820089 - PDM - Mobile Devices Programming

**Coordinating unit:** 295 - EEBE - Barcelona East School of Engineering

**Teaching unit:** 723 - CS - Department of Computer Science

**Academic year:** 2019

**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 INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
- BACHELOR'S DEGREE IN ENERGY ENGINEERING (Syllabus 2009). (Teaching unit Optional)
- BACHELOR'S DEGREE IN BIOMEDICAL 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)

**ECTS credits:** 6

**Teaching languages:** Catalan, Spanish

**Teaching staff**

**Coordinator:** Samir Kanaan
Escudero Bakx, Gerard

**Others:** Samir Kanaan i Gerard Escudero

**Prior skills**

This course does not require any previous skills.

**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.
2. 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.
Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group: 0h 0.00%</th>
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</thead>
<tbody>
<tr>
<td>Hours medium group: 0h 0.00%</td>
<td></td>
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<tr>
<td>Hours small group: 60h 40.00%</td>
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</tr>
<tr>
<td>Self study: 90h 60.00%</td>
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</tbody>
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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:

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 choosen by the student with the assessment and approval of the professors.
Bibliography

Basic:
