220090 - Industrial Technologies

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 220 - ETSEIAT - Terrassa School of Industrial and Aeronautical Engineering
Academic year: 2018
Degree: BACHELOR’S DEGREE IN INDUSTRIAL TECHNOLOGY ENGINEERING (Syllabus 2010). (Teaching unit Compulsory)
ECTS credits: 3

Teaching languages: Catalan

Coordinator: Eulàlia Gríful
Others: Otros departamentos con presencia en la ETSEIAT

Degree competences to which the subject contributes

General:
2. THE ABILITY TO ANALYSE AND SYNTHESISE: The ability to think abstractly about the fundamental concepts of a text or exposition and to intelligibly present the result of one's work.

Transversal:
1. SELF-DIRECTED LEARNING - Level 1. Completing set tasks within established deadlines. Working with recommended information sources according to the guidelines set by lecturers.
3. 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.
4. ENTREPRENEURSHIP AND INNOVATION - Level 1. Showing enterprise, acquiring basic knowledge about organizations and becoming familiar with the tools and techniques for generating ideas and managing organizations that make it possible to solve known problems and create opportunities.
5. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 1. Analyzing the world’s situation critically and systemically, while taking an interdisciplinary approach to sustainability and adhering to the principles of sustainable human development. Recognizing the social and environmental implications of a particular professional activity.
6. 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.
7. 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.
8. 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.

Teaching methodology

The methodologies applied will be suitable in each case.

Learning objectives of the subject

The general aim of learning this subject is to know the wide field of work of the industrial engineering. It wants to give importance to the generic competitions which are incorporated in the degree, as a necessary complement of the technological knowledge of the course.
## Study load

<table>
<thead>
<tr>
<th>Total learning time: 75h</th>
<th>Hours large group:</th>
<th>6h</th>
<th>8.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours small group:</td>
<td>21h</td>
<td>28.00%</td>
</tr>
<tr>
<td></td>
<td>Self study:</td>
<td>48h</td>
<td>64.00%</td>
</tr>
<tr>
<td>Content</td>
<td>Learning time: 5h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **1. Work of industrial engineer** | Theory classes: 1h  
Laboratory classes: 1h  
Self study: 3h |

**Description:**

**Related activities:**

<table>
<thead>
<tr>
<th>Learning time: 4h</th>
</tr>
</thead>
</table>
| **2. Generic competition CG3 - Third language** | Theory classes: 1h  
Laboratory classes: 1h  
Self study: 3h |

**Description:**

(ENG) · Importància de l'anglès com a eina de comunicació oral i escrita a l'enginyeria.

**Related activities:**

(ENG) Autoavaluació del nivell de coneixements orals i escrits en anglès tècnic (associat a les competències genèriques CG3 (tercera llengua) i CG4 (comunicació eficaç oral i escrita)).

<table>
<thead>
<tr>
<th>Learning time: 4h</th>
</tr>
</thead>
</table>
| **3. Forum of companies** | Theory classes: 1h  
Self study: 3h |

**Description:**

(ENG) · Participació a les activitats organitzades al voltant del Fòrum d'empreses.

**Related activities:**

(ENG) Treball en grups de 5-6 estudiants per a la generació d'un informe-resum sobre les ponències presentades (associat a les competències genèriques CG4 (comunicació eficaç oral i escrita), CG5 (treball en equip) i CG8 (capacitat d'anàlisi i síntesi)).
### 4. The different tasks of industrial engineering

**Learning time:** 51h  
Theory classes: 9h  
Laboratory classes: 9h  
Self study: 33h

**Description:**  
(ENG) · Presentació de les activitats de diferents Departaments de l'ETSEIAT amb incidència en la professió de l'enginyeria industrial.

**Related activities:**  
(ENG) Treballs individuals i en grup.  
Assistència a seminaris amb presència d'experts.  
Visita a laboratoris de recerca i/o instal·lacions singulars.  
Desenvolupament general de competències genèriques a nivell 1.

### 5. Partial and final evaluation

**Learning time:** 10h  
Theory classes: 5h  
Self study: 5h

**Description:**  
(ENG) · Avaluació parcial (lliurament exercicis) i final.

**Related activities:**  
(ENG) Lliurament de treballs i examen final escrit.
# Planning of activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY 1: TECHNOLOGICAL CONFERENCES</td>
<td>11h</td>
<td>Theory classes: 11h</td>
</tr>
<tr>
<td>ACTIVITY 2: ACTIVITIES RELATED WITH TECHNOLOGICAL CONFERENCES</td>
<td>9h</td>
<td>Laboratory classes: 9h</td>
</tr>
<tr>
<td>ACTIVITY 3: IDENTIFICATION OF BASIC RULES</td>
<td>4h</td>
<td>Laboratory classes: 1h, Self study: 3h</td>
</tr>
<tr>
<td>ACTIVITY 4: ENGLISH EVALUATION</td>
<td>4h</td>
<td>Laboratory classes: 1h, Self study: 3h</td>
</tr>
<tr>
<td>ACTIVITY 5: BUSINESS FORUM</td>
<td>4h</td>
<td>Theory classes: 1h, Self study: 3h</td>
</tr>
</tbody>
</table>

## Qualification system
Students have to assist to 80% of activities to be evaluated of this subject. It will realise a minimum of 4 evaluated activities during the course. The note will be the average of the notes of the activities that are done.

## Regulations for carrying out activities

A

## Bibliography