340072 - TAD1-D3O17 - Design Workshop I

Degree: BACHELOR'S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)

ECTS credits: 6

Teaching languages: Catalan, Spanish

Teaching staff
Coordinator: Manuel López Membrilla

Degree competences to which the subject contributes

Transversal:
1. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 1. Planning oral communication, answering questions properly and writing straightforward texts that are spelt correctly and are grammatically coherent.
2. SELF-DIRECTED LEARNING - Level 1. Completing set tasks within established deadlines. Working with recommended information sources according to the guidelines set by lecturers.
3. EFFECTIVE USE OF INFORMATION RESOURCES - Level 1. Identifying information needs. Using collections, premises and services that are available for designing and executing simple searches that are suited to the topic.
4. TEAMWORK - Level 1. Working in a team and making positive contributions once the aims and group and individual responsibilities have been defined. Reaching joint decisions on the strategy to be followed.
5. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

Teaching methodology
Workshop 1 theory: contents are exhibited and theoretical basis of different materials, concepts, methods and results with practical applications are introduced and appropriate examples to facilitate their understanding.
Practises of workshop 1 consist of:
1) Sessions where projects consist of statements.
2) Global or specific complementary feedback so that students are able to develop proposed projects.
3) Guided follow-up to achieve results.
Students propose solutions for analysed and developed projects.
The lab os workshop 2 contemplates:
1) Possibility to do the respective model (Prototype in 3D, possible solutins)
2) Guided follow-up to achieve results.
The independent learning is aimed at making presentations of projects as well as at complementary information research and existing product manipulation.

Learning objectives of the subject

Workhsop 1 theory: contents are exhibited and theoretical basis of different materials, concepts, methods and results with practical applications are introduced and appropriate examples to facilitate their understanding.
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The lab os workshop 2 contemplates:
1) Possibility to do the respective model (Prototype in 3D, possible solutins)
2) Guided follow-up to achieve results.
The independent learning is aimed at making presentations of projects as well as at complementary information research and existing product manipulation.
To acquire a general education based on the product and get acquainted to the different parts that form them. Internal and external product analysis.
Strengthen skills, ingenuity and ability to analyze and manipulate an industrial product.
To develop minimum technical ability to solve effectively the proposed projects and ideas that students themselves generate.
To interpret the process of product development from the formal and theoretical knowledge of different subjects that make up the Design Workshop.
To develop an attitude of criticism and self-criticism of the own works and those of the colleagues.
To gain an overview of the product. Product and its components. Structure of a product.

### Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group: 6h</th>
<th>4.00%</th>
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</thead>
<tbody>
<tr>
<td>Hours medium group: 0h</td>
<td>0.00%</td>
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<tr>
<td>Hours small group: 6h</td>
<td>4.00%</td>
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<tr>
<td>Guided activities: 0h</td>
<td>0.00%</td>
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<tr>
<td>Self study: 138h</td>
<td>92.00%</td>
<td></td>
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</tbody>
</table>
## Content

<table>
<thead>
<tr>
<th>Module</th>
<th>Learning time:</th>
<th>Theory classes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction into Product Design. Creativity.</td>
<td>2h</td>
<td>2h</td>
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<tr>
<td>2. Components Analysis: Conception of Volum and Form.</td>
<td>2h</td>
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<td>3. Product Analysis: Form, Function and Aesthetics.</td>
<td>2h</td>
<td>2h</td>
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<td>4. Product and Materials. Product and Resistance.</td>
<td>2h</td>
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<td>5. Construction Techniques. Processes.</td>
<td>2h</td>
<td>2h</td>
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<td>6. Market Demand Analysis. Types of Clients.</td>
<td>2h</td>
<td>2h</td>
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<tr>
<td>Distance Activity.</td>
<td>45h</td>
<td>Self study: 45h</td>
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## Qualification system

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Regulations for carrying out activities

Bibliography

Basic:


Complementary:

