COURSE DATA

DATA SUBJECT

Code: 36472
Name: Final degree project in Chemistry
Cycle: Undergraduate Studies
ECTS Credits: 12
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1110 - Degree in Chemistry	Facultat de Química	4	Indefinite (Individuals)
1929 - Double Degree Program in Physics and Chemistry	Facultat de Física	5	Indefinite (Individuals)
1934 - Double Degree Program in Chemistry-Chemical Engineering	Facultat de Química	5	Indefinite (Individuals)

SUBJECT-MATTER

Degree	Subject-matter	Character
1110 - Degree in Chemistry	Degree Final project	FINAL DEGREE PROJECT
1929 - Double Degree Program in Physics and Chemistry	Trabajo Final de Doble Grado F-Q	FINAL DEGREE PROJECT
1934 - Double Degree Program in Chemistry-Chemical Engineering	Trabajo Final de Doble Grado Q-EQ	FINAL DEGREE PROJECT

COORDINATION

PORCAR I BOIX IOLANDA

GOMEZ GARCIA CARLOS JOSE

SUMMARY

The Bachelor Thesis (TFG) is a compulsory subject worth 12 credits that is programmed to be studiedin the 8th semester (year 4) of the Degree in Chemistry. Its target is to make it possible for students toapply the knowledge acquired throughout the degree course by means of carrying out technical work ora fundamental or applied research project that is related to some of the multiple fields in chemistry. Thatis why the project is to be conducted in the final stage of the curriculum and is focused on assessing thecompetences associated with the degree (as included in the Verifica document).

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

1110 - Degree in Chemistry

Obligation to have previously passed the subject(s)	34183 - General Chemistry I 34184 - General Chemistry II 34185 - Chemistry laboratory I 34186 - Chemistry laboratory II 34187 - Mathematics I 34188 - Mathematics II 34189 - Physics I 34190 - Physics II 34191 - Biology 34192 - Informatics for Chemistry 34193 - Physical Chemistry I 34196 - Physical Chemistry Laboratory I 34199 - Inorganic Chemistry II 34201 - Inorganic Chemistry Laboratory I 34229 - Analytical Chemistry II 34231 - Analytical Chemistry Laboratory I 36450 - Analytical Chemistry I 36452 - Inorganic Chemistry I 36453 - Organic Chemistry I 36454 - Organic Chemistry II 36455 - Organic Chemistry Laboratory I

1929 - Double Degree Program in Physics and Chemistry

Obligation to have previously passed the subject(s)	34183 - General Chemistry I 34184 - General Chemistry II 34199 - Inorganic Chemistry II 34229 - Analytical Chemistry II 34231 - Analytical Chemistry Laboratory I 34233 - General physics I 34234 - General physics II 34235 - General physics III 34236 - Algebra and geometry I 34237 - Algebra and geometry II 34238 - Calculus I 34239 - Calculus II 34242 - Mechanics I 34243 - Oscillations and waves 34245 - Thermodynamics 34247 - Mathematical methods I 34248 - Mathematical methods II 34250 - Mechanics laboratory 34251 - Thermodynamics laboratory 36450 - Analytical Chemistry I 36452 - Inorganic Chemistry I 36594 - Chemistry Laboratory 36595 - Basic Physics Laboratory

1934 - Double Degree Program in Chemistry-Chemical Engineering

Obligation to have previously passed the subject(s)	34183 - General Chemistry I 34184 - General Chemistry II 34189 - Physics I 34190 - Physics II 34193 - Physical Chemistry I 34743 - Mathematics I 34744 - Mathematics II 34745 - Mathematics III 34749 - Business 34750 - Engineering graphics 34751 - Informatics 34752 - Applied thermodynamics and heat transfer 34753 - Fluid mechanics 34755 - Basis of chemical engineering I 34759 - Environment and sustainability 34780 - Principles of electrical engineering and electronics 36450 - Analytical Chemistry I 36452 - Inorganic Chemistry I 36453 - Organic Chemistry I 36455 - Organic Chemistry Laboratory I 36821 - Chemistry laboratory 36822 - Physical Chemistry Laboratory I 36823 - Laboratory of Analytical Chemistry I

OTHER REQUIREMENTS

To be allowed to take this subject the student must have successfully completed all the subjects of 1st and 2nd year and have passed at least 150 ECTS credits corresponding to basic and compulsory subject areas. Additionally, the student must enrol in all the credits pending completion to finish the degree. The bachelor thesis will be assessed once the student complies with the requirements established in the TFG explanatory document.

COMPETENCES / LEARNING OUTCOMES

1110 - Degree in Chemistry

Act autonomously in learning, making well-founded decisions in various contexts, forming judgements based on experimentation and analysis, and applying knowledge to new situations.

Address new problems and propose strategies to solve them.

Collaborate effectively in work teams, assume responsibilities and leadership roles, and contribute to collective improvement and development.

Communicate effectively both orally and in writing, adapting to the context and audience.

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

Demonstrate both inductive and deductive reasoning skills.

Demonstrate critical and self-critical thinking, considering professional ethics, moral values and social implications of the different activities carried out throughout the degree.

Demonstrate the ability to analyse, synthesise and reason critically.

Evaluate the risks involved in the use of chemical substances and laboratory procedures.

Express ideas correctly, both orally and in writing, in any of the official languages of the Valencian Community.

