Course guide
820526 - EEQ2Q - Experimentation in Chemical Engineering II

Last modified: 02/03/2026

Unit in charge: Barcelona East School of Engineering
Teaching unit: 713 - EQ - Department of Chemical Engineering.

Degree: BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Compulsory subject).

Academic year: 2025 **ECTS Credits:** 6.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: MARGARITA SÁNCHEZ JIMÉNEZ

Others:

Primer quadrimestre:
NÚRIA BORRÀS CRISTÒFOL - Grup: M1, Grup: T1
AGUSTÍN CORRUCHAGA GUERRERO - Grup: M1, Grup: T1
JAIME FOLCH BELTRAN - Grup: M1, Grup: T1
NEUS PAGÈS HERNANDO - Grup: M1, Grup: T1
MÒNICA REIG I AMAT - Grup: M1, Grup: T1
ALEXANDRA ROA TORRES - Grup: M1, Grup: T1
MARGARITA SÁNCHEZ JIMÉNEZ - Grup: M1, Grup: T1
NURIA SAPERAS PLANA - Grup: M1, Grup: T1
DAVID ZANUY GOMARA - Grup: M1, Grup: T1

Segon quadrimestre:
NÚRIA BORRÀS CRISTÒFOL - Grup: T1
AGUSTÍN CORRUCHAGA GUERRERO - Grup: T1
JAIME FOLCH BELTRAN - Grup: T1
NEUS PAGÈS HERNANDO - Grup: T1
MÒNICA REIG I AMAT - Grup: T1
MARGARITA SÁNCHEZ JIMÉNEZ - Grup: T1
NURIA SAPERAS PLANA - Grup: T1
DAVID ZANUY GOMARA - Grup: T1

REQUIREMENTS

EXPERIMENTACIÓ EN ENGINYERIA QUÍMICA I - Prerequisit

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. Design and manage applied experimentation procedures, particularly for determining thermodynamic and transport properties, and the modelling of phenomena and systems in the field of chemical engineering, such as fluid flow systems, heat and mass transfer operations and the kinetics of chemical reactions and reactors.

Transversal:
2. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

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STUDY LOAD

Type	Hours	Percentage
Hours small group	60,0	40.00
Self study	90,0	60.00

Total learning time: 150 h

CONTENTS

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Description:
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Full-or-part-time: 10h
Theory classes: 4h
Self study : 6h

Experimental sessions

Description:
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Related activities:
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Full-or-part-time: 100h
Laboratory classes: 40h
Self study : 60h

Design and evaluation of a pilot project

Description:
It is about developing a specific practice including objectives, experimental design, data collection from all the groups of the course, data processing, elaboration/application of models, conclusions, discussion of results. It includes the follow-up meetings of the project and the public presentation of work and common discussion of the results obtained in two sessions.

Related activities:
Continuous assessment 2

Full-or-part-time: 40h
Laboratory classes: 8h
Guided activities: 8h
Self study : 24h

ACTIVITIES

Final Examen

Description:
Evaluation of the knowledge acquired at the individual level through a final exam.

Material:
Practice reports, notes, etc.

Full-or-part-time: 2h 30m
Theory classes: 2h 30m

name english

Full-or-part-time: 50h
Laboratory classes: 20h
Guided activities: 3h 20m
Self study: 26h 40m

name english

Full-or-part-time: 50h
Laboratory classes: 20h
Self study: 30h

name english

Full-or-part-time: 40h
Practical classes: 8h
Guided activities: 8h
Self study: 24h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:
- McCabe, Warren L. [et al.]. Operaciones unitarias en ingeniería química. 7ª ed. Madrid [etc.]: McGraw-Hill, cop. 2007. ISBN 9701061748.
- Coulson, J. M. [et al.]. Ingeniería química, vol. 2. Barcelona [etc.]: Reverté, 1979-1984. ISBN 8429171347.
- Levenspiel, Octave. Ingeniería de las reacciones químicas. 3a ed. México: Limusa Wiley, 2004. ISBN 9681858603.
- Perry, Robert H.; Green, Don W.; Maloney, James O. Manual del ingeniero químico [on line]. Madrid: McGraw Hill, 2001 [Consultation: 30/04/2020]. Available on: http://www.ingebook.com/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=6572. ISBN 9788448612788.

RESOURCES

Other resources:

Practice scripts; document templates; presentation of the subject at ATENEA Digital Campus