Course guide
240035 - 240035 - Engineering Drawing II

Unit in charge: Barcelona School of Industrial Engineering
Teaching unit: 717 - DEGD - Department of Engineering Graphics and Design.

Degree: Academic year: 2023  ECTS Credits: 3.0
Languages: Catalan, Spanish

LECTURER

Coordinating lecturer: Alsina Torrent José María
Others: Villa Sicilia, Arantza
Fernández Sánchez, Joaquin
Mataró Villacampa, Joan
Robert Rincón, Miguel

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

GENERAL
Learn to apply graphic computer tools related to industrial design.
The set of classes in the subject are aimed to make the student familiar with graphic tools and working methods for the creation, representation, analysis and modification of the design of an object or mechanism.

SPECIFIC
The objectives are met by carrying out specific application exercises, according to the following classification and with the contents specified later.
- Model and representation of individual objects in 3D (pieces and assemblies), of varying difficulty, of which the corresponding drawings are provided to help their visualization.
- Learn the dimensioning conditions for manufacturing and the concept of tolerances
- Make assembly and operation animations of mechanisms.
- Use industrial applications, such as sheet metal and welded elements.
- Introduce some tools to validate a design, such as simple motion analysis and basic finite element simulations.
- Introduce the realization of macros and parametric design
- Do a final work on a mechanism or design application to solve a problem applying what has been learned during the course.

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self study</td>
<td>45,0</td>
<td>60.00</td>
</tr>
<tr>
<td>Practical classes</td>
<td>30,0</td>
<td>40.00</td>
</tr>
</tbody>
</table>

Total learning time: 75 h
<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Full-or-part-time</th>
<th>Theory classes</th>
<th>Practical classes</th>
<th>Self study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>content english</td>
<td>4h</td>
<td>1h</td>
<td>1h</td>
<td>2h</td>
</tr>
<tr>
<td></td>
<td>content english</td>
<td>7h</td>
<td>1h</td>
<td>3h</td>
<td>3h</td>
</tr>
<tr>
<td></td>
<td>content english</td>
<td>11h</td>
<td>1h</td>
<td>4h</td>
<td>6h</td>
</tr>
<tr>
<td></td>
<td>content english</td>
<td>6h</td>
<td>4h</td>
<td>2h</td>
<td></td>
</tr>
<tr>
<td></td>
<td>content english</td>
<td>17h</td>
<td>1h</td>
<td>1h</td>
<td>15h</td>
</tr>
</tbody>
</table>
title english

Description:
content english

Full-or-part-time: 11h
Theory classes: 1h
Practical classes: 4h
Self study : 6h

title english

Description:
content english

Full-or-part-time: 8h
Theory classes: 1h
Practical classes: 2h
Self study : 5h

title english

Description:
content english

Full-or-part-time: 9h
Theory classes: 1h
Practical classes: 4h
Self study : 4h

GRADING SYSTEM

BIBLIOGRAPHY

Basic: