

**Project Management and Legislation**

Code: 102717  
ECTS Credits: 6

Degree	Type	Year	Semester
2500895 Electronic Engineering for Telecommunication	OB	3	1
2500898 Telecommunication Systems Engineering	OB	3	1

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

### Contact

Name: Xavier Aymerich Humet  
Email: Xavier.Aymerich@uab.cat

### Use of Languages

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: No  
Some groups entirely in Spanish: No

### Teachers

Albert Crespo Yepes

### Prerequisites

No prerequisite is required for the students of the degree.

### Objectives and Contextualisation

The objective is to know and use the general techniques of management of engineering projects, including all the phases of the projects and the regulatory and legislative aspects related to the professional field of telecommunications, as well as computer tools oriented to the management of projects .

### Competences

- Electronic Engineering for Telecommunication
- Apply basic elements of economics and human resource management, organisation and planning of projects.
- Apply the necessary legislation in the exercise of the telecommunications engineers profession and use the compulsory specifications, regulations and standards
- Develop ethics and professionalism.
- Develop personal work habits.
- Draft, develop and sign projects in the field of telecommunications engineering designed to conceive, develop or exploit electronic systems
- Manage activities involved in projects in the field of telecommunications.
- Work in a team.

Telecommunication Systems Engineering

- Apply basic elements of economics and human resource management, organisation and planning of projects.
- Apply the necessary legislation in the exercise of the telecommunications engineers profession and use the compulsory specifications, regulations and standards.
- Develop ethics and professionalism.
- Develop personal work habits.
- Direct the activities object of the projects in the field of telecommunication.
- Draft, develop and sign projects in the field of telecommunications engineering that, depending on the speciality, are aimed at the conception, development or exploitation of telecommunication and electronic networks, services and applications.
- Work in a team.

## Learning Outcomes

1. Adapt to unforeseen situations.
2. Ask, write and present a feasibility study of a project.
3. Assume and respect the role of the different members of a team, as well as the different levels of dependency in the team.
4. Assume social, ethical, professional and legal responsibility, if applicable, derived from professional exercise.
5. Conceive, deploy and manage a mini project in the field of telecommunications.
6. Conceive, implement and manage a miniproject in the field of telecommunications.
7. Define and use basic concepts related to project management.
8. Define and use the basic concepts related with project management.
9. Draft documents in the field of telecommunications engineering as a format and established standards.
10. Draft documents in the field of telecommunications engineering using the established and standards.
11. Identify and interpret telecommunications standards and regulations in the national, European and international fields.
12. Identify and interpret the rules and regulation of telecommunications at the national, European and international levels.
13. Identify, manage and resolve conflicts.
14. Make ones own decisions.
15. Plan, draft and present a project feasibility study.
16. Prevent and solve problems.
17. Use computerised project management applications to support the development and exploitation of networks, services and applications.
18. Using IT project management applications to support the development and operation of networks, services and applications.
19. Work cooperatively.
20. Work in complex or uncertain surroundings and with limited resources.

## Content

- Principles, tools and techniques of project management
- Professional colleges and professional field
- Legislation and regulatory bodies
- ICTs Projects (common telecommunication infrastructures)
- Patens, intellectual property and its legislation.

## Methodology

The teaching methodology includes classroom training activities, seminars, practices and the realization of a team project. These activities should be complemented by independent personal work by the student. The team project will consist of developing a project following the methodology described in the subject, with the additional knowledge relevant to the subject of the specific project. The students will be organized in work teams, and each team will develop a different project, with a tutor. The described methodology can be adjusted according to academic or health needs.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Theory lectures and seminars	22	0.88	1, 3, 4, 6, 8, 11, 13, 15, 16, 10, 19, 17
Type: Supervised			
Team project	12	0.48	1, 3, 6, 8, 11, 13, 15, 16, 10, 19, 17
Practices	9	0.36	1, 3, 6, 8, 11, 13, 15, 16, 10, 19, 17
Type: Autonomous			
Study	58	2.32	1, 8, 11, 13, 15, 10, 19, 17
Team working	40	1.6	1, 6, 8, 15, 16, 10, 17

## Assessment

### a) Process and scheduled evaluation activities

The evaluation of the degree of acquisition of the competences by the students is carried out with continuous evaluation, according to these criteria:

A. First written examination on the theory and seminars, which may include practical exercises related to the content developed. It will take place towards the middle of the teaching period. The weight is 30% of the mark for the course.

B. Second written examination on the theory and seminars, which may include practical exercises related to the content developed. It will take place at the end of the teaching period. The weight is 30% of the mark for the course.

C. Participation in the team project. It will be evaluated based on the individual participation of each student in the assigned project team, with a weight of 15%. To track individual participation, each student must periodically make an activity report as indicated on the Virtual Campus.

D. Report and presentation of the project as a team. The structure, content, organization and results of the project report and individual participation in the final presentation of the project will be evaluated. Weight of 15%.

E. Practices. They will be evaluated based on attendance and the corresponding reports. The weight of this activity in the final mark is 10%

In order to pass the course, through continuous assessment, you must obtain a minimum mark of 4 points in each of the previous activities (A, B, C, D, E) and the resulting overall mark results in a minimum of 5 points. It should be taken into account that the activities C, D, E are not recoverable, therefore suspending them with a mark of less than 4 points means that they can not pass the course. Due to academic needs, and according to the development of the course, the evaluation procedures may be adjusted.

#### b) Scheduling of evaluation activities

The programming of the two partial exams (A and B) will be made public through the Virtual Campus and on the website of the School of Engineering, in the exams section. It is planned to take the written exams at the middle and end of the semester, they can be outside the regular hours of the course.

#### c) Recovery process

The student can submit to the recovery whenever it has been presented to a set of activities that represent a minimum of two thirds of the total mark of the course and it results in a minimum mark of 3.5 points. In accordance with the coordination of the Degree and the direction of the Engineering School of the following activities cannot be recovered:

- Activity C, 15% of the final mark.
- Activity D, 15% of the final mark.
- Activity E, 10% of the final mark.

#### d) Procedure for the review of qualifications

For each evaluation activity, a place, date and time of review will be indicated in which the student can review the activity with the professor. In this context, claims may be made about the mark of the activity. If the student does not appear in this review, this activity will not be reviewed later.

#### e) Qualifications

Honor qualification is a decision of the professor responsible for the subject. The regulations of the UAB indicate that MH can only be awarded to students who have obtained a final grade of 9.00 or more. It can be granted up to 5% of MH of the total number of students enrolled.

Non-Evaluable: A student will be considered non-evaluable (NA) if it has not been presented in a set of activities whose weight equals to a minimum of two thirds of the total grade of the subject.

Final grade for assessed students. To pass it, it is necessary that the evaluation of each of the parts exceeds the minimum grade required and that the total assessment, taking into account the weight of each activity, has a score equal to or greater than 5. If you do not pass the subject, the numerical note of the file will be the lowest value between 4,5 and the weighted average of the notes.

#### f) Irregularities by the student, copy and plagiarism

Without prejudice to other disciplinary measures considered appropriate, the irregularities committed by the student that can lead to a variation in the rating of an evaluation act will be qualified with a zero. Therefore, copying, plagiarizing, cheating, copying, etc. In any of the assessment activities it will imply suspending it with a zero. Assessment activities qualified in this way and by this procedure will not be recoverable. If it is necessary to pass any of these assessment activities to pass the subject, this subject will be suspended directly, without opportunity to recover it in the same course. The final grade that will be placed will be the one that results from the corresponding pesos of each part, but maximum a final grade of the assigned 3 points.

#### h) Evaluation of repeating students

As of the second enrollment, the evaluation of the subject will consist of a synthesis test, plus the grade corresponding to the activities C, D, E obtained the first time that the student has enrolled in the subject. The calculation of the note will be made in accordance with the established pesos for each of the activities. In order

to be able to opt for this differentiated evaluation, the repeating student must ask the teacher by email at the latest within 4 weeks after the start of classes and indicating which of the activities they want to be given keep the mark obtained earlier.

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
1st Assessment of theory and seminars (A)	30%	3	0.12	1, 4, 5, 6, 8, 7, 11, 12, 13, 15, 2, 14, 16, 10, 9, 20, 18, 17
2nd Assessment of theory and seminars (B)	30%	3	0.12	1, 4, 5, 6, 8, 7, 11, 12, 13, 15, 2, 14, 16, 10, 9, 20, 18, 17
Final recovery exam	60%	3	0.12	1, 4, 5, 6, 8, 7, 11, 12, 13, 15, 2, 14, 16, 10, 9, 20, 18, 17
Practices (E)	10%	0	0	1, 3, 5, 6, 13, 14, 16, 10, 9, 19, 20, 18, 17
Team project (C, D)	30%	0	0	1, 3, 4, 5, 6, 8, 7, 11, 12, 13, 15, 2, 14, 16, 10, 9, 19, 20, 18, 17

## Bibliography

[Estrategias y tácticas en la dirección y gestión de proyectos / Luis José Amendola](#)

[Evaluación de proyectos / Gabriel Baca Urbina](#)

[Fundamentals of project management / James P.Lewis](#)

[La Gestión de proyectos / Jeff Davidson ; traducción: Mª Amparo Sánchez Hoyos](#)

[A Guide to the project management body of knowledge \(PMBOK® guide\)](#)

[Infraestructuras comunes de telecomunicaciones para el acceso a los servicios de telecomunicación en el interior de las edificaciones \[Recurs electrònic\] : Normas UNE y legislació / AENOR](#)

[Libro blanco del hogar digital y las infraestructuras comunes de telecomunicaciones / Telefónica](#)

[Microsoft Project 2013 step by step / Carl Chatfield, Timothy Johnson](#)

[Normativa de las infraestructuras comunes de telecomunicaciones : infraestructuras de acceso ultrarrápidas y hogar digital Real Decreto 346/2011, nuevo Reglamento de ICT / José Manuel Huidobro Moya,](#)

[Project management for business, engineering, and technology : principles and practice ; John M. Nicholas, Herman Steyn](#)

[Project management for engineering, business and technology John M. Nicholas, Loyola University Chicago, Herman Steyn University of Pretoria](#)

## Software

Microsoft Project (v2013 to 2019)