Course guide
820526 - EEQ2Q - Experimentation in Chemical Engineering II

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: 2023
ECTS Credits: 6.0
Languages: Catalan, Spanish

LECTURER

Coordinating lecturer: MARGARITA SÁNCHEZ JIMÉNEZ

Others:
Primer quadrimestre:
NÚRIA BORRÀS CRISTÒFOL - Grup: M11, Grup: M12, Grup: T11, Grup: T12
AGUSTÍN CORRUCHAGA GUERRERO - Grup: M11, Grup: M12
JAIME FOLCH BELTRAN - Grup: T11, Grup: T12
VICENÇ MARTI GREGORIO - Grup: M11, Grup: M12, Grup: T11, Grup: T12
NEUS PAGÈS HERNANDO - Grup: T11, Grup: T12
MÒNICA REIG AMAT - Grup: M11, Grup: M12, Grup: T11, Grup: T12
MARGARITA SÁNCHEZ JIMÉNEZ - Grup: M11, Grup: M12, Grup: T11, Grup: T12
NURIA SAPERAS PLANA - Grup: M11, Grup: M12, Grup: T11, Grup: T12
DAVID ZANUY GOMARA - Grup: M11, Grup: M12, Grup: T11, Grup: T12

Segon quadrimestre:
NÚRIA BORRÀS CRISTÒFOL - Grup: T11
AGUSTÍN CORRUCHAGA GUERRERO - Grup: T11
JAIME FOLCH BELTRAN - Grup: T11
VICENÇ MARTI GREGORIO - Grup: T11
NEUS PAGÈS HERNANDO - Grup: T11
MÒNICA REIG AMAT - Grup: T11
MARGARITA SÁNCHEZ JIMÉNEZ - Grup: T11
NURIA SAPERAS PLANA - Grup: T11
DAVID ZANUY GOMARA - Grup: T11

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours small group</td>
<td>60,0</td>
<td>40.00</td>
</tr>
<tr>
<td>Self study</td>
<td>90,0</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Total learning time: 150 h

CONTENTS

Description:

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

Experimental sessions

Description:

* Related activities:

  * 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

Continuous assessment 1 (Practices)

Description:
Each practice will involve the presentation of a corresponding group report with a weekly delivery periodicity. The evaluation of the report is joint for the whole group. The non face-to-face work of each group is reflected in the delivery of a weekly group summary document as well.

Material:
Notes, Digital Campus material.

Delivery:
Written report and Summary document per group. Weekly delivery.

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

Continuous Assessment 2 (Project)

Description:
Each project group will present a final report focused on an experiment (experimental project).

Material:
Notes, Digital Campus material

Delivery:
Written report by group + presentation

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

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
Theory classes: 2h

GRADING SYSTEM
BIBLIOGRAPHY

Basic: