

PROJECT MANAGEMENT

20563 - PROJECT MANAGEMENT (2024-25)

General

Code: 20563

Lecturer responsible:

RUIZ CACERES, JOSE ANGEL

Credits ECTS:	6,00
Theoretical credits:	1,20
Practical credits:	1,20
Distance-base hours:	3,60

Departments involved

- **Dept:** ARCHITECTURAL CONSTRUCTIONS
Area: ARCHITECTURAL CONSTRUCTIONS
Theoretical credits: 1,2
Practical credits: 1,2
This Dept. is responsible for the course.
This Dept. is responsible for the final mark record.
- **Dept:** GRAPHIC EXPRESSION, COMPOSITION AND PROJECTS
Area: ARCHITECTURAL GRAPHIC EXPRESSION
Theoretical credits: 0
Practical credits: 0

Study programmes where this course is taught

- [DEGREE IN FUNDAMENTALS OF ARCHITECTURE](#)
Course type: OPTIONAL (Year: 5)

Course context for academic year 2024-25

CONTEXT

This subject will push out us into the wide world of the Project Management. But for do it so, we should start for doing ourself some necessary questions...

1. What is a **Project**?
2. What is, therefore, **Project Management**?
3. What is the difference between Project Management and **Construction Management**?

A first reflection on this issue will lead us to the conclusion that if we do not have a complete and coordinated Project, with a controlled data match, where it meets the minimum of formal orders, the technical requirements and necessary understanding it will be no possible to manage a Project.

General Competences (CG)

- **CG.4** : Comprendre els problemes de la concepció estructural, de construcció i d'enginyeria vinculats als projectes d'edificis, a més de les tècniques de resolució d'aquests.
- **CG.5** : Conèixer els problemes físics, les diverses tecnologies i la funció dels edificis, per tal de dotar-los de condicions internes de comoditat i protecció dels factors climàtics.
- **CG.6** : Conèixer les indústries, organitzacions, normatives i procediments per a plasmar els projectes en edificis i integrar els plànols en la planificació.
- **CG.7** : Comprendre les relacions entre les persones i els edificis i entre aquests i l'entorn, a més de la necessitat de relacionar els edificis i els espais situats entre aquests en funció de les necessitats i de l'escala humanes.

Skills/Skills

- **CB 2** : Que els estudiants sàprien aplicar els coneixements al seu treball o vocació d'una forma professional i posseïsquen les competències que solen demostrar-se per mitjà de l'elaboració i defensa d'arguments i la resolució de problemes dins de la seua àrea d'estudi.
- **CB 3** : Que els estudiants tinguen la capacitat de reunir i interpretar dades rellevants (normalment dins de la seua àrea d'estudi) per a emetre judicis que incloguen una reflexió sobre temes rellevants d'índole social, científica o ètica.
- **CB 4** : Que els estudiants puguen transmetre informació, idees, problemes i solucions a un públic especialitzat o no especialitzat.
- **CB 5** : Que els estudiants hagen desenvolupat les habilitats d'aprenentatge necessàries per a emprendre estudis posteriors amb un alt grau d'autonomia.

Inherent transversal

competences:>>Cognitive Instrumental

- **CT.11** : Habilitat per a aplicar els coneixements a la pràctica. Habilitat de tecnificar, en processos aplicables a la realitat, qualsevol tipus de discurs conceptual.

UA Basic Transversal Competences

- **CT.3** : Capacitat de programar i fixar terminis. Capacitat de planificar treballs i comprometre's en el compliment d'objectius i terminis.
- **CT.4** : Capacitat de treball en grup. Capacitat d'èxit en treballs col·lectius i de grup, repartint treball i assumint rols.
- **CT.6** : Capacitat d'adaptar-se a nous conceptes i mètodes. Capacitat d'aprendre i aplicar, autònomament i interdisciplinària, nous conceptes i mètodes.
- **CT.7** : Capacitat d'adaptar-se a nous models tecnològics professionals. Capacitat d'assimilar i adaptar-se a l'evolució contínua de la tecnologia en l'àmbit de desenvolupament professional.

Inherent transversal

competences:>>Methodological Instrumental

- **CT.18** : Habilitat per a prendre decisions. Capacitat per a entendre la complexitat dels contextos en què produïm transformacions i prendre-hi decisions creatives de manera responsable.
- **CT.20** : Habilitat per a integrar els diversos sabers i disciplines. Capacitat d'entendre la dimensió múltiple dels problemes en què s'intervé i habilitat per a seleccionar i incorporar els arguments més eficaços.

Inherent transversal

Competences:>>Social Interpersonal

- **CT.27** : Motivació per treballar en equips de caràcter interdisciplinari i internacional. Capacitat per a entendre les diverses maneres d'aproximar els problemes, tant des

d'altres disciplines com des d'altres territoris, com a oportunitats d'aprenentatge i creixement.

- **CT.28** : Habilitat per a dissenyar i gestionar propostes que incorporen responsabilitat social i mediambiental. Capacitat per a entendre el compromís amb l'entorn social i físic que impliquen els processos de transformació d'aquest.

Inherent transversal

Competences:>>Leadership System

- **CT.32** : Habilitat per a perseguir les bones idees. Capacitat per a localitzar les idees extremadament rellevants per la capacitat sintètica o les operatives i fixar-les com a objectius prioritaris.

Specific Competences:>>Technical Block

- **CE.12T** : Aptitud per a concebre, calcular, dissenyar, integrar en edificis i conjunts urbans i executar solucions de fonamentació.
- **CE.13** : Aptitud per a aplicar les normes tècniques i constructives.
- **CE.17T** : Capacitat per a concebre, calcular, dissenyar, integrar en edificis i conjunts urbans i executar estructures d'edificació.
- **CE.18T** : Capacitat per a concebre, calcular, dissenyar, integrar en edificis i conjunts urbans i executar sistemes de divisió interior, fusteria, escales i altra obra acabada.
- **CE.19T** : Capacitat per a concebre, calcular, dissenyar, integrar en edificis i conjunts urbans i executar sistemes de tancament, coberta i altra obra gruixuda.

Specific Competences:>>Project Block

- **CE.34T** : Aptitud per a suprimir barreres arquitectòniques.
- **CE.35T** : Aptitud per a resoldre el condicionament ambiental passiu, incloent-hi l'aïllament tèrmic i acústic, el control climàtic, el rendiment energètic i la il·luminació natural.
- **CE.37T** : Capacitat per a concebre, practicar i desenvolupar projectes bàsics i d'execució, croquis i avantprojectes.
- **CE.38T** : Capacitat per a concebre, practicar i desenvolupar projectes urbans.
- **CE.39T** : Capacitat per a concebre, practicar i desenvolupar la direcció d'obres.
- **CE.59** : Coneixement de la reglamentació civil, administrativa i urbanística, de l'edificació i de la indústria relativa a l'execució professional.

Exclusive skill taught in this course

No data

Learning outcomes (Training objectives)

No data

OBJETIVES

The general objective of the subject is to create an environment so that the student acquires the necessary criteria, skills and abilities that allow him to know the process by which is developed in Project Management and, consequently, can carry out the risk analysis of a Project and then be able to establish what Project remedies are necessary to minimize those ones. The progressive acquisition of knowledge aims at training students for professional development, based on both academic and professional competencies.

For this purpose, the following partial objectives are proposed:

1. That the student acquires knowledge about the **PRACTICAL ASPECTS** about the professional practice of Project Management.
2. That the student acquires necessary knowledge for the **MANAGEMENT AND COORDINATION** of the professional work in terms of Project Management.
3. That the student knows the **PROCESS** that is produced during the Management of a Project and/or its Construction.
4. That the student knows the current regulations which affect his/her professional practice.
5. That the student makes contact with the **COMPETENCES** that includes his/her training and his/her professional possibilities.
6. That the student knows the professional **RESPONSIBILITIES** of the agents involved in the Building Scope.
7. That the student be introduced into the risk analysis offered by a Project: acquiring **RISK ANTICIPATION** criteria and protocols (such as Measurement, Terms of Use, Basic Documents, Specific Regulations, etc.) that are used in the Professional Practice in order to allow the economic and temporary **SETTLEMENT** of a Project or Construction, and so, it could be carried out under the required terms.
8. That the student knows the figure of the Project Manager as an **EXPERT-ADVISOR** within the Construction Scope, making an approaching **ANALYSIS** and its subsequent **STARTUP** to obtain the economic and temporary settlement established since the beginning of the Process.
9. That the student makes contact with the development of a **TEAMWORK**.

Content for academic year 2024-25

CONTENTS OF THE SUBJECT

The structure of the subject is organized on the basis of **5 DIDACTIC UNITS**.

Didactic Unit 1 / Elementary Concepts

Didactic Unit 2 / The professional structure of the Building in Spain

Didactic Unit 3 / Architectural Project Management

Didactic Unit 4 / Construction Management of the architectural work

Didactic Unit 5 / Built Work Management

The five Didactic Units provide the theoretical and practical content of the subject, in such a way that each of these fields is composed of a series of theoretical themes (T) that develop the fundamental Concepts of Didactic Unit and the development of the Practical Exercises (P), in which the exposed knowledge is applied.

Didactic Unit 1. Elementary Concepts

- 1.1. ¿What is a Project? The Architectural Project
- 1.2. ¿What is Project Management? The reason for its importance.
- 1.3. Project Management vs Construction Management.
- 1.4. Differences between Budget, Cost and Value. How many types of Budgets coexist in the field of Construction in Spain? Why is this situation coming out?
- 1.5. Project Units. Unit Prices. Unitary items. Hourly Jobs.
- 1.6. Importance of Measurement (method) in Project and Construction Management.
- 1.7. What is a contract or a professional order? Analysis of the set of parts which it is composed.
- 1.8. Importance of Terms of Use: before and during the execution of the building works.

Didactic Unit 2. The professional structure of the Building in Spain

- 2.1. Professional Practice. The LOE regulation. Intervening Agents.
- 2.2. The institutional organization of the Profession of an Architect. The Architects Association in Spain.
- 2.3. The free professional Architect.
- 2.4. Work as an integrated team Architect.
- 2.5. Other forms of Professional Practice (Product designer, Web designer, etc).
- 2.6. Professional Responsibilities. Civil Liability Insurance.

