

## Course guides

### 205051 - 205051 - Facilities Management

**Last modified:** 29/05/2020

**Unit in charge:** Terrassa School of Industrial, Aerospace and Audiovisual Engineering  
**Teaching unit:** 758 - EPC - Department of Project and Construction Engineering.

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

**Academic year:** 2020    **ECTS Credits:** 3.0    **Languages:** English

#### LECTURER

**Coordinating lecturer:** Núria Forcada Matheu

**Others:** Molins Foj, Marc

#### TEACHING METHODOLOGY

Lecture: Lecturers present concepts, principles and techniques, with the active participation of students.

Problem Based Learning: Lecturers and students resolve exercises and standard problems through specific techniques related to the theoretical contents and principles of the course.

Project Based learning: Students resolve complex problems through specific techniques related to the theoretical contents and principles of the course.

Self-study: Students diagnose their learning needs, in collaboration with the lecturers, and plan their own learning process.

#### LEARNING OBJECTIVES OF THE SUBJECT

The course Facilities Management provides the knowledge, tools and skills needed for successful coordination and management of space, infrastructure, people and real estate decisions within the organizations. This course includes operations and maintenance, strategic planning, commercial real estate, project management, space planning and construction management.

#### STUDY LOAD

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

**Total learning time:** 75 h



## CONTENTS

### Module 1: Facilities Management: areas and functions

**Description:**

The goal of this module is to determine the strategic role of facility management in supporting the core activities of a building on the operational aspects of the built environment and examine the influence of facilities management practices on corporate strategy, procurement, human resource management and financial decision making. This module will also address basic knowledge and operational skills required for the good management of buildings, their environments, facilities, support services and personnel.

**Related activities:**

Distance and in-class activities  
Group project  
Individual work

**Full-or-part-time:** 16h

Theory classes: 6h  
Self study : 10h

### Module 2: Space Planning and Management

**Description:**

The aim of this module is to understand how buildings and the space configuration within them support the strategic objectives of the organization.

This module covers the best practices for developing and implementing design strategies, defining project requirements and anticipating the changing needs of an organization that could be effected by the building design in the future.

**Related activities:**

Distance and in-class activities  
Group project  
Individual work

**Full-or-part-time:** 16h

Theory classes: 6h  
Self study : 10h

### Module 3: Asset Management

**Description:**

The aim of this module is to understand the fundamentals of Asset Management, as much when the company makes large investments in equipment and machinery as when maintaining and operating them in accordance with the own business objectives and the ones of its stakeholders. Both a business vision and technical aspects will be addressed.

**Related activities:**

Distance and in-class activities  
Group project  
Individual work

**Full-or-part-time:** 16h

Theory classes: 6h  
Self study : 10h



#### Module 4: Energy management for Facility Managers

**Description:**

The aim of this module is to present the tools and techniques to effectively manage energy in a building. Energy efficiency, energy monitoring and management and environmental certification systems will be presented in this module.

**Related activities:**

Distance and in-class activities  
Group project  
Individual work

**Full-or-part-time:** 16h

Theory classes: 6h  
Self study : 10h

#### Module 5: Other supporting and integrating technologies

**Description:**

The goal of this module is to present different technologies to support and integrate Asset and Facility Management within the organizational structure of the company such as Enterprise Asset Management Systems (EAMS) or Building Information Modelling: O&M phase (BIM).

**Related activities:**

Distance and in-class activities  
Group project  
Individual work

**Full-or-part-time:** 11h

Theory classes: 3h  
Self study : 8h

## GRADING SYSTEM

The final grade depends on the following three elements:

- \* 20%, Distance and in-class activities
- \* 40%, Group project
- \* 40%, Individual work