Course guide
220581 - 220581 - Quality Management

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 715 - EIO - Department of Statistics and Operations Research.
Degree: MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2012). (Optional subject).
Academic year: 2022  ECTS Credits: 3.0  Languages: Catalan

LECTURER
Coordinating lecturer: 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>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided activities</td>
<td>16,0</td>
<td>21.33</td>
</tr>
<tr>
<td>Self study</td>
<td>48,0</td>
<td>64.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>8,0</td>
<td>10.67</td>
</tr>
<tr>
<td>Hours medium group</td>
<td>3,0</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Total learning time: 75 h
CONTENTS

Introduction to Quality Management

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

Full-or-part-time: 75h
Theory classes: 24h
Guided activities: 3h
Self study : 48h

GRADING SYSTEM

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

EXAMINATION RULES.

The exam will be individual and the exercises in group

BIBLIOGRAPHY

Basic:

RESOURCES

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