Course guide
320171 - ECC - Energy and Climate Change

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 709 - DEE - Department of Electrical Engineering.
Degree: BACHELOR’S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Optional subject).
Academic year: 2023 ECTS Credits: 6.0 Languages: Catalan, Spanish

LECTURER
Coordinating lecturer: Juan Martínez Magaña

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Transversal:
1. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.
2. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 2. Applying sustainability criteria and professional codes of conduct in the design and assessment of technological solutions.
3. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self study</td>
<td>90,0</td>
<td>60.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>30,0</td>
<td>20.00</td>
</tr>
<tr>
<td>Hours medium group</td>
<td>30,0</td>
<td>20.00</td>
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</tbody>
</table>

Total learning time: 150 h

CONTENTS

(ENG) TEMA 1 . BALANÇOS ENERGETICS

Full-or-part-time: 20h
Theory classes: 4h
Practical classes: 4h
Self study: 12h
### (ENG) TEMA 2 . PROSPECTIVA ENERGÈTICA

**Full-or-part-time:** 26h  
Theory classes: 8h  
Practical classes: 6h  
Self study: 12h

### (ENG) TEMA 3 . CLIMA I CANVI CLIMÀTIC

**Full-or-part-time:** 132h  
Theory classes: 8h  
Practical classes: 4h  
Self study: 120h

### (ENG) TEMA 4 . MITIGACIÓ DEL CC

**Full-or-part-time:** 35h  
Theory classes: 7h  
Practical classes: 7h  
Self study: 21h

### (ENG) TEMA 5 . SOSTENIBILITÀD ENERGETICA

**Full-or-part-time:** 40h  
Theory classes: 6h  
Practical classes: 10h  
Self study: 24h

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**GRADING SYSTEM**

**BIBLIOGRAPHY**

**Basic:**
- El sistema eléctrico español: informe .... Madrid: Red Eléctrica de España, 2002-.