

UNIVERSIDAD DE CASTILLA - LA MANCHA **GUÍA DOCENTE**

1. General information

Course: WORK PLACEMENT II Type: ELECTIVE

Degree: 344 - CHEMICAL ENGINEERING

Center: 1 - FACULTY OF SCIENCE AND CHEMICAL TECHNOLOGY

Year: 4

Main language: Spanish Use of additional

Edifico Enrique Costa /

Despacho 14

languages:

INGENIERÍA QUÍMICA

Web site: http://www.uclm.es/cr/fquimicas/menu_principal/06-movilidad/practicas_empresa/index.htm

Academic year: 2023-24 Group(s):21

Code: 57743

Duration: First semester Second language: English

English Friendly: Y

ECTS credits: 6

Bilingual: N

Lecturer: CARMEN MARIA F	ecturer: CARMEN MARIA FERNANDEZ MARCHANTE - Group(s): 21								
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ŀ	Lecturer: M ^a JESUS RAMOS MARCOS - Group	(s)	: 2	1

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2. Pre-Requisites

To have passed at least 120 credits of the Degree in Chemical Engineering

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

Subject oriented to put into practice in the real working environment the theoretical training received at the University.

4. Degree competences achieved in this course

Description

Course competences

Code

CB03

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CB01	Prove that they have acquired and understood knowledge in a subject area that derives from general secondary education and is
CBOT	appropriate to a level based on advanced course books, and includes updated and cutting-edge aspects of their field of knowledge.

Apply their knowledge to their job or vocation in a professional manner and show that they have the competences to construct and CB02

justify arguments and solve problems within their subject area. 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 E16 Basic knowledge and application of environmental technologies and sustainability.

E17 Applied knowledge of business organization.

Knowledge about material and energy balances, biotechnology, material transfer, separation operations, chemical reaction E19

engineering, reactor design, and recovery and transformation of raw materials and energy resources. F20 Capacity for analysis, design, simulation and optimization of processes and products. E22 Ability to design, manage and operate simulation, control and instrumentation procedures of chemical processes. Knowledge and / or ability to handle chemical analysis equipment and property characterization, and the basic instruments of a E24 chemical laboratory. F26 Knowledge about integration of processes and operations Knowledge and capacity of management and specification of the main industrial equipment in the area of knowledge of chemical E27 E28 Ability to compare and select between technological alternatives F29 Ability to perform economic evaluations and establish the economic viability of a project Knowledge of the theory and capacity of use of the procedures of change of scale E30 Ability to manage information sources in chemical engineering. Properly handle the terminology of the profession in Spanish and E32 English in the oral and written records E33 Knowledge of the fundamentals and techniques of environmental analysis Capacity for calculation and design, and knowledge about the operation, of water treatment processes including human supply, E34 industrial conditioning and the treatment of urban and industrial waste effluents. E35 Capacity for calculation and design, and knowledge about the operation, of gas treatment processes F36 Capacity for calculation and design, and knowledge on the operation, of industrial waste management systems E37 Capacity for calculation and design, and knowledge about the operation, of urban solid waste management systems Capacity for calculation and design, and knowledge about the mode of operation, of remediation processes of contaminated soils E38 Knowledge of the basic norms in matters of occupational health and safety, especially those that are applicable in the Industry and in E40 the Chemical Laboratories Ability to evaluate and implement quality criteria in the chemical industry and chemical laboratories E41 E44 Capacity to handle process simulators in Chemical Engineering Ability to write, sign and develop projects in the field of chemical engineering that are intended, according to the knowledge acquired as established in section 5 of order CIN / 351/2009 of February 9, construction, reform, repair, conservation, demolition, manufacture, G01 installation, assembly or operation of: structures, mechanical equipment, energy installations, electrical and electronic installations, industrial facilities and processes and manufacturing and automation processes. G02 Capacity for the direction, of the activities object of the engineering projects described in the competence G1. Knowledge in basic and technological subjects, which enables them to learn new methods and theories, and give them versatility to G03 adapt to new situations. Ability to solve problems with initiative, decision making, creativity, critical reasoning and to communicate and transmit knowledge, skills G04 and abilities in the field of Chemical Engineering. Knowledge for the realization of measurements, calculations, valuations, appraisals, surveys, studies, reports, work plans and other G05 analogous works. Ability to handle specifications, regulations and mandatory standards. G06 G07 Ability to analyze and assess the social and environmental impact of technical solutions. G08 Ability to apply the principles and methods of quality. Capacity for organization and planning in the field of the company, and other institutions and organizations. G09 G10 Ability to work in a multilingual and multidisciplinary environment. Knowledge, understanding and ability to apply the necessary legislation in the exercise of the profession of Industrial Technical G11 Engineer G14 Proper oral and written communication G15 ethical commitment and professional ethics G16 Management capacity and information planning G17 Capacity for critical thinking and decision making G18 Synthesis capacity G19 Capacity for teamwork Ability to analyze and solve problems G20 G21 Ability to learn and work autonomously G22 Ability to apply theoretical knowledge to practice G23 Creativity and initiative G24 Leadership

5. Objectives or Learning Outcomes

Course learning outcomes

Description

G25

G26

To have the ability to work in a team, responsibility in performance and responsible management and leadership strategies.

Recognition of diversity, multiculturalism and gender equality

To have the skill for practical work, being able to develop it in coordination with other professionals.

Obtaining skills in interpersonal relationships.

To be able to analyze and assess the social and environmental impact of technical solutions

To know some of the main professional activities of the chemical industry sector.

To know the applications of chemical engineering in processes and energy engineering.

To develop in the student the capacity of initiative to raise and solve specific problems of Organic Chemistry, as well as to interpret the results obtained.

To acquire the capacity for the ethical exercise of the profession and become socially aware of their reports and impact of their decisions.

6. Units / Contents

Unit 1: Industrial training related to Environmental Engineering

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Practicum [ON-SITE]	Guided or supervised wor	CB01 CB02 CB03 CB04 CB05 E16 E17 E19 E20 E22 E24 E26 E27 E28 E29 E30 E32 E33 E34 E35 E36 E37 E38 E40 E41 E44 G01 G02 G03 G04 G05 G06 G07 G08 G09 G10 G11 G14 G15 G16 G17 G18 G19 G20 G21 G22 G23 G24 G25 G26	4.8	120	Υ	Y	Tutored internships. Presential Training
Writing of reports or projects [OFF-SITE]	Self-study	CB01 CB02 CB03 CB04 CB05 E16 E17 E19 E20 E22 E24 E26 E27 E28 E29 E30 E32 E33 E34 E35 E36 E37 E38 E40 E41 E44 G01 G02 G03 G04 G05 G06 G07 G08 G09 G10 G11 G14 G15 G16 G17 G18 G19 G20 G21 G22 G23 G24 G25 G26	1.1	27.5	Y	Y	Preparation of internship report
Final test [ON-SITE]	Assessment tests	CB01 CB02 CB03 CB04 CB05 E16 E17 E19 E20 E22 E24 E26 E27 E28 E29 E30 E32 E33 E34 E35 E36 E37 E38 E40 E41 E44 G01 G02 G03 G04 G05 G06 G07 G08 G09 G10 G11 G14 G15 G16 G17 G18 G19 G20 G21 G22 G23 G24 G25 G26	0.1	2.5	Υ	Υ	Oral presentation of the work done
		Total:	_	150			Tatal along time house, 400 5
	To	Total credits of in-class work: 4.9 stal credits of out of class work: 1.1				7	Total class time hours: 122.5 Total hours of out of class work: 27.5

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	B. Evaluation criteria and Grading System								
Evaluation System	Continuous assessment	Non- continuous evaluation*	Description						
Final test	10.00%	17 () ()()%	Evaluation by means of critical oral presentation of the internship in front of an ad hoc commission of the FCYTQ.						
Self Evaluation and Co-evaluation	90.00%	190 00%	Attendance with good results followed by the elaboration of the internship report, and evaluation by both tutors.						
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).

Evaluation criteria for the final exam:

Continuous assessment:

The evaluation process will be carried out both by the tutor of the external institution and by the tutor of the University. In case the report of the external institution's tutor is unfavorable (less than four points out of ten), the evaluation of the external internship will be negative, and the student will have to carry out a new internship period. In case the external institution tutor's report is favorable, the University tutor will evaluate the internship report submitted by the student. If the evaluation is negative (less than four points out of 10), the student may undergo a new evaluation of the internship report at the next evaluation call. The final grade for external internships will be given by the University tutor, and is established as follows:

Overall evaluation by tutors (90%)

Critical evaluation through final presentation in front of a committee (10%).

Non-continuous evaluation:

Evaluation criteria not defined

Specifications for the resit/retake exam:

Activity not recoverable in extraordinary call if the evaluation of tutors (90%) is not passed in the ordinary call.

Specifications for the second resit / retake exam:

 $Activity \ not \ recoverable \ in \ extraordinary \ call \ if \ the \ evaluation \ of \ tutors \ (90\%) \ is \ not \ passed \ in \ the \ ordinary \ call.$

9. Assignments, course calendar and important dates					
Not related to the syllabus/contents					
Hours	hours				
Practicum [PRESENCIAL][Guided or supervised work]	120				
Writing of reports or projects [AUTÓNOMA][Self-study]	27.5				
Final test [PRESENCIAL][Assessment tests]	2.5				
Unit 1 (de 1): Industrial training related to Environmental Engineering					

Activities	Hours
Practicum [PRESENCIAL][Guided or supervised work]	120
Writing of reports or projects [AUTÓNOMA][Self-study]	27.5
Final test [PRESENCIAL][Assessment tests]	2.5
Global activity	
Activities	hours
Activities Writing of reports or projects [AUTÓNOMA][Self-study]	hours 55
Writing of reports or projects [AUTÓNOMA][Self-study]	55

10. Bibliography and Sources							
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description	
No se ha introducido ningún elemento bibliográfico							