820058 - ACAD - Advanced Computer-Aided Design

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering
Teaching unit: 717 - EGE - Department of Engineering Presentation
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 ENERGY ENGINEERING (Syllabus 2009). (Teaching unit Optional)
BACHELOR'S DEGREE IN ELECTRICAL 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 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 MATERIALS ENGINEERING (Syllabus 2010). (Teaching unit Optional)

ECTS credits: 6
Teaching languages: English

Teaching staff
Coordinator: JORDI TORNER RIBÉ
Others: JORDI TORNER RIBÉ

Opening hours
Timetable: 1D07 (1er pis)
Tuesdays 11-14h
Thursdays 11-14h

Prior skills
Must have completed successfully EGDAO (Graphic Expression and CAD)

Requirements
GGraphic Expression and CAD

Degree competences to which the subject contributes

Transversal:
1. 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.

Teaching methodology
This course uses narrative method by 50%, individual work 25% and project-based learning by 50%.
No reassessment test is performed.

Learning objectives of the subject
820058 - ACAD - Advanced Computer-Aided Design

Acquire fundamentals and knowledge in order to use different CAD Systems according to the drawing, design or project to produce.

### Study load

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

| (ENG) Giving a general knowledge of features and characteristics in CAD systems. | Learning time: 30h  
  Practical classes: 7h 12m  
  Guided activities: 3h  
  Self study: 19h 48m |
|---|---|
| **Description:**  
  CAD software  
  Project management |

| (ENG) Getting knowledge on how to use 2D layer CAD systems | Learning time: 30h  
  Practical classes: 7h 12m  
  Guided activities: 3h  
  Self study: 19h 48m |
|---|---|
| **Description:**  
  Introduction  
  2D plots  
  Modification and Editing  
  Blocks, dimensioning and layers  
  2D to 3D  
  Layouts  
  Solids |

  Practical classes: 7h 12m  
  Guided activities: 3h  
  Self study: 19h 48m |
|---|---|
| **Description:**  
  Drawings  
  Animation  
  Simulation  
  Analysis  
  Assembly Visualization  
  Configurations  
  Exploded assemblies |
### Qualification system

- Exam 1: 20%
- Exam 2: 20%
- Final Project: 55%
- Competence: 5%

### Bibliography

**Basic:**