COURSE DATA

DATA SUBJECT

Code: 42942
Name: External internships
Cycle: Master's Degree
ECTS Credits: 7
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period

SUBJECT-MATTER

Degree	Subject-matter	Character

COORDINATION

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SUMMARY

Subject dedicated to internships in companies or agencies of the chemical industry or related, selected by the Academic Coordinating Commission of the Master. The students perform tasks in the laboratory using the studied experimental techniques, in order to enable them to implement their knowledge to the resolution of the real problems of the company or organization.

Regarding the Sustainable Development Goals (SDGs), it is expected that students will be able to know in this subject how to apply the knowledge learned to guarantee an inclusive, equitable, and quality education and promote learning opportunities for everyone (SDG 4), to acquire a special sensitivity for sustainable management of water (SDG 6), raw materials and energy sources (SDG 7), as well as for an environmentally friendly and sustainable development (SDGs 11 , 12, 13, 14 and 15), in addition to being able to design, select and/or develop efficient products, chemical processes, and analytical methodologies (SDG 7) that minimize their impact on the environment (SDGs 14 and 15), using alternative raw materials and reducing wastes (SDG 11).

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

Prior knowledge of chemistry and experimental work in the laboratory of chemistry taught in the degrees indicated in the recommended income profile for the student of the master's degree are required.

COMPETENCES / LEARNING OUTCOMES

2109 -

Be able to access the information required (databases, scientific articles, etc.) and to interpret and use it sensibly.

Be able to make quick and effective decisions in professional or research practice.

Poseer las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.

Realizar estudios realacionados con el análisis y/o la caracterización de sustancias químicas tales como: control de calidad, diseño de protocolos de trabajo para laboratorios, diseño e implementación de procesos de acreditación y validación, diseño y desarrollo de proyectos I+D+I, emisión de informes, certificaciones y/o dictámenes, etc.

Realizar las labores propias de su profesión, tanto en empresas privadas como en organismos públicos, llevando a cabo estudios basados en el uso de técnicas experimentales, en distintos ámbitos tales como: medioambiental, agroalimentario, sanitario (farmacéutico y clínico), cosmético y en general de la industria del sector químico y afines.

Saber aplicar los conocimientos adquiridos y ser capaces de resolver problemas en entornos nuevos o poco conocidos dentro de contextos más amplios (o multidisciplinares) relacionados con su área de estudio.

Saber comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan a públicos especializados y no especializados de un modo claro y sin ambigüedades.

Seleccionar la instrumentación química comercializada apropiada para el estudio a arealizar y de aplicar sus conocimientos para utilizarla de manera correcta.

Ser capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios.

Ser capaces de planificar y gestionar los recursos disponibles de un laboratorio químico, teniendo en cuenta los principios básicos de la calidad, prevención de riesgos, seguridad y sostenibilidad.

Students should possess and understand foundational knowledge that enables original thinking and research in the field.

To acquire basic skills to develop laboratory work in biomedical research.

DESCRIPTION OF CONTENTS

1. Realization of a work proposed by the company or institution where the student will be integrated to carry it out.

The External Practices subject is based on the completion of autonomous and individual work that each student must carry out under the supervision of a tutor from the Company, supervised by the academic tutor, and in accordance with the training plan that will be delivered to the student. at the beginning of the practices. The work will be carried out in a collaborating entity in accordance with the External Practice Regulations of the University of Valencia.

The company tutor must have a degree in Chemistry or a related qualification, or at least four years of experience in the chemical sector.

The training program examples that follow correspond to standard models of some internship positions and can serve as a guide for preparing the specific proposals for each offer.

Quality laboratories and/or analysis laboratories
- Search and organization of regulatory documentation
- Sampling
- Treatment, conservation and conditioning of samples
- Use of instrumental techniques. (HPLC, GC, FTIR,...)
- Data processing
- Preparation of internal reports

R&D laboratories
- Bibliographic review of a topic
- Organization of bibliographic information as a team
- Design of experiments
- Analysis and characterization
- Processing and presentation of experimental data
- Preparation of technical tables and graphs

Consulting (hygiene, environmental safety,...)
- Search and organization of regulatory documentation
- Field work, sampling¿
- Supervision of procedures and application of regulations (occupational, environmental,...)
- Application of REACH legislation
- Preparation of reports.

Production plant (chemical processes).
- Training on the production process
- Control of raw materials
- Production planning
- Control production parameters
- Verification of process conditions
- Data processing and presentation
- Preparation of technical reports

Data processing/quality control.
- Collection and management of databases
- Data processing (multivariate analysis)
- Analysis of experimental data and decision making
- Preparation and/or supervision of quality assurance protocols

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at the internship centre	156,00
Attendance at supplementary activities	0,00
Monitoring and tutoring of internships	0,00
Total hours	**156,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent study and work	70,00
Preparation of supplementary reports	0,00
Preparation of the internship report and evaluation of the internship	17,50
Total hours	**87,50**

TEACHING METHODOLOGY

La información está en un formato que no se puede convertir

EVALUATION

FIRST CALL

Students must complete a final report on their stay in the company considering the recommendations contained in article 22 of the External Practice Regulations of the University of Valencia as described in the teaching methodology section. This memory will conform in formal aspects to the template published on the subject's disk drive.

The company tutor must prepare a report assessing the different generic and practical skills acquired by the student. This report is sent to the internship management body (ADEIT), which makes it available to the corresponding academic tutor. The academic tutor will evaluate the quality of the report presented by the student and the follow-up of the meetings with the tutor.

The final grade obtained by the student will be the one corresponding to the sum of the following percentages: 50% grade from the external tutor and 50% grade from the academic tutor.

Evaluable activities by the Tutor of company through the realization of the work (Tutor of company report)

Competences to evaluate: CB6, CB7, CB8, CG1, CG2, CG3, CE1, CE2 y CE3

WEIGHT 50 %

Presented memory (Tutor of University report)

Competences to evaluate: CB9 CB10 y CE7

WEIGHT 50 %

The minimum overall grade to pass the subject is 5.0.

The hours of attendance at the assigned internship position are mandatory and non-recoverable, in accordance with the internship contract signed by all parties.

SECOND CALL

The evaluation will be carried out in the same way as in the first call.

Regarding attendance (non-recoverable activity), non-compliance with the hours stipulated in the contract will prevent passing the subject, unless ADEIT renegotiates a new contract with the company that allows the student to carry out the internship hours stipulated in the study plan. before the end of the evaluation

period.

The obvious copying or plagiarism of any task that is part of the evaluation will mean the impossibility of passing the subject, subsequently subjecting yourself to the appropriate disciplinary procedures.

REFERENCES