820014 - OP - Production Organisation

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering
Teaching unit: 732 - OE - Department of Management
Academic year: 2017
Degree:
BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN BIOMEDICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN ENERGY ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN BIOMEDICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN ENERGY ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)
ECTS credits: 6
Teaching languages: Spanish

Teaching staff
Coordinator: Garrido Godes, Ernesto
Others: - XAVIER GRÈBOL NOGUERAS - RUBÉN MARTÍN TORT - GEMMA ROS ESCODA

Prior skills
None

Requirements
None

Degree competences to which the subject contributes

Specific:
4. Understand the applications of business organisation.
5. Understand the basics of production and manufacturing systems.

Transversal:
2. ENTREPRENEURSHIP AND INNOVATION - Level 2. Taking initiatives that give rise to opportunities and to new products and solutions, doing so with a vision of process implementation and market understanding, and involving others in projects that have to be carried out.

Teaching methodology
The subject uses a 25% of master classes, and 25% of exercise classes. The rest of the time should be devoted to self-study
Learning objectives of the subject

Show the main ideas of production, its relationship with the logistics area and other management elements of the enterprise.
Give to the students the idea of the importance of decision making when managing logistic and production systems.
Prepare the student to different techniques to schedule and control activities.
Prepare the student to solve fuzzy problems.
Teach the student quantitative techniques applicable to the solution of management problems.

Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group:</th>
<th>45h</th>
<th>30.00%</th>
</tr>
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<tbody>
<tr>
<td>Hours medium group:</td>
<td>0h</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>Hours small group:</td>
<td>15h</td>
<td>10.00%</td>
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<tr>
<td>Guided activities:</td>
<td>0h</td>
<td>0.00%</td>
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</tr>
<tr>
<td>Self study:</td>
<td>90h</td>
<td>60.00%</td>
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<tr>
<td>Content</td>
<td>Learning time</td>
<td>Theory classes</td>
<td>Self study</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
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<td>----------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Introduction</strong></td>
<td><strong>10h</strong></td>
<td><strong>4h</strong></td>
<td><strong>6h</strong></td>
</tr>
<tr>
<td><strong>Scheduling</strong></td>
<td><strong>30h</strong></td>
<td><strong>12h</strong></td>
<td><strong>18h</strong></td>
</tr>
<tr>
<td><strong>Production Planning</strong></td>
<td><strong>25h</strong></td>
<td><strong>10h</strong></td>
<td><strong>15h</strong></td>
</tr>
<tr>
<td><strong>Inventory management for independent demand</strong></td>
<td><strong>35h</strong></td>
<td><strong>14h</strong></td>
<td><strong>21h</strong></td>
</tr>
<tr>
<td><strong>Inventory Management for Dependent Demand</strong></td>
<td><strong>10h</strong></td>
<td><strong>4h</strong></td>
<td><strong>6h</strong></td>
</tr>
<tr>
<td><strong>Logistics. Location and Routing</strong></td>
<td><strong>15h</strong></td>
<td><strong>6h</strong></td>
<td><strong>9h</strong></td>
</tr>
</tbody>
</table>
### Qualification system

Four sources of qualification will be used.

- Exercises during class 40%
- Final Exam 40%
- Additional work at home 10%
- Generic Ability 10%
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Bibliography

Basic:

Complementary: