

## Course guide

### 230854 - PM - Project Management

**Last modified:** 19/06/2024

**Unit in charge:** Barcelona School of Telecommunications Engineering  
**Teaching unit:** 732 - OE - Department of Management.

**Degree:** MASTER'S DEGREE IN ENGINEERING PHYSICS (Syllabus 2018). (Compulsory subject).

**Academic year:** 2024    **ECTS Credits:** 3.0    **Languages:** English

#### LECTURER

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**Coordinating lecturer:** VICENÇ FERNANDEZ ALARCON

**Others:** Primer quadrimestre:  
JIARUI YIN - 10

#### REQUIREMENTS

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No requirements

#### DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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**Basic:**

CB6. Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context

CB7. Students should know how to apply the knowledge acquired and their problem-solving ability in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.

#### TEACHING METHODOLOGY

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The teaching methodology of this course has 4 parts:

- \* 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.
- \* Reading Based learning: Students read and discuss current scientific papers 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 aims to introduce concepts and techniques for efficient project management. For this purpose, the following specific objectives are defined:

- \* Define the overall aim and specific objectives of a project.
- \* Define the object, scope, stakeholders and specifications of a project.
- \* To plan the project based on three dimensions: Time, Resources, and Quality.
- \* Apply time planning techniques.
- \* Develop an economic budget.
- \* Define quality criteria.
- \* Develop a risk plan.
- \* Monitor a project.
- \* Apply corrective actions to a project.
- \* Communicate the status and results of a project throughout its life.
- \* Close a project.

## STUDY LOAD

Type	Hours	Percentage
Self study	53,0	68.83
Hours large group	24,0	31.17

**Total learning time:** 77 h

## CONTENTS

### Module 1: Project Planning

#### Description:

Scope Management  
Time Management  
Cost Management  
Quality Management  
People Management  
Communication Management  
Risk Management

#### Related activities:

Individual and Group Activities  
Group Project  
Examen Final

#### Related competencies :

CB6. Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context  
CB7. Students should know how to apply the knowledge acquired and their problem-solving ability in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.

#### Full-or-part-time: 38h

Theory classes: 12h  
Self study : 26h

## Module 2: Project Implementation and Monitoring

### Description:

Scope Management  
Time Management  
Cost Management  
Quality Management  
People Management  
Communication Management  
Risk Management

### Related activities:

Individual and Group Activities  
Group Project  
Final Exam

### Related competencies :

CB6. Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context  
CB7. Students should know how to apply the knowledge acquired and their problem-solving ability in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.

### Full-or-part-time: 26h

Theory classes: 8h  
Self study : 18h

## Module 3: Project Closure

### Description:

Expectation management  
Communication  
Team management

### Related activities:

Individual and Group Activities  
Group Project  
Final Exam

### Related competencies :

CB6. Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context  
CB7. Students should know how to apply the knowledge acquired and their problem-solving ability in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.

### Full-or-part-time: 13h

Theory classes: 4h  
Self study : 9h

## GRADING SYSTEM

The final grade depends on the following elements:

- \* 40%, Individual and Group Activities during the course
- \* 30%, Group Project
- \* 30%, Final Exam (revaluated part)



## EXAMINATION RULES.

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The final exam will be individual and without supporting material.

## BIBLIOGRAPHY

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### Basic:

- A guide to the project management body of knowledge: PMBOK guide [on line]. 7th ed. Newtown Square, Pennsylvania: Project Management Institute, 2021 [Consultation: 04/03/2025]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=6636132>. ISBN 9781628256659.

## RESOURCES

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### Other resources:

Slides and current articles on the various topics of the course.