220260 - Power Transmission Systems

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 729 - MF - Department of Fluid Mechanics
712 - EM - Department of Mechanical Engineering
724 - MMT - Department of Heat Engines

Academic year: 2019
Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Teaching unit Optional)
ECTS credits: 10  Teaching languages: Catalan, Spanish

Teaching staff

Coordinator: Gamez Montero, Pedro Javier
Freire Venegas, Francisco Javier
Comas Amengual, Angel
Codina Macia, Esteve

Others: Comas Cespedes, Esteve
Torrent Celma, Miquel

Degree competences to which the subject contributes

Specific:
3. Ability to learn and understand design tools like CAD / CAM / CAE, CFD numerical simulation and dynamic simulation for design and advanced computing facilities and fluid dynamic systems.
4. Ability to know the laws, regulations and directives in force whenever assessing the environmental implications, energy, social and ethical professional activity.
5. Ability to learn and understand the dynamic phenomena and its formulation for application in the development of each of the stages of conception, design and mechanical calculations.
6. Ability to learn and understand numerical simulation tools for the design, calculation and fabrication of components, systems and mechanical installations.

Teaching methodology

Aquesta assignatura tindrà una part de teoria i una part de pràctiques.
Les classes de teoria podem incloure lliçons magistral, així com exemples i problemes.
Les classes pràctiques podem incloure visites a empreses, practiques de laboratori/taller, seminaris, presentació de treballs/projectes.

NOTA: per evitar interferències de les classes pràctiques amb altres assignatures, cal dedicar un matí o una tarda sencera (6 hores) a aquesta assignatura.
Esta previst que les classes teòriques es divideixin en tres blocs de dues hores, de manera que cada dues hores es canvi el tema estudiat.

Learning objectives of the subject
# 220260 - Power Transmission Systems

## Study load

<table>
<thead>
<tr>
<th>Total learning time: 250h</th>
<th>Hours large group:</th>
<th>60h</th>
<th>24.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours small group:</td>
<td>30h</td>
<td>12.00%</td>
</tr>
<tr>
<td></td>
<td>Self study:</td>
<td>160h</td>
<td>64.00%</td>
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</tbody>
</table>
# 220260 - Power Transmission Systems

## Content

<table>
<thead>
<tr>
<th>Description:</th>
<th>Learning time: 83h</th>
</tr>
</thead>
<tbody>
<tr>
<td>related activities:</td>
<td>Theory classes: 20h Laboratroy classes: 10h Self study: 53h</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Description:</th>
<th>Learning time: 84h</th>
</tr>
</thead>
<tbody>
<tr>
<td>related activities:</td>
<td>Theory classes: 20h Laboratroy classes: 10h Self study: 54h</td>
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### Gears

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<tr>
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<th>Learning time: 83h</th>
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<tbody>
<tr>
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### title english

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<tr>
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<td>Theory classes: 20h Laboratroy classes: 10h Self study: 53h</td>
</tr>
</tbody>
</table>

### Specific objectives: |

- content english
- activity english
- objective english
## Planning of activities

| Description: | Hours: 138h  
|              | Theory classes: 54h  
|              | Self study: 84h |
| Support materials: | |
| Descriptions of the assignments due and their relation to the assessment: | None |
| Specific objectives: | |

| Description: | Hours: 69h  
|              | Laboratory classes: 27h  
|              | Self study: 42h |
| Support materials: | material english |
| Descriptions of the assignments due and their relation to the assessment: | |
| Specific objectives: | |

| Description: | Hours: 8h  
|              | Theory classes: 2h  
|              | Self study: 6h |
| Support materials: | |
| Descriptions of the assignments due and their relation to the assessment: | |
| Specific objectives: | |
### 220260 - Power Transmission Systems

<table>
<thead>
<tr>
<th>Hours: 8h</th>
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<tbody>
<tr>
<td>Theory classes: 2h</td>
</tr>
<tr>
<td>Self study: 6h</td>
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</table>

**Description:**
- activity english

**Support materials:**
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**Descriptions of the assignments due and their relation to the assessment:**
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**Specific objectives:**
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<table>
<thead>
<tr>
<th>Hours: 9h</th>
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<tbody>
<tr>
<td>Laboratory classes: 3h</td>
</tr>
<tr>
<td>Self study: 6h</td>
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**Description:**
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**Support materials:**
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**Descriptions of the assignments due and their relation to the assessment:**
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**Specific objectives:**
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<table>
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<tr>
<th>Hours: 10h</th>
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<tbody>
<tr>
<td>Self study: 10h</td>
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**Description:**
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**Support materials:**
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**Descriptions of the assignments due and their relation to the assessment:**
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**Specific objectives:**
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**Description:**
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**Support materials:**
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**Specific objectives:**
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**Description:**
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**Support materials:**
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**Support materials:**
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**Support materials:**
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**Support materials:**
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**Specific objectives:**
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**Description:**

**Support materials:**

**Descriptions of the assignments due and their relation to the assessment:**

**Specific objectives:**

objective english

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**Qualification system**

**Bibliography**

**Basic:**


**Others resources:**

**Hyperlink**

Documentació a la web ATENEA

Resource