and defense of work.

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Personal works	Laboratory evaluation	No	Yes	30,00
Works	Work	No	Yes	70,00
TOTAL				100,00
Observations				
Observations for part-time students				

8. BIBLIOGRAPHY AND TEACHING MATERIALS				
BASIC				
Diseño mecánico con Autodesk Inventor paso a paso. 2010	Carolina Senabre Blanes	Editor	Editorial Club Universitario,	
Mecánica de fluidos Autor	Robert L. Mott Traducido por	Javier Enríquez Brito	Editor	Pearson Educación, 2006