220206 - Operations Management

**Coordinating unit:** 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering

**Teaching unit:** 732 - OE - Department of Management

**Academic year:** 2018

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

#### Module 1: Operations Management

**Description:**
- Process strategy
- Plant layout
- Toyota Production System
- Simulation
- Materials Requirement Planning

**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 (final exam), weight: 35%
- Activity 5 (Practices), weight: 30%

Unsatisfactory results of the partial exam (3rd activity) may be redone by a written test to be done on the day set for the final exam. To this exam can accede all the students enrolled previous resignation to the obtained qualification in the partial examination. The grade obtained by the application of the renewal will replace the initial grade.
Bibliography

**Basic:**


**Complementary:**


