

Academic year
2026/2027

Course Guide:
Work Placement



FACULTY OF
CHEMICAL SCIENCES



1. IDENTIFICATION

Degree Programme	Bachelor's Degree in Chemical Engineering.			Course Code	801555
Course Name	Work Placement			ECTS	6
Subject Area	Work Placement				
Module	Industrial Engineering				
Course Type	Optional	Year	Fourth year	Semester	Annual
Department	Chemical and Materials Engineering				

Staff Responsible

Activity	Lecturer	Email	Office
Vice Dean of Students and External Work Placements	M.LUZ MENA FERNÁNDEZ	VDestquim@ucm.es	Deanery
Coordinator of the Degree	MERCEDES OLIET PALÁ	moliet@ucm.es	QB 544

2. OBJECTIVES

General Objective

Work Placement is an optional 6-ECTS course that may be taken by students on the Bachelor's Degree in Chemical Engineering, generally in the final year of the degree programme. Its objective is to enable students to become familiar with, and engage with, the business sector and the chemical industry, while acquiring knowledge of new techniques, organisational structures and working procedures in professional settings and their connection with their academic training. Work placements carried out in Public Research Organisations (OPIs), with the aim of bringing students closer to the scientific environment, are also included within the scope of this course.

3. PREREQUISITES

Students must have passed at least 150 compulsory ECTS credits.

4. CONTENTS

Brief description

The work placement will consist of carrying out work in a company, industrial setting or official public-administration laboratory. Work placements carried out in Public Research Organisations (OPIs) are also included.

The specific content of the placement will depend on the type of organisation in which the placement assigned to the student is carried out. Under no circumstances may the work be exclusively bibliographical.

At the end of the placement, and within the period established by the responsible body, the student will submit a written report on the activities carried out during that period and will publicly defend both the report and the work undertaken.

Course programme

The variety of possible work-placement assignments makes it impossible to define a single programme covering the contents of all placements. In any case, the body responsible for work placements may, in view of an offer made by an industry or company, consider that the proposed activities to be undertaken by the student are not aligned with the descriptors of this course and are therefore not valid for the award of its 6 ECTS credits.

The offer, company details and the characteristics of the placement will be published on the Faculty of Chemical Sciences website or in the specific IT application developed by the University (GIPE), within the deadlines established each year by the responsible body.

5. COMPETENCES

General competences

CG4	Solve problems in the field of chemical engineering with initiative, decision-making ability, and critical reasoning.
CG5	Perform calculations, measurements, valuations, expert assessments, studies, and reports in the relevant field of knowledge.
CG7	Analyse and assess the social and environmental impact of the technical solutions identified for a given problem.

Specific competences

Work placements must allow professionally oriented specific competences and skills to be assessed. Students will develop those directly related to the area and type of industry or chemical company in which they carry out their work, provided that these have been specified in the corresponding proposal.

CE3	Use computer programs and operating systems. Use databases and software applications. Use databases and computer applications.
CE25	Interpret data from laboratory observations and measurements in terms of their significance and the theories that support them.

Cross-cutting competences

CT2	Demonstrate problem-solving ability.
CT3	Demonstrate organisational and planning ability.
CT4	Communicate in Spanish using standard audiovisual media.
CT5	Properly manage the available information (bibliography, specialised databases and resources accessible through the Internet).
CT6	Use computer tools and programs.
CT7	Work in a team, demonstrating interpersonal skills.
CT9	Demonstrate a professional ethical commitment.
CT13	Adapt to new situations and demonstrate initiative and creativity.



6. WORKLOAD DISTRIBUTION BY ACTIVITY

The minimum duration of the work placement is 200 hours.

Activity	In-class (hours)	Self-study (hours)	Credits
Practical work in the company or host organization	200	60	5
Tutorials	5	10	0,5
Preparation and delivery of the public defence	5	10	0,5
Total			6

7. METHODOLOGY

Work placements are designed so that the student's total workload is consistent with the number of credits assigned (6 ECTS). The student will carry out the tasks assigned by the company or host organisation and will prepare the report with the support of their academic tutor during tutorial activities. The student will also prepare the presentation for the public defence of the work placement before the Assessment Board.

The methodological procedure of each work proposal will be described in the methodology section of corresponding work-placement proposal.

The report, between 20 and 30 pages in length (1.5 line spacing), must include the following sections:

- The cover page, which is not included in the stipulated page limit, must include the student's personal details, the name of the entity/company where the placement was carried out and the Faculty tutor. It is also recommended that the placement have a title.
- Brief description of the company and its activities.
- Background and objectives of the work.
- Description of the tasks performed and the results obtained, with a critical and reasoned discussion of them.
- Conclusions on the overall work and a critical comment on the contribution that the placement has made to the student's training.
- Bibliography, where relevant.

Both the oral presentation and the written report must respect the confidentiality principles associated with the nature of the work, as established by the company tutor. This will be reflected in the results that the company tutor and the student decide to present. In some cases, if required by the company, the student may need to sign a confidentiality agreement.

8. EVALUATION

For final assessment, attendance at the placement and the presentation and defence of the report and the work carried out are compulsory. In order for the report to be authorised for public defence, it must have the approval of the academic tutor, who will have provided a report including the student's numerical grade.

The assessment and grading of the Work Placement will be carried out by an Assessment Board appointed for this purpose, averaging the grade awarded by the academic tutor, taking into account the favourable report of the company tutor and the written report (40%), and the grade awarded by the Assessment Board on the basis of the report, presentation and knowledge demonstrated by the student (60%). The Academic Board will consist of three lecturers from the area of Chemical Engineering, holding a doctoral degree and proposed by the Department of Chemical and Materials Engineering. The Board will be chaired by the lecturer with the highest academic rank and seniority. The grade will be based on an absolute mark out of 10 points, in accordance with the scale established in RD 1125/2003. The Vice-Dean for Students and External Work Placements will be responsible for completing and signing the course records by delegation of the Academic Board.

The student must submit a printed copy of the report to the Registry, addressed to the chair of the corresponding committee, within the deadlines established each year for this purpose and published in advance on the Faculty of Chemical Sciences website. The student must also upload it to the GIPE application within the same period.

Students who have not submitted the report by the specified date will be recorded as 'Not Presented' for grading purposes in the official records and may sit the extraordinary July assessment period.

The defence of the work placement will consist of an oral presentation in a public session, with a maximum duration of 10 minutes. The members of the assessment committee may then discuss the work with the student and ask any questions they consider appropriate, for a maximum period of 5 minutes.

If the student does not pass the work placement in either assessment period of the academic year, they must enrol again, should they wish to do so. However, a new allocation and completion of the placement will not be necessary, provided that the academic tutor agrees and the student requests it.

The regulations governing this course are published on the Faculty of Chemical Sciences website. They include the procedure and requirements to be met by companies or research centres.

<https://quimicas.ucm.es/practicas-en-empresa>