220220 - 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 AERONAUTICAL ENGINEERING (Syllabus 2014). (Teaching unit Optional)
MASTER’S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Teaching unit Optional)
MASTER’S DEGREE IN SPACE AND AERONAUTICAL ENGINEERING (Syllabus 2016). (Teaching unit Optional)
ECTS credits: 3
Teaching languages: Catalan, Spanish

Teaching staff
Coordinator: Eulàlia 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:</th>
<th>Self study:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27h</td>
<td>48h</td>
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<tr>
<td></td>
<td>36.00%</td>
<td>64.00%</td>
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## Content

<table>
<thead>
<tr>
<th>Introduction to Quality Management</th>
<th>Learning time: 75h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 27h</td>
</tr>
<tr>
<td></td>
<td>Self study: 48h</td>
</tr>
</tbody>
</table>

### 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
- Models of business excellence
- Statistical techniques and ISO
- Metrological control and their international standards

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

## Qualification system

The exam will be individual and the exercises in group.

## Bibliography

### Basic:
- UNE-EN ISO 9004:2009 Sistemas de gestión de la calidad: gestión para el éxito sostenido de una organización.
- IATF 16949:2016 Requisitos de sistema de gestión de la calidad para organizaciones productoras de piezas y piezas de recambio en automoción.

### Others resources:
- **Audiovisual material**
  - **Nom recurs**  
    - Resource