Identify chemical processes in everyday life.

Implement sustainable and environmentally friendly methodologies.

Propose creative and innovative solutions to complex situations or problems in the field, addressing diverse professional and social needs.

Relate chemistry to other disciplines.

Relate theory to experimentation.

Solve problems effectively.

Understand and analyse, from the perspective of the degree programme, social inequalities based on sex and gender; integrate gender-sensitive approaches into problem-solving and solution design.

DESCRIPTION OF CONTENTS

1. Internal experimental and/or theoretical work.

The TFG is an autonomous and individual assignment that every student must perform under the supervision of an academic tutor. The experimental and/or theoretical works related to the qualification will be carried out in Departments, Laboratories or Research Centers of the University of Valencia.

2. Literature research and review.

The TFG is an autonomous and individual assignment that every student must perform under the supervision of an academic tutor. Literature research and reviews will focus on different topics related to the degree programme.

3. Works of a theoretical nature.

The TFG is an autonomous and individual assignment that every student must perform under the supervision of an academic tutor. Works of a theoretical nature where the student proposes all the phases of development of a hypothetical research project related to the Degree.

4. Work based on interships.

The TFG is an autonomous and individual assignment that every student must perform under the supervision of an academic tutor. Internships will be carried out in companies, organisations or institutions other than the University of Valencia, as long as an agreement has been signed.

WORKLOAD

PRESENCIAL ACTIVITIES

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

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent preparation of the bachelor's thesis	0,00
Preparation of the bachelor's thesis project	0,00
Total hours	**0,00**

TEACHING METHODOLOGY

The TFG must be prepared individually by every student under the supervision of an academic tutor. There are four possible options for conducting the TFG:

a) Experimental and/or Theoretical works related to the qualification that can be carried out in Departments, Laboratories or Research Centres at the University of Valencia.

b) Literature research and reviews based on different topics related to the degree programme.

c) Works of a theoretical nature where the student proposes all the phases of development of a hypothetical research project related to the Degree.

d) Works based on internships, carried out in companies, organisations or institutions other than the University of Valencia, as long as an agreement has been signed. In these cases, the Committee for TFG shall appoint an academic tutor.

All the students must submit a report of their work, regardless of the type of bachelor's thesis they conduct,

and they must defend it in a public meeting.

The report must be between 20 and 30 pages long excluding bibliography, font size 12, line spacing to 1.15, and margins of 2.5 cm. It must be written entirely in English. NO ANNEX IS ALLOWED. For the cover, the general model (annex VIa) will be used and the content will be structured in the following sections:

- Summary (in two of the possilbe languages)
- Index
- Introduction
- Aims
- Experimental part
- Results and discussion
- Conclusions
- Bibliography (following the format set out in annex VIb)

The oral defence of the TFG will be conducted by students in person and in an open session. The presentation will last a maximum of 15 minutes during which the student will have to make a summary of the report submitted according to the current regulations of the Faculty of Chemistry. Next, the panel will ask questions and/or clarifications as deemed appropriate, for a maximum of 15 minutes.

Students in mobility programmes may carry out the TFG at the host university (agreement of the Academic Committee of 5 November 2014).

Students from other universities enrolled in the degree as mobility students may carry out the TFG at the University of Valencia under the same conditions as UV students, as long as their exchange agreement allows them to. Students can choose a topic and a tutor from the offer available at the time that they join the University of Valencia.

EVALUATION

The academic committee for the TFG will annually appoint, at the suggestion of the departments, the examining panels for the different areas of knowledge assigned to the Faculty of Chemistry. The panel is constituted by three lecturers (two from the relevant area of knowledge and an external one). In no case can the tutor of a TFG be part of the panel responsible for its assessment.

The oral defence of the TFG will be conducted by students in person and in an open session. Next, the panel will ask questions and/or clarifications as deemed appropriate.

The panel will assess the report submitted (20 %), the oral presentation (40 %) and the defence (40 %), according to the template attached.

The panel will sign a record to announce the agreements reached as regards the final mark assigned to each student. This final mark is calculated as the average between the mark awarded by the tutor (20%)

and by the examination panel (80%). The panel may meet with the tutor, if needed, in order to solve any discrepancies that could arise. The panel will also propose the award of distinctions.

The minimum mark of the two parts (tutor and panel) has to be able to overcome the 5.0 unfulfilled.

Final marks awarded will be made public officially in a single record signed by the president and by an additional member of the Committee for TFGs.

Students may appeal against the final mark awarded through the procedure established in the relevant University of Valencia regulations.

Final warning

Copying or plagiarism of any assignment that is part of the evaluation will make it impossible to pass the course, and the student will be subject to the appropriate disciplinary procedures.

Please note that, according to Article 13 d) of the University Student Statute (RD 1791/2010, December 30), "*it is the duty of a student to refrain from using or cooperating in fraudulent procedures in evaluation tests, in the work performed or in official University documents*".

REFERENCES

- Reglament del treball fi de grau aprovat pel Consell de Govern en sessió ordinaria del 20 de desembre de 2011. http://www.uv.es/quimdocs/graus/treball_fi_grau/reglament.pdf
- Pàgina web de la Facultat de Química: http://www.uv.es/quimica (pestanya Graus / TFG)
- Compromiso ético con el Código Europeo de conducta http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf