Course guides
330412 - IAE - Informatics Applied to Engineering

Unit in charge: Manresa School of Engineering
Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering.

Degree: BACHELOR’S DEGREE IN MINING ENGINEERING (Syllabus 2016). (Compulsory subject).

Academic year: 2021  ECTS Credits: 4.5  Languages: Catalan, Spanish

LECTURER

Coordinating lecturer: Piney Da Silva, Jose Ramon

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. Basic knowledge on the use and programming of computers.
2. Operating systems, databases and computer programs with applications in engineering.

Transversal:
3. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 2. Using strategies for preparing and giving oral presentations. Writing texts and documents whose content is coherent, well structured and free of spelling and grammatical errors.
4. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.
5. EFFECTIVE USE OF INFORMATION RESOURCES - Level 2. Designing and executing a good strategy for advanced searches using specialized information resources, once the various parts of an academic document have been identified and bibliographical references provided. Choosing suitable information based on its relevance and quality.
6. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours medium group</td>
<td>45,0</td>
<td>40.00</td>
</tr>
<tr>
<td>Self study</td>
<td>67,5</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Total learning time: 112.5 h
<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Full-or-part-time</th>
<th>Theory classes</th>
<th>Laboratory classes</th>
<th>Self study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>content english</td>
<td>11h 30m</td>
<td>3h</td>
<td>1h 30m</td>
<td>7h</td>
</tr>
<tr>
<td></td>
<td>content english</td>
<td>14h 30m</td>
<td>4h</td>
<td>2h</td>
<td>8h 30m</td>
</tr>
<tr>
<td></td>
<td>content english</td>
<td>11h 30m</td>
<td>3h</td>
<td>1h 30m</td>
<td>7h</td>
</tr>
<tr>
<td></td>
<td>content english</td>
<td>14h 30m</td>
<td>4h</td>
<td>2h</td>
<td>8h 30m</td>
</tr>
<tr>
<td></td>
<td>content english</td>
<td>11h 30m</td>
<td>3h</td>
<td>1h 30m</td>
<td>7h</td>
</tr>
</tbody>
</table>
### title english

**Description:**
content english

**Full-or-part-time:** 11h 30m  
- Theory classes: 3h  
- Laboratory classes: 1h 30m  
- Self study : 7h

### title english

**Description:**
content english

**Full-or-part-time:** 14h 30m  
- Theory classes: 4h  
- Laboratory classes: 2h  
- Self study : 8h 30m

### title english

**Description:**
content english

**Full-or-part-time:** 11h 30m  
- Theory classes: 3h  
- Laboratory classes: 1h 30m  
- Self study : 7h

### title english

**Description:**
content english

**Full-or-part-time:** 11h 30m  
- Theory classes: 3h  
- Laboratory classes: 1h 30m  
- Self study : 7h

### ACTIVITIES

**name english**

**Full-or-part-time:** 12h  
- Theory classes: 12h
name english

**Full-or-part-time:** 12h  
Theory classes: 12h

---

name english

**Full-or-part-time:** 23h  
Laboratory classes: 13h  
Self study: 10h

---

name english

**Full-or-part-time:** 15h  
Self study: 15h

---

name english

**Full-or-part-time:** 20h  
Self study: 20h

---

name english

**Full-or-part-time:** 21h  
Theory classes: 4h  
Laboratory classes: 2h  
Self study: 15h

---

name english

**Full-or-part-time:** 9h 30m  
Theory classes: 2h  
Self study: 7h 30m

---

**GRADING SYSTEM**

---

**BIBLIOGRAPHY**

**Basic:**