Course guide
820227 - IEEIA - Electronic Instrumentation

Unit in charge: Barcelona East School of Engineering
Teaching unit: 710 - EEL - Department of Electronic Engineering.
Degree: BACHELOR’S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Compulsory subject).
Academic year: 2023 ECTS Credits: 6.0 Languages: Catalan, Spanish

LECTURER
Coordinating lecturer: FRANCISCO CASELLAS BENEYTO
Others: FRANCISCO CASELLAS BENEYTO
XAVIER ROSET JUAN
IGNACIO MORAGUES RODRÍGUEZ

REQUIREMENTS

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. Understand the applications of electronic instrumentation.

Transversal:
2. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.

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 small group</td>
<td>45,0</td>
<td>30.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>15,0</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Total learning time: 150 h
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Specific objectives</th>
<th>Related activities</th>
<th>Full-or-part-time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction to the subject of electronic instrumentation.</td>
<td></td>
<td></td>
<td></td>
<td>1h</td>
</tr>
<tr>
<td><strong>Full-or-part-time:</strong> 1h</td>
<td>Theory classes: 1h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Measures and analysis of basic signals.</td>
<td></td>
<td></td>
<td></td>
<td>9h</td>
</tr>
<tr>
<td><strong>Full-or-part-time:</strong> 9h</td>
<td>Theory classes: 3h</td>
<td>Laboratory classes: 2h</td>
<td>Self study : 4h</td>
<td></td>
</tr>
<tr>
<td>3. Basic instruments.</td>
<td></td>
<td></td>
<td></td>
<td>85h</td>
</tr>
<tr>
<td><strong>Full-or-part-time:</strong> 85h</td>
<td>Theory classes: 21h</td>
<td>Laboratory classes: 8h</td>
<td>Self study : 56h</td>
<td></td>
</tr>
</tbody>
</table>
4. Measurement systems.

Description:

Specific objectives:

Related activities:

Full-or-part-time: 54h
   Theory classes: 20h
   Laboratory classes: 4h
   Self study: 30h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

Complementary:

RESOURCES

Other resources: