205301 - Quality Management: Models and Standards

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)
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ECTS credits: 3
Teaching languages: Catalan, Spanish

Teaching staff

Coordinator: Eulàlia Griful

Teaching methodology

The teaching methodology is divided into three parts:
- Face-to-face sessions - Participation of contents and performance of exercises.
- Face-to-face sessions of laboratory work.
- Self study work and exercises and activities.

In the sessions of exhibition -participation of the contents, the teaching staff will introduce the theoretical bases of the subject, concepts, methods and results illustrating them with convenient examples and requesting, in his case, the accomplishment of exercises to facilitate- and their understanding.

In the laboratory work sessions, the teaching staff will guide the students in the application of the theoretical concepts for the resolution of experimental assemblies, based at all times on the critical reasoning.

Activities will be proposed that the student will solve in the classroom and outside the classroom, in order to encourage the contact and use of the basic tools necessary for the realization of an instrumentation system.

The student, independently, must work the material provided by the teaching staff and the result of the work sessions-problems in order to assimilate and set the concepts. The teaching staff will provide a plan for study and follow-up activities (ATENEA).

Learning objectives of the subject

The main objective of this subject is to provide students with the basic notions of a quality management system by introducing the models of business excellence and the standards of the ISO 9000 family.

Study load

<table>
<thead>
<tr>
<th>Total learning time: 75h</th>
<th>Hours large group:</th>
<th>8h</th>
<th>10.67%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group:</td>
<td>3h</td>
<td>4.00%</td>
</tr>
<tr>
<td></td>
<td>Hours small group:</td>
<td>0h</td>
<td>0.00%</td>
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<tr>
<td></td>
<td>Guided activities:</td>
<td>16h</td>
<td>21.33%</td>
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<tr>
<td></td>
<td>Self study:</td>
<td>48h</td>
<td>64.00%</td>
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</tbody>
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### Content

<table>
<thead>
<tr>
<th>Quality Management: Models and Standards</th>
<th>Learning time: 75h</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 8h</td>
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<tr>
<td></td>
<td>Practical classes: 3h</td>
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<tr>
<td></td>
<td>Guided activities: 16h</td>
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<td>Self study: 48h</td>
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**Description:**
- Introduction to quality management models
- Knowledge of the laws and directives that affect the product and the company
- International accreditation, certification and standardization organizations
- General and specific regulations for the operation of the quality system
- Definition of the quality system, its processes and the product/service
- The ISO 9000 family
- Models of business excellence
- Statistical techniques and ISO standards

### Qualification system

The final grade of the course depends on the following evaluative acts:
- Exercises, weight: 50%
- Exam, weight: 50%

### Bibliography

**Basic:**
- IATF 16949:2016 Requisitos de sistema de gestión de la calidad para organizaciones productoras de piezas y piezas de recambio en automoción.
- EFQM de Excelencia 2013.