820227 - IEEIA - Electronic Instrumentation

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering
Teaching unit: 710 - EEL - Department of Electronic Engineering
Academic year: 2019
Degree: BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
ECTS credits: 6  Teaching languages: Catalan, Spanish

Teaching staff
Coordinator: FRANCISCO JOSÉ CASELLAS BENYEYO
Others: Primer quadrimestre:
FRANCISCO JOSÉ CASELLAS BENYEYO - T11, T12, T13, T15
XAVIER MARIMON SERRA - T14
FRANCESC XAVIER ROSET JUAN - T11, T12, T13, T14, T15

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.

Learning objectives of the subject
## Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group:</th>
<th>45h</th>
<th>30.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group:</td>
<td>0h</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Hours small group:</td>
<td>15h</td>
<td>10.00%</td>
</tr>
<tr>
<td></td>
<td>Guided activities:</td>
<td>0h</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Self study:</td>
<td>90h</td>
<td>60.00%</td>
</tr>
</tbody>
</table>
## Content

| 1. Introduction to the subject of electronic instrumentation. | **Learning time:** 1h  
Theory classes: 1h |
| --- | --- |

**Description:**

**Related activities:**

**Specific objectives:**

| 2. Measures and analysis of basic signals. | **Learning time:** 9h  
Theory classes: 3h  
Laboratory classes: 2h  
Self study: 4h |
| --- | --- |

**Description:**

**Related activities:**

**Specific objectives:**
### 3. Basic instruments.

**Learning time:** 85h  
Theory classes: 21h  
Laboratory classes: 8h  
Self study: 56h

**Description:**  

**Related activities:**  

**Specific objectives:**

### 4. Measurement systems.

**Learning time:** 54h  
Theory classes: 20h  
Laboratory classes: 4h  
Self study: 30h

**Description:**  

**Related activities:**  

**Specific objectives:**
820227 - IEEIA - Electronic Instrumentation

**Bibliography**

**Basic:**


**Complementary:**

