

Course guide

310504 - 310504 - Integrated Management of Occupational Health and Safety, Quality and Environment

Last modified: 06/06/2024

Unit in charge: Barcelona School of Building Construction
Teaching unit: 732 - OE - Department of Management.
753 - TA - Department of Architectural Technology.

Degree: MASTER'S DEGREE IN BUILDING CONSTRUCTION MANAGEMENT (Syllabus 2015). (Compulsory subject).

Academic year: 2024 **ECTS Credits:** 5.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Abad Puente, Jesus

Others: Abad Puente, Jesus
Gaspar Fàbregas, Kàtia

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CE04MUGE. Apply audit techniques to construction processes, in the areas of quality, safety and environment.

CE05MUGE. Implement management models of resources in companies in the sector of construction

CE10MUGE. Design indicator systems for building processes.

CE12MUGE. Apply management models suitable for edification processes

CE13MUGE. Implement standardized systems of integrated management (quality, safety and environment)

Generical:

CG4MUGE. Analyse, evaluate and synthesise critically, the information to propose solutions or alternatives to situations arising from building management processes.

Transversal:

05 TEQ. TEAMWORK. Being able to work as a team player, either as a member or as a leader. Contributing to projects pragmatically and responsibly, by reaching commitments in accordance to the resources that are available.

Basic:

CB7. The students must be able to apply the acquired knowledges and their ability of resolution of problems in new or little known environments inside more wide environments (or multidisciplinary) related with their study field.

TEACHING METHODOLOGY

The course of Integrated Management PRL, Q and MA seeks to create close links between theoretical knowledge and practical application throughout the different class sessions (2 hours per week). Under this concept, the student's involvement in the theoretical and practical sessions is fundamental to ensure an efficient learning process.

In the case of the theoretical sessions, it is proposed to expose the theoretical concepts related to the different topics of the course. In this case, we will seek to create parallel spaces for participation using real cases in order to enrich the debate with the students.

In the case of practical sessions, the professor will present practical cases. The aim is that the student can put into practice and use the available tools to solve different problems associated with the integrated management of standardized systems. In these sessions the professor will seek to encourage teamwork through different activities of a collaborative and competitive nature, as well as the active involvement of the students in the resolution of the different tasks assigned.

LEARNING OBJECTIVES OF THE SUBJECT

At the end of the course students must be able to:

- Design an integrated management system based on international standards
- Conduct audits of management systems
- Develop systems of indicators that help to improve continuously processes and management systems of the organization

STUDY LOAD

Type	Hours	Percentage
Hours large group	17,5	14.00
Hours medium group	5,0	4.00
Guided activities	7,5	6.00
Self study	90,0	72.00
Hours small group	5,0	4.00

Total learning time: 125 h

CONTENTS

1.- Introduction to management systems

Description:

In this content the students will see:

- 1.1 Current Management Principles
- 1.2 Management based on processes
- 1.3 The continuous improvement
- 1.4 Orientation towards the achievement of objectives
- 1.5 Standardized management systems and certification processes

Full-or-part-time: 9h

Theory classes: 2h

Practical classes: 1h

Guided activities: 1h 15m

Self study : 4h 45m

2.- Quality management

Description:

In this content the students will see:

- 2.1 Organization of quality in the building
- 2.2 Quality of the project, materials and execution of work
- 2.3 Quality management systems
- 2.4 The certification process

Full-or-part-time: 27h

Theory classes: 2h

Practical classes: 4h

Guided activities: 1h 15m

Self study : 19h 45m

3.- Environmental management

Description:

In this content the students will see:

- 3.1 Sustainability in building
- 3.2 Management of environmental aspects in building
- 3.3 Models of environmental management

Full-or-part-time: 27h

Theory classes: 4h

Practical classes: 2h

Guided activities: 1h 15m

Self study : 19h 45m

4.- Occupational Health and Safety management

Description:

In this content the students see:

- 4.1 Occupational accidents and diseases
- 4.2 Situation of the construction sector
- 4.3 Basis for activities of occupational health and safety
- 4.4 Risk management in construction
- 4.5 Occupational health and safety management systems

Full-or-part-time: 27h

Theory classes: 4h

Practical classes: 2h

Guided activities: 1h 15m

Self study : 19h 45m

5.- Integrated management systems

Description:

In this content the students see:

- 5.1 Key aspects of the integration of management systems
- 5.2 Integration Methodologies
- 5.3 Benefits and difficulties in integrating management systems
- 5.4 Technical improvement of an integrated system

Full-or-part-time: 42h

Theory classes: 6h

Practical classes: 3h

Guided activities: 1h 15m

Self study : 31h 45m

GRADING SYSTEM

The evaluation of the student's achievement will be done considering these parameters:

$$\text{Final mark} = (0.60 \times \text{CC}) + (0.40 \times \text{EF})$$

Being:

Short practical cases (in-person) (CC): 60%

Final Exam (EF): 40%

BIBLIOGRAPHY

Basic:

- Abad, Jesus; Sánchez-Toledo, Agustín. Aspectos clave de la integración de sistemas de gestión. Madrid: AENOR, 2012. ISBN 9788481437690.
- Gatell Sánchez, Cristina; Pardo Álvarez, José Manuel. Factores que contribuyen al éxito de una auditoría integrada. Madrid: AENOR, 2011. ISBN 9788481437263.
- Gatell Sánchez, Cristina; Pardo Álvarez, José Manuel. Éxito de un sistema integrado. Madrid: Aenor, 2014. ISBN 9788481438383.
- Griffith, Alan. Integrated management systems for construction: quality, environment and safety. Harlow: Prentice Hall, 2011. ISBN 9780273730651.
- Pardo Álvarez, José Manuel. Configuración y uso de un mapa de procesos. Madrid: Aenor, 2012. ISBN 9788481437966.