COURSE DATA

Data Subject	
Code	36895
Name	Prácticas externas-Mención Dual
Cycle	Grade
ECTS Credits	12.0
Academic year	2024 - 2025

Study (s)

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

Subject-matter

Degree	Subject-matter	Character
1401 - Degree in Chemical Engineering	27 - External internships - Dual Mention	External Practice
1401 - Degree in Chemical Engineering	27 - External internships-Dual Mention	External Practice

Coordination

Name	Department
LLOPIS ALONSO, FRANCISCO	245 - Chemical Engineering
MARTINEZ SORIA, VICENTE	245 - Chemical Engineering
PASTOR ALCAÑIZ, LAURA	245 - Chemical Engineering

SUMMARY

The aim of these external internships is to strengthen the training of university students in the operational areas of institutions or companies in order to obtain professionals with a real vision of the problems and their interrelations, preparing their future incorporation into productive work or research.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

In order to successfully take the course, it is advisable that the student has passed the previous courses of the degree.
In order to be able to take the course, the student must have been selected to enroll in the option of Degree in Chemical Engineering- Dual Mention.

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

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

Skills:

HAB1. Knowledge to perform measurements, calculations, valuations, appraisals, appraisals, surveys, studies, reports, work plans and other similar work.

HAB2. Ability to handle specifications, regulations and mandatory standards.

HAB3. Ability to apply quality principles and methods.

HAB4. Ability to organize and plan within the company and other institutions and organizations.

Competences:

COMP3. 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.

COMP4. Ability to analyze and assess the social and environmental impact of technical solutions.

COMP5. Ability to work in a multilingual and multidisciplinary environment.

COMP6. Knowledge, understanding and ability to apply the necessary legislation in the exercise of the profession of Industrial Technical Engineer.

COMP15. Distinguish and value advanced techniques and knowledge of processes, services or projects in companies of the chemical engineering sector. Distinguish and value advanced concepts associated with the organization, work planning, innovation and knowledge transfer of the company.

Transversal Competencies:

CT1. Contribute to the design, development and implementation of solutions that respond to social demands, taking into account the Sustainable Development Goals as a reference.

CT2. Demonstrate critical and self-critical reasoning in the field of the degree, considering aspects such as professional ethics, moral values and the social implications of the different activities carried out.

CT3. Collaborate effectively in work teams, assuming responsibilities and leadership roles and contributing to collective improvement and development.

CT4. Act with autonomy in learning, making informed decisions in different contexts, making judgments based on experimentation and analysis and transferring knowledge to new situations.

CT5. Know how to communicate effectively, both orally and in writing, adapting to the characteristics of the situation and the audience.

CT6. Propose creative and innovative solutions to complex situations or problems, specific to the field of knowledge, to respond to various professional and social needs.

CT7. Know and understand, from within the scope of the degree, the inequalities based on sex and gender in society; integrate the different needs and preferences based on sex and gender in the design of solutions and problem solving.

DESCRIPTION OF CONTENTS

1. CONTENTS

The general contents of these internships are:
-To get to know the working world
-Applying the skills acquired during the course of study to professional activity.
-To work in a group in a work environment.
-To facilitate the employability of the graduates.
-To value the acquired training for employability.
The contents of the subject will be different depending on the specific internship to be carried out. In particular there will be practices related to one or more of the following topics:
-Transformation, application and manufacture of chemical substances.
-Processing and industrialization of natural resources
Pollution prevention and remediation technologies -Design, simulation and optimization of the use of natural resources -Pollution prevention and remediation technologies
-Design, simulation and optimization of industrial processes -Environmental laboratory
-Environmental laboratory
-Legal, economical and financial engineering aspects
-Quality control, hygiene and safety

WORKLOAD

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

TEACHING METHODOLOGY

Within the programming of the subjects of the Dual Mention, the types of teaching activities that will be developed will be mainly:

MD5.- Attendance to courses and seminars: optional activity proposed, where appropriate, by the student, the university tutor or the company tutor. In case it is not carried out, the dedication will be complemented with attendance to the internship center.

MD7.- Lectures on the contents of each subject. In them, the topics will be developed providing a global and integrating vision, analyzing in greater detail the key aspects and of greater complexity, encouraging at all times, the participation of the student.

MD8.- Seminars or workshops.

MD10.- Tasks in the center where the internship is performed, which should include an integration of the student in the work environment of the company, receiving training from the company and providing solutions and initiative.

MD11.- Scheduled tutorials (individual or group).

MD12.- Practical activities that complement the theoretical activities in order to apply the basic concepts and expand them with the knowledge and experience acquired during the realization of the proposed work. Some of these activities will be carried out in small groups.

The company will appoint a company tutor and in turn the ETSE-UV will appoint an academic tutor. The coordination will be:

- Company tutor-academic tutor

- Company tutor - student

- Academic tutor-student

It is proposed that meetings be held, preferably face-to-face, with the following frequency:

- Company tutor-academic tutor: meetings will be held at the beginning and end of the training period. During this period, at least one meeting per month will be planned.

- Company tutor-student: at least one meeting at the beginning of the training, one every two weeks and at the end of the training period.

- Academic tutor-student: at least one meeting at the beginning of the training, biweekly and at the end of the training period.

The tutor appointed by the company must have higher education (Bachelor, Engineering or Degree) and obtain the venia docendi by the Academic Committee of the Degree (CAT).

The tutor in the company will be responsible for coordinating the incorporation of the student, managing the planned training with the people in the company in charge of providing it, all with sufficient time in advance of the student's entry. In addition, he/she will ensure that the person to be trained receives the necessary equipment: PPE, work clothes, locker room assignment, etc.

The company tutor will meet, at least every two weeks, with the student to supervise his/her development and evaluate his/her work, indicating the points to be improved and his/her strong points. He/she will previously meet with the people who are providing his/her training to gather the necessary information for these follow-up meetings.

The academic tutor will ensure compliance with the training plan by the company and by the student and will mediate in case of conflict between the student and the company. Specifically, the academic tutor, through the coordination mechanisms, will ensure that the student acquires the learning outcomes foreseen in the training plan.

EVALUATION

The evaluation of the students of the Dual Mention will be carried out through a continuous evaluation system in which both the company tutor and the academic tutor will be involved. The system is based on the evaluation of knowledge, skills and competences acquired by the students.

The activity developed will be evaluated by means of:

1. Surveys and follow-up reports that allow to know the acquisition of knowledge, skills and competences of the students.

2. A rubric agreed upon by the company tutor and the academic tutor, which will be specified in the training plan.

3. The meetings and follow-up interviews carried out between the tutors and the student in which the degree of compliance with the training plan and the competencies acquired will be verified.

4. A written or oral exam if required by the activities carried out in the company.

The process involves the feedback of results to the evaluated student by his/her company and university tutors on his/her development and performance, establishing possible measures of action for a process of continuous improvement and growth.

It will be evaluated taking into account:

(a) The company tutor's report (40%).

b) The final report of the activities carried out in the company, which will objectively determine the difficulty of the tasks performed and the relation with the subjects of the degree. (30%)

c) Courses or seminars attended by the student, both given by the university and by the internship center (10%).

d) Interview of the student with the professor-tutor of the internship at the university. Other meritorious aspects (20%).

REFERENCES

Basic

- La bibliografia serà específica del camp en el qual l´estudiant realitze l´estada i seleccionada pels tutors a suggeriment de l´empresa.

  La bibliografía será específica del campo en el cual el estudiante realice la estancia y seleccionada por los tutores a sugerencia de la empresa.

  The bibliography will be specific to the field in which the student performs the stay and selected by the tutors at the suggestion of the company.