220581 - Quality Management

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

**Teaching unit:** 715 - EIO - Department of Statistics and Operations Research

**Academic year:** 2018

**Degree:** MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2012). (Teaching unit Optional)

**ECTS credits:** 3  

**Teaching languages:** Catalan

### Teaching staff

**Coordinator:** EULALIA GRIFUL PONSATI

### Teaching methodology

The teaching methodology is in three parts:
- theory classes
- practical classes
- autonomous work of study and realization of exercises and activities.

In the sessions of exhibition of the contents, the teaching will enter the theoretical bases of the matter, concepts, methods and results explaining them with convenient examples to facilitate the understanding.

In the sessions of practical work at the classroom, the teaching will guide the student in the application of the theoretical concepts for the resolution of several situations, helping for the critical reasoning. They will propose exercises that the student solve at the classroom and out of the classroom, in order to favor the contact and utilization of the necessary basic tools for the resolution of problems.

The student, autonomously, has to work the material provided by the teachings and the result of the sessions of work-problems in order to assimilate and fix the concepts. The teachings will provide a plan of study and a follow-up of activities (*ATENEA*).

### Learning objectives of the subject

The main aim of this subject is to provide the students the basic knowledge of the quality management, the present more known models, as well as the statistical methods for the operative management of the companies.

### Study load

<table>
<thead>
<tr>
<th>Total learning time: 75h</th>
<th>Hours large group: 8h</th>
<th>10.67%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group: 3h</td>
<td>4.00%</td>
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<tr>
<td></td>
<td>Guided activities: 16h</td>
<td>21.33%</td>
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<tr>
<td></td>
<td>Self study: 48h</td>
<td>64.00%</td>
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**Introduction to Quality Management**

**Learning time:** 75h  
Theory classes: 24h  
Guided activities: 3h  
Self study: 48h

**Description:**  
- Introduction to the models of quality management  
- Knowledge of the laws and managerial that affect to the product and to the company  
- International organisms of accreditation, certification and normalization  
- General and specific normalizations for the operative of the system of quality  
- Definition of the system of quality, its processes and the product/service  
- The ISO 9000 family  
- Statistical techniques and ISO  
- Metrological control and their international standards

**Related activities:**  
- TeamWork  
- Individual practice  
- Exam

**Qualification system**

The final note of the course has the following:  
- Exercises, weight: 50%  
- Exam, weight: 50%

**Regulations for carrying out activities**

The exam will be individual and the exercises in group

**Bibliography**

**Basic:**


**Others resources:**

- Hyperlink  
  https://atenea.upc.edu/moodle/login/index.php