COURSE DATA

DATA SUBJECT

Code: 42941
Name: Master's final project
Cycle: Master's Degree / Doctorate
ECTS Credits: 18
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 the realization a experimental work in the laboratory that uses the techniques studied in the Master. The students do this work by joining in any of the consolidated research groups of the departments involved in the teaching of the Master, forming part of the work of some of the lines of research of greatest interest.

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 apply the research experience acquired to professional practice both in private companies and in public organisations.

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 aplicar la experiencia investigadora adquirida para iniciar el desarrollo de la fase investigadora de un programa de doctorado en temas relacionados con la química y afines.

Ser capaces de emplear las herramientas básicas para el tratamiento de datos experimentales en el laboratorio.

Ser capaces de exponer y defender públicamente los resultados y conclusiones de su trabajo de una manera clara y concisa.

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.

Ser capaces de seleccionar y optimizar las variables instrumentales para obtener los mejores parámetros analíticos en las técnicas experimentales estudiadas.

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.

To prepare a clear and concise memory of the results of your work and the conclusions obtained.

DESCRIPTION OF CONTENTS

1. Realization of a research work on a specific research line belonging to the research group of the Tutor and in which the student will be integrated to carry it out

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at supplementary activities	0,00
Monitoring and tutoring of the master's thesis	180,00
Presentation and defence of the master's thesis	0,00
Total hours	**180,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent preparation of the master's thesis	180,00
Preparation of the master's thesis project	90,00
Total hours	**270,00**

TEACHING METHODOLOGY

Students must carry out an individual experimental work related to the use of experimental techniques studied in the Master's Degree, under the supervision of an academic tutor.

For each academic year, the *Academic Coordination Commission*, at the proposal of the Master's teaching staff, will provide a list of topics for the Master's Final Project (as well as the names of the corresponding tutor teachers), in sufficient number so that students have a broad variety of topics to choose from.

The student must present a report of the work carried out and defend it before a court in a public session.

The TFM report will be written entirely in English and will have a maximum length of 50 pages, including all material (text, bibliography, etc.). The memory format is font size 12, line spacing 1.15 and margins 2.5 cm. The format of Tables/Figures is free and must be numbered in the order in which they appear in the text.

The report must include the following sections:

• Abstract (maximum 250 words)

• Resumen (maximum 250 words in Spanish or Valencian)

• Keywords (include 5-6 keywords that summarize the work)

• Index

• 1. Introduction

• 2. Objectives

• 3. Experimental procedure

• 4. Results and discussion

• 5. Conclusions

• References

EVALUATION

FIRST CALL

The *Academic Coordination Commission* of the master's degree will annually appoint the evaluating tribunal, which will be made up of three professors from the master's degree. The academic tutor of a TFM

student, in no case, may be part of the tribunal responsible for its evaluation.

The oral defense of the TFM will be carried out by the students in a public and in-person session. The exhibition will have a maximum duration of 10 minutes. Next, the tribunal may ask any questions and/or clarifications it deems appropriate, with a maximum duration of 10 minutes.

The evaluation will be carried out based on the following criteria:

• Activities evaluable by the academic Tutor by carrying out experimental work (Tutor's report).

The competencies evaluated will be CB6, CB7, CB8, CB10, CG1, CG2, CG3, CE1, CE2, CE3, CE4, CE5 and CE6

WEIGHTING 20%

• Report presented evaluated by the tribunal

The competencies evaluated will be CE6 and CE7

WEIGHTING 50%

• Presentation of the work, exhibition and public defense evaluated by the tribunal

The competencies evaluated will be CE1, CE2, CE3, CE4, CE5, CE6, CE8, CE9 and CE10

WEIGHTING 30%

The minimum overall grade to pass the subject is 5.0.

The tribunal will sign a record that reflects the agreements adopted regarding the final grade of each student. The tribunal may meet with the tutor faculty, if it considers it appropriate, in order to obtain clarifications or resolve any discrepancies that may arise.

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.

SECOND CALL

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

REFERENCES