# 295506 - TMSQ - Environmental Technologies and Sustainability

**Coordinating unit:** 295 - EEBE - Barcelona East School of Engineering  
**Teaching unit:** 713 - EQ - Department of Chemical Engineering  
**Academic year:** 2017  
**Degree:** BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)  
**ECTS credits:** 6  
**Teaching languages:** Catalan

## Teaching staff

**Coordinator:** Casas Pons, Ignasi  
**Others:** Cesar Valderrama, Jose Luis Cortina, Vicenç Martí, Eulàlia Planas, Elsa Pastor, Núria Saperas

## Opening hours

**Timetable:** Es dirà a classe i a ATENEA

## Prior skills

## Requirements

## Degree competences to which the subject contributes

### Specific:

CEI-16. Understand the basic applications of environmental technologies and sustainability principles.

### Transversal:

02 SCS N1. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 1. Analyzing the world's situation critically and systemically, while taking an interdisciplinary approach to sustainability and adhering to the principles of sustainable human development. Recognizing the social and environmental implications of a particular professional activity.

## Teaching methodology

The course is based on a exhibition methodology (lecture) using as support PowerPoint slides to teach the theoretical part (20%), a methodology of exhibition / participation to solve the practical problems related to the theory (16%), active and collaborative learning to perform different practices throughout the year (4%) and independent learning (60%).

The practices, which are of compulsory attendance, will be in groups of two people during class time devoted to this activity.

Depending on the type of practice and prior to its completion, students must submit an individual report on the practice, following the indications of its script. The report is required for the practice to be evaluated. After the class, students will deliver, a report with the resolution of the problem solved during the practice. The average of the ratings of these reports constitutes the practices grade (NP). The unjustified assistance to a practice means a zero of it.

## Learning objectives of the subject
Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group: 52h 30m 35.00%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group: 0h 0.00%</td>
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<tr>
<td></td>
<td>Hours small group: 7h 30m 5.00%</td>
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<tr>
<td></td>
<td>Self study: 90h 60.00%</td>
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</tbody>
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Content

<table>
<thead>
<tr>
<th>Tema 1</th>
<th>Learning time: 1h</th>
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<tbody>
<tr>
<td></td>
<td>Theory classes: 1h</td>
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Description:
Tema 1

Qualification system

The final course grade will be calculated according to the following formula, taking into account that the final exam includes the whole course content:

FINAL NOTE : NF = 0.1 * NP + 0.3 * NEP + 0.6% * NEF

where:
NP : practice note
NEP : note of the partial tests
NEF : Final exam

If reevaluation exam is undertaken, the grade obtained will replace the 60% of the final exam grade (NEF).

Bibliography

Others resources: