

# **COURSE DATA**

Data Subject		
Code	34779	
Name	Company Internships Degree in Chemical Engineering	
Cycle	Grade	
ECTS Credits	12.0	
Academic year	2020 - 2021	

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Degree	Center	Acad. Period			
		year			
1401 - Degree in Chemical Engineering	School of Engineering	4 Annual			

Subject-matter		
Degree	Subject-matter	Character
1401 - Degree in Chemical Engineering	21 - External internship in chemistry engineering	External Practice

#### Coordination

Name	Department
CHAFER ORTEGA, AMPARO	245 - Chemical Engineering
LLOPIS ALONSO, FRANCISCO	245 - Chemical Engineering

# SUMMARY

The external practice aims to strengthen the training of university students in the operational areas of Institutions or Companies for professionals with a real insight into the problems and their interrelation, preparing future incorporation into productive work or research.

The University may establish agreements with institutions or companies, practical cooperation programs in which arrange their participation in specialized training and practical training required for students.

External practices programs will be established for the training of students in the final year of Degree and Master of the ETSE and must be made so as to suit the number of credits established.

The entity and activity to be performed will be assigned from a list of institutions and companies with the agreement established with the University of Valencia through ADEIT, or others with whom the student to establish a contact, subject to approval.



Dedication scheduled for this course is: tasks at the center where the practice is carried out 260 hours; meetings with university tutor 5 hours; attendance at courses and seminars 15 hours and report about the knowledge and the experience gained at the practice center 20 hours.

## **PREVIOUS KNOWLEDGE**

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

## Other requirements

The performance of the external practices required to have fully overcome the first two courses and 50% of the credits of the third.

## COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

### 1401 - Degree in Chemical Engineering

- G4 Ability to solve problems with initiative, decision-making skills, creativity and critical reasoning and to communicate and transmit knowledge, abilities and skills in the field of industrial engineering.
- G5 Knowledge to carry out measurements, calculations, assessments, appraisals, surveys, studies, reports, work plans and analogous work.
- G6 Ability to deal with specifications, regulations and mandatory standards.
- G7 Ability to analyse and assess the social and environmental impact of technical solutions.
- G8 Ability to apply the principles and methods of quality control.
- G9 Ability to organise and plan work in companies and in other institutions and organisations.
- G10 Ability to work in a multilingual and multidisciplinary environment.
- G11 Knowledge, understanding and ability to apply the necessary legislation for practising professionally as a qualified industrial technical engineer.

## **LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)**

- Know how to detect needs and situations requiring professional intervention (Outcomes G4, G5).
- Know how to identify useful resources that can carry out this procedure (Outcomes G4, G5).
- Know how to apply and develop this intervention (Outcomes G4, G5, G6).
- Acquire appropriate professional skills (Outcomes G7).



- Develop skills of cooperation with other professionals (Outcomes G9).
- Make contact with the specific aspects of professional practice (Outcomes G8, G11).
- Ability to work in team (Outcomes G10).
- Learn to manage different customer relationships (Outcomes G7, G8, G9).
- Be aware of the ethical component and the ethical principles of professional practice (Outcomes G11).
- Become aware of the fundamental rights and equality between men and women in the workplace (Outcomes G9).

# **DESCRIPTION OF CONTENTS**

#### 1. External Practices

The contents of the course will be different depending on the specific practice that is to be carried out. The following activities are generic and it can be performed during external practices:

Design, simulation, planning, scheduling and optimization of industrial processes

Production and control of chemical processes

Exploitation and industrialization of natural resources

Technologies prevention and correction of pollution

**Environmental Laboratory** 

WWTP: Wastewater Treatment Plants

Aspects of legal, economic and financial Engineering

Quality control, hygiene and safety

Transformation, arbitration, expertise, pricing, application and manufacturing of chemicals

## WORKLOAD

ACTIVITY	Hours	% To be attended
Internship		100
Internship	260,00	0
TOTAL	260,00	

# TEACHING METHODOLOGY

• Set of tasks in the center where the practice is performed, which shall include an integration of the student in the working environment



- Class work while attending seminars or specific courses.
- Student class work: preparing reports and presentation of results.
- Individual or group tutoring.

(G4, G5, G6, G7, G8, G9, G10, G11)

## **EVALUATION**

The evaluation will take into account:

- a) The report of the guardian of the company, will attest: (40%)
- Compliance with the estimated times.
- The ability to integrate into the working group.
- The assessment of the activity performed by the student.
- b) The final report of the activities undertaken in the company, which objectively determine the difficulty of the tasks and the relation to the matters of degree. Contain at least the following (30%):
- Relationship of practical training studies conducted
- Input from the student at the center of practice
- New knowledge and skills acquired
- Relationship with center personnel practices and methodology

work

- c) Courses or seminars you have attended the student, both taught by the university as the training center. (10%)
- d) Interview the student with the teacher-tutor in college practices. Other meritorious aspects. (20%)

Both the final interview and the report will assess the acquisition of competences G4, G5, G6, G7, G8, G10, G11.

The realization of the total hours of practice is a prerequisite for the evaluation unless force majeure.

The subject is considered overcome when the mark obtained is equal to or greater than 5 (over 10).

External practices must take into account the ETSE-UV specific regulation of external practices that can be found in <a href="http://www.uv.es/etse">http://www.uv.es/etse</a>



Anyhow, the evaluation system will be based on the guides stated in the "Reglament d'Avaluació i Qualificació de la Universitat de València per a Graus i Màsters" (https://goo.gl/UdDYS2).

# **ADDENDUM COVID-19**

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

Addenda COVID-19

#### **Contents**

The contents initially collected in the Teaching Guide are maintained.

### Volume of work

The different activities described in the Teaching Guide are maintained with the planned dedication.

## **Teaching methodology**

### **Evaluation**

The evaluation system described in the Teaching Guide of the subject in which the different evaluable activities have been specified as well as their contribution to the final qualification of the subject is maintained.

### **Bibliography**