220206 - Operations Management

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 732 - OE - Department of Management
Academic year: 2019
Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Teaching unit Compulsory)
ECTS credits: 5
Teaching languages: Catalan

Teaching staff
Coordinator: FEDERICO GARRIGA GARZON

Degree competences to which the subject contributes

Specific:
1. Knowledge and skills to organize and manage companies.
2. Knowledge and skills of strategy and planning applied to different organizational structures.

Teaching methodology

The course is developed by the use of three types of methodology:

- Lecture sessions.
- Case study debates and problem-solving classes (case studies and exercises).
- Self-study for doing exercises and activities.

In the lecture sessions, lecturers will introduce the theoretical basis of the concepts, methods and results and illustrate them with examples appropriate to facilitate their understanding.

In the case study debates and problem solving sessions, lecturers guide students in applying theoretical concepts to solve problems and cases, always using critical reasoning. We propose that students solve exercises in and outside the classroom, to promote contact and use the basic tools needed to solve problems.

Students, independently, need to work on the materials provided by lecturers and the outcomes of the sessions of exercises/problems, in order to fix and assimilate the concepts.

The lecturers provide the curriculum and monitoring of activities (by ATENEA).

Learning objectives of the subject
The aim of the course is that students deepen in the management techniques used in making strategic decisions, tactical and operative in the functional area of operations.

**Study load**

<table>
<thead>
<tr>
<th>Total learning time: 125h</th>
<th>Hours large group: 30h 24.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group: 0h 0.00%</td>
</tr>
<tr>
<td></td>
<td>Hours small group: 15h 12.00%</td>
</tr>
<tr>
<td></td>
<td>Guided activities: 0h 0.00%</td>
</tr>
<tr>
<td></td>
<td>Self study: 80h 64.00%</td>
</tr>
</tbody>
</table>

**Content**

**Module 1: Operations Management**

<table>
<thead>
<tr>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulation</td>
</tr>
<tr>
<td>Process strategy</td>
</tr>
<tr>
<td>Plant layout</td>
</tr>
<tr>
<td>Toyota Production System</td>
</tr>
<tr>
<td>Production Planning</td>
</tr>
</tbody>
</table>

**Related activities:**

- Activity 1: Large/Theory group sessions
- Activity 2: Exercises/Medium groups sessions
- Activity 3: Mid-Semester Exam
- Activity 4: Final Exam
- Activity 5: Practices

**Learning time: 125h**

- Theory classes: 30h
- Laboratory classes: 15h
- Self study: 80h

**Qualification system**

The final grade depends on the following assessment criteria:

- Activity 3 (mid-semester exam), weight: 35%
- Activity 4 (second partial), weight: 35%
- Activity 5 (Practices), weight: 30%

Unsatisfactory results (less than six points) of the partial exam (3rd activity) and second partial (4ra activity) may be redone by a written test to be done on the day set for the final exam. The note obtained in the revision test will only replace the original in case of being greater.
220206 - Operations Management

Bibliography

Basic:


Complementary:


