

Course guide

220220 - 220220 - Quality Management

Last modified: 19/04/2023

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 INDUSTRIAL ENGINEERING (Syllabus 2013). (Optional subject).
MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Optional subject).
MASTER'S DEGREE IN SPACE AND AERONAUTICAL ENGINEERING (Syllabus 2016). (Optional subject).

Academic year: 2023 **ECTS Credits:** 3.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: Eulàlia Grifol Ponsati

Others:

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

Type	Hours	Percentage
Hours large group	27,0	36.00
Self study	48,0	64.00

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

Related activities:

TeamWork
Individual practice
Exam

Full-or-part-time: 75h

Theory classes: 27h

Self study : 48h

GRADING SYSTEM

The exam will be individual and the exercises in group.

BIBLIOGRAPHY

Basic:

- UNE-EN ISO 9000:2015 Sistemas de gestión de la calidad: fundamentos y vocabulario.
- UNE-EN ISO 9001:2015 Sistemas de gestión de la calidad: requisitos.
- Griful, E.; Canela, M. A. Gestión de la calidad [on line]. Barcelona: Edicions UPC, 2002 [Consultation: 22/06/2020]. Available on: <http://hdl.handle.net/2099.3/36668>. ISBN 8483016184.
- 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.
- Modelo EFQM de excelencia. Brussels: European Foundation for Quality Management, 2012.

RESOURCES

Audiovisual material:

- Nom recurs. Resource