Course guide
240IEL33 - 240IEL33 - Control and Protection of Electrical Systems

Unit in charge: Barcelona School of Industrial Engineering
Teaching unit: 709 - DEE - Department of Electrical Engineering.
Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2014). (Optional subject).
Academic year: 2023  ECTS Credits: 4.5  Languages: Spanish

LECTURER

Coordinating lecturer: Bosch Tous, Ricardo

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
CEELECC6. Model and solve problems related to the operation of the electric energy integrating the information technologies and the communications: protections, network operations, electrical market and stability.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

Acquire knowledge for the analysis of all the electrical systems in normal operation and in emergency situations

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours large group</td>
<td>27,0</td>
<td>24.00</td>
</tr>
<tr>
<td>Hours small group</td>
<td>13,5</td>
<td>12.00</td>
</tr>
<tr>
<td>Self study</td>
<td>72,0</td>
<td>64.00</td>
</tr>
</tbody>
</table>

Total learning time: 112.5 h

CONTENTS

<table>
<thead>
<tr>
<th>title english</th>
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<tbody>
<tr>
<td>Description:</td>
</tr>
<tr>
<td>content english</td>
</tr>
<tr>
<td>Full-or-part-time:  6h</td>
</tr>
<tr>
<td>Practical classes:  6h</td>
</tr>
</tbody>
</table>
**Title**

**Description:**
content english

**Full-or-part-time:** 6h
Practical classes: 6h

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**Title**

**Description:**
content english

**Full-or-part-time:** 10h
Practical classes: 10h

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**Title**

**Description:**
content english

**Full-or-part-time:** 10h
Practical classes: 10h

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**Title**

**Description:**
content english

**Full-or-part-time:** 8h
Practical classes: 8h

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**GRADING SYSTEM**

Continuous assessment through case and laboratory work during the course.

Reassessment by written and practical examination on the contents of the subject seen during the course.

**BIBLIOGRAPHY**

**Basic:**