820054 - TSECR - Electronics System Technology for Control

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering
Teaching unit: 710 - EEL - Department of Electronic Engineering
Academic year: 2015

Degree:
- Bachelor's Degree in Electrical Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Mechanical Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Chemical Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Biomedical Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Energy Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Industrial Electronics and Automatic Control Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Biomedical Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Chemical Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Mechanical Engineering (Syllabus 2009). (Teaching unit Optional)
- Bachelor's Degree in Industrial Electronics and Automatic Control Engineering (Syllabus 2009). (Teaching unit Optional)

ECTS credits: 6
Teaching languages: Catalan, Spanish

Teaching staff
Coordinator: FRANCISCO JOSÉ CASELLAS BENEYTO

Degree competences to which the subject contributes

Specific:
1. Understand automatic regulation and control techniques and their application to industrial automation.

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.
3. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.

Learning objectives of the subject
Study load

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

Content

(ENG) Introducción a la tecnología de los sistemas electrónicos de control y regulación.

Degree competences to which the content contributes:

(ENG) 1: Sistemas de adquisición de variables físicas para el control electrónico de sistemas.

Degree competences to which the content contributes:

(ENG) 2: Procesos y estrategias de control en lenguaje de programación gráfico.

Degree competences to which the content contributes:

(ENG) 3: Acciones de control mediante sistemas actuadores.

Degree competences to which the content contributes:

(ENG) 4: Sistemas de gestión tipo SCADA.

Degree competences to which the content contributes:

(ENG) 5: Estudio de ejemplos industriales de sistemas de control.

Degree competences to which the content contributes:
820054 - TSECR - Electronics System Technology for Control

Bibliography

Basic:


Complementary:

Lajara Vizcaíno, José Rafael; Pelegrí Sebastiá, José. Labview : entorno grafico de programación. Barcelona: Marcombo, cop. 2007. ISBN 9788426714268.