820089 - PDM - Mobile Devices Programming

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering
Teaching unit: 723 - CS - Department of Computer Science
Academic year: 2017

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 INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
- BACHELOR'S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Teaching unit Optional)
- BACHELOR'S DEGREE IN BIOMEDICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
- 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 ENERGY 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: Samir Kanaan
Others: Samir Kanaan i Gerard Escudero

Degree competences to which the subject contributes

Specific:
1. Understand the basics behind the use and programming of PCs, operating systems, databases and software with applications in engineering.
3. Apply their knowledge to industrial informatics and communications.

Transversal:

Teaching methodology
The course uses a group methodology based on projects: a guided work (laboratory) in a 50% and an open work (project) in the remaining 50%.

Learning objectives of the subject
- Let the student know about the concepts and basic usages of mobile device programming (phones and tablets) with Android.
- Provide programming techniques for mobile devices.
The assignment will be formed by the evaluation on the professors of the different practical works (50%) and a final project (another 50%).

Qualification system

The assignment will be formed by the evaluation on the professors of the different practical works (50%) and a final project (another 50%).

Regulations for carrying out activities

Laboratory works follow a guide. The final project can be chosen by the student with the assessment and approval of the professors.

Study load

<table>
<thead>
<tr>
<th>Content Description</th>
<th>Hours large group</th>
<th>Hours medium group</th>
<th>Hours small group</th>
<th>Self study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total learning time:</strong> 150h</td>
<td>0h</td>
<td>0h</td>
<td>60h</td>
<td>90h</td>
</tr>
<tr>
<td>Degree competences to which the content contributes:</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Content

- **(ENG) Instalación e introducción al entorno de desarrollo (SDK) de Android.**
  - Degree competences to which the content contributes:

- **(ENG) Estructuras básicas de programación en el entorno Android.**
  - Degree competences to which the content contributes:

- **(ENG) Tratamiento de gráficos.**
  - Degree competences to which the content contributes:

- **(ENG) Acceso a los accesorios del dispositivo móvil.**
  - Degree competences to which the content contributes:

- **(ENG) Programación con bases de datos.**
  - Degree competences to which the content contributes:
Bibliography

Basic:
