Degree competences to which the subject contributes

Specific:
1. Capability for modeling, analysis, calculation and design of electrical power systems.

3. Ability to project conventional and non-conventionals power facilities.

6. Ability to model and solve problems associated with the operation of electric power systems by integrating information technologies and communication: protection, network operation, and electricity market stability.

Learning objectives of the subject

To study the vector control schemes as well as Direct Torque Control schemes.

Study load

<table>
<thead>
<tr>
<th>Total learning time: 125h</th>
<th>Hours large group: 30h</th>
<th>24.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours small group: 15h</td>
<td>12.00%</td>
</tr>
<tr>
<td></td>
<td>Self study: 80h</td>
<td>64.00%</td>
</tr>
</tbody>
</table>

Content

Vector control of Induction Motor and Permanent Magnet Synchronous Machines.

Learning time: 125h
- Theory classes: 30h
- Laboratory classes: 15h
- Self study: 80h
220252 - Control of Electrical Machines

Qualification system

First exam* 0.3 + Final exam* 0.5 + laboratori * 0.2

Regulations for carrying out activities

In case to fail the first exam, the obtained mark could be improved

Bibliography

Basic: