820329 - REEN - Energy Resources

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering
Teaching unit: 710 - EEL - Department of Electronic Engineering
Academic year: 2018
Degree: BACHELOR'S DEGREE IN ENERGY ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
ECTS credits: 6
Teaching languages: Catalan, Spanish

Teaching staff

Coordinator: GUILLERMO VELASCO QUESADA
Others: GUILLERMO VELASCO QUESADA
CUADRAS TOMAS, ANGEL
Ovejas Benedicto, Victòria Júlia

Degree competences to which the subject contributes

Specific:
CEENE-19. Explain energy resources, their characteristics and where they come from.
CEENE-20. Assess and compare the energy capacitance and potential of the energy resources available.

Transversal:
04 COE N2. 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.

Learning objectives of the subject

Study load

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

<table>
<thead>
<tr>
<th>Topic</th>
<th>Learning time</th>
<th>Theory classes</th>
<th>Self study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(ENG) Relacions entre energia i societat</strong></td>
<td>6h</td>
<td>2h</td>
<td>4h</td>
</tr>
<tr>
<td><strong>(ENG) Conceptes bàsics d’energia.</strong></td>
<td>6h</td>
<td>2h</td>
<td>4h</td>
</tr>
<tr>
<td><strong>(ENG) Formes d’energia, transformacions energètiques bàsiques i el seu rendiment.</strong></td>
<td>12h</td>
<td>4h</td>
<td>8h</td>
</tr>
<tr>
<td><strong>(ENG) Recursos energètics renovables i no renovables.</strong></td>
<td>22h</td>
<td>4h</td>
<td></td>
</tr>
<tr>
<td><strong>(ENG) Recursos d’origen no renovable: Fòssil i nuclear.</strong></td>
<td>36h</td>
<td>12h</td>
<td>24h</td>
</tr>
<tr>
<td><strong>(ENG) Recursos d’origen renovable: Solar, geotèrmic o gravitatori.</strong></td>
<td>57h</td>
<td>19h</td>
<td>38h</td>
</tr>
<tr>
<td><strong>(ENG) Caracterització dels recursos energètics.</strong></td>
<td>11h</td>
<td>2h</td>
<td>4h</td>
</tr>
</tbody>
</table>
Bibliography

Complementary:


Others resources:

Statistical bulletins published by different national and international official bodies

Audiovisual material

BP Statistical Review of World Energy <http://www.bp.com>

World Energy Outlook <http://www.worldenergyoutlook.org>