320030 - CP - Advanced Programming

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 723 - CS - Department of Computer Science
Academic year: 2018
Degree: BACHELOR'S DEGREE IN AUDIOVISUAL SYSTEMS ENGINEERING (Syllabus 2009). (Teaching unit Optional)
BACHELOR'S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2010). (Teaching unit Optional)
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
BACHELOR'S DEGREE IN TEXTILE TECHNOLOGY AND DESIGN 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 ELECTRICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
ECTS credits: 6
Teaching languages: Catalan, Spanish

Teaching staff
Coordinator: Jordi Marco
Others: Pepa López

Degree competences to which the subject contributes

Transversal:
1. 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.
2. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
3. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.

Learning objectives of the subject
# 320030 - CP - Advanced Programming

## Study load

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<tr>
<th></th>
<th>Hours large group:</th>
<th>Hours medium group:</th>
<th>Hours small group:</th>
<th>Guided activities:</th>
<th>Self study:</th>
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<tr>
<td><strong>Total learning time</strong>:</td>
<td>150h</td>
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<td>60h</td>
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<td><strong>Learning time</strong>:</td>
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<td>Laboratory classes:</td>
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<td>Self study:</td>
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<td>90h</td>
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## Content

### (ENG) Tema 1. Classes i Objectes

- **Learning time**: 30h
  - Laboratory classes: 12h
  - Self study: 18h

### (ENG) Tema 2. Herència i Polimorfisme

- **Learning time**: 42h
  - Laboratory classes: 18h
  - Self study: 24h

### (ENG) Tema 3. Programació visual

- **Learning time**: 18h
  - Laboratory classes: 6h
  - Self study: 12h

### (ENG) Tema 4. Estructures de dades

- **Learning time**: 60h
  - Theory classes: 24h
  - Self study: 36h

## Bibliography

### Basic: