



1. General information

Course: MANUFACTURING SYSTEM AND INDUSTRIAL MANAGEMENT**Type:** CORE COURSE**Degree:** 412 - UNDERGRADUATE DEGREE PROGRAMME IN ELECTRICAL ENGINEERING**Center:** 106 - SCHOOL OF MINING AND INDUSTRIAL ENGINEERING**Year:** 2**Main language:** Spanish**Use of additional languages:****Web site:****Code:** 56319**ECTS credits:** 6**Academic year:** 2022-23**Group(s):** 55 56**Duration:** First semester**Second language:** English**English Friendly:** Y**Bilingual:** N

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2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

Not established

4. Degree competences achieved in this course

Course competences

Code	Description
CB02	Apply their knowledge to their job or vocation in a professional manner and show that they have the competences to construct and justify arguments and solve problems within their subject area.
CB03	Be able to gather and process relevant information (usually within their subject area) to give opinions, including reflections on relevant social, scientific or ethical issues.
CB04	Transmit information, ideas, problems and solutions for both specialist and non-specialist audiences.
CB05	Have developed the necessary learning abilities to carry on studying autonomously
CEC09	Basic knowledge of production and manufacturing systems.
CEC11	Applied knowledge of company organisation.
CG03	Knowledge of basic and technological subjects to facilitate learning of new methods and theories, and provide versatility to adapt to new situations.
CG04	Ability to solve problems with initiative, decision-making, creativity, critical reasoning and to communicate and transmit knowledge, skills and abilities in the field of industrial engineering.
CG06	Ability to handle specifications, regulations and mandatory standards.
CG08	Ability to apply quality principles and methods.
CG09	Organisational and planning skills in the field of companies and other institutions and organisations.
CG10	Capacity to work in a multilingual and multidisciplinary environment.
CT02	Knowledge and application of information and communication technology.
CT03	Ability to communicate correctly in both spoken and written form.

5. Objectives or Learning Outcomes

Course learning outcomes

Description

6. Units / Contents

Unit 1:

Unit 2:

Unit 3:

Unit 4:

7. Activities, Units/Modules and Methodology							
Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Combination of methods	CB02 CB03 CB04 CB05 CEC09 CEC11 CG03 CG04 CG06 CG08 CG09 CG10 CT02 CT03	1.76	44	N	-	
Class Attendance (practical) [ON-SITE]	Combination of methods	CB02 CB03 CB04 CB05 CEC09 CEC11 CG03 CG04 CG06 CG08 CG09 CG10 CT02 CT03	0.48	12	Y	Y	
Study and Exam Preparation [OFF-SITE]	Self-study	CB02 CB03 CB04 CB05 CEC09 CEC11 CG03 CG04 CG06 CG08 CG09 CG10 CT02 CT03	3.6	90	N	-	
Formative Assessment [ON-SITE]	Assessment tests	CB02 CB03 CB04 CB05 CEC09 CEC11 CG03 CG04 CG06 CG08 CG09 CG10 CT02 CT03	0.16	4	Y	Y	
Total:			6	150			
Total credits of in-class work: 2.4			Total class time hours: 60				
Total credits of out of class work: 3.6			Total hours of out of class work: 90				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System			
Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Laboratory sessions	30.00%	30.00%	
Final test	70.00%	70.00%	
Total:	100.00%	100.00%	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours
Class Attendance (theory) [PRESENCIAL][Combination of methods]	44
Class Attendance (practical) [PRESENCIAL][Combination of methods]	12
Study and Exam Preparation [AUTÓNOMA][Self-study]	90
Formative Assessment [PRESENCIAL][Assessment tests]	4
Global activity	
Activities	hours
Formative Assessment [PRESENCIAL][Assessment tests]	4
Study and Exam Preparation [AUTÓNOMA][Self-study]	90
Class Attendance (theory) [PRESENCIAL][Combination of methods]	44
Class Attendance (practical) [PRESENCIAL][Combination of methods]	12
Total horas: 150	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Miranda González F. J., Rubio Lacoba S., Chamorro Mera A. y Bañegil Palacios T.M.	Manual de Dirección de Operaciones	Thomson		9788497322584	2004	
Alting, Leo	Manufacturing engineering processes	Marcel Dekker		0-8247-9129-0	1994	
Domínguez, J. A., Álvarez, M ^a , J., García, S. Domínguez, M. A., Ruiz, A.	Dirección de Operaciones. Aspectos Estratégicos en la producción y los servicios	McGraw-Hill		9788448118488	2001	
Heizer J. y Renden B.	Dirección de la Producción: Decisiones Estratégicas	Prentice Hall		9788483223604	2001	
Domínguez, J. A., Álvarez, M ^a , J., García, S. Domínguez, M. A., Ruiz, A.	Dirección de Operaciones. Aspectos Tácticos y operativos en la producción y los servicios	McGraw-Hill		8448130847	2001	
Heizer J. y Renden B.	Dirección de la Producción: Decisiones Tácticas	Prentice Hall		9788483223611	2022	

S. F. Krar and A. F. Check	Tecnología de las Maquinas	Marcombo	84-267-1329-7	2002
S. Kalpakjian, S.R. Schmid	Herramientas: Manufacturing Engineering and Technology, 7th Ed	Pearson Education Inc., Prentice Hall	0-13-148965-	2014
Schroeder, R. G.	Administración de Operaciones	McGraw-Hill	9789701000885	1992
Groover, M.P.	Fundamentals of modern manufacturing: materials, processes, and systems	Wiley		2007