Didactic Unit 3. Architectural Project Management

- 3.1. Types of Projects and Planning. New Building (Newly-Built), Building Reforms, Refurbishment and others.
- 3.2. Temporary organization of work forecast. The processing of countersigned (Project approved) by the corresponding Architects Association, licenses, etc.
- 3.2. Composition of an Architectural Project. The application of the current regulations.
- 3.3. To reduce the costs of a Project: agreement of data between the whole documents whose it is composed.
- 3.4. Comprehensive Project Review (CPR) upon delivery. Risk Forecasting.
- 3.5. Time and Cost Management for the DRAFTING of the Architectural Project.
- 3.6. Time and Cost Management for the EXECUTION of the Architectural Project.
- 3.7. Project Management Development: BIM as a reference.
 - 3.7.1. Current status of its implementation.
 - 3.7.2. Positive and negative aspects of the BIM system.

Didactic Unit 4. Construction Management of the architectural work

- 4.1. Preliminary Activities Management.
 - 4.1.1. The processing of licenses for Works and Activities.
 - 4.1.2. The Bidding Budget.
 - 4.1.2. The Awarded Budget. The Works Contract.
 - 4.1.3. Planning of the Work: the time and the Budget Factors.
- 4.2. Execution of the Work Management.
 - 4.2.1. The Faculty Management of the Work and its Execution Control.
 - 4.2.2. The Health and Safety Coordination.
 - 4.2.3. Documentation of the Monitoring of the Work. The Quality Control.
 - 4.2.4. The Construction Management Costs and the Execution of Works: the Construction Works Certifications.
- 4.3. Built Work Management.

Didactic Unit 5. Built Work Management.

- 5.1. The Building Book (the mandatory manual required by current legislation).
- 5.2. Maintenance programming: Building and User.
- 5.3. ¿What is Facility Management?
- 5.4. Intervention works at the Building.

Related links

No data

Bibliography

Project management : proven principles in agile project management for successful managers and businesses

Author(s): KEANE, Thomas

Issue: Great Britain : CreateSpace Independent Publishing Platform, 2017;

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Category: Básico

Assessment procedures and criteria 2024-25

EVALUATION

The subject is composed by the following evaluable parts:

1. Active participation of the student,
2. Five Individual Practical Exercises (5) and
3. A Practical Team Exercise (1), developed during the Course, previously selected, under the supervision of the teaching staff and in accordance with the contents and criteria received in class and taught in this Teaching Guide.

The proposed teaching method seeks to achieve a progressive acquisition of skills through the practical application of the knowledge to which theoretical themes refer. The present evaluation model assumes a continuous attendance to the theoretical and practical classes during the whole course, with an active participation of the student in them.

1. ACTIVE PARTICIPATION. The student's participation will be evaluated considering:

- a) The participatory presence of the student in the classroom during the theoretical hours and established practices, working individually or in groups in the practical exercises, and correcting them with the teacher.
- b) The adequacy of Team Work in about the weekly objectives defined in the Learning Plan.
- c) The individual demandability and the positive interdependence of the students, by valuing the student's knowledge and control of all the solutions proposed by the Group, answering questions about the exposed exercise in the weekly corrections and in the planned exhibition, in which students will review and evaluate the work of other classmates (Peer Reviewing) and self-evaluate their personal work.

2. INDIVIDUAL PRACTICAL EXERCISES (IPE) (5). The Practical Exercises will be individually done inside the classroom, delivering the same ones to the teacher once they be finished during the class schedule. They consist of carrying out different RISK ANALYSIS based on the available documentation.

3. PRACTICAL TEAM EXERCISES (PTE) (1). The work must be done in a Team, with a maximum of three students (3), with the delivery of the complete work done during the course and concluding with the final presentation to the rest of their classmates. As a complement to the Individual Practical Exercises (IPE), all students, in Teams of three members, have to carry out the joint development of Risk Analysis and Project Planning and Construction of the Model that they have previously analyzed.

APPROVED BY COURSE.

Students can approve by Course only if ALL and EACH ONE of the following requirements are met:

- Have participated actively during the development of the classes.
- Have delivered the 5 INDIVIDUAL PRACTICAL EXERCISES (IPE) of Course on the indicated date.
- Have delivered the PRACTICAL TEAM EXERCISES (PTE) of Course on the indicated date.
- Have obtained an equal or greater score than 4.0 points out of 10 in each of the different exercises, with an overall average score of 5.0 or higher.
- In case of obtaining an insufficient score, it will be returned the corrected work to the student, indicating the errors and the parts that must complete or remake, and it will be delivered the following announcement.
- Acquisition of the basic knowledge set for the subject. It will be evaluated by oral defense of students works done during the course.

APPROVED IN JUNE AND JULY ANNOUNCEMENT.

- Have overcome each one of the practical exercises of course (5) and the Team Work (1) with a superior or equal score to 5.0.
- Overcome a written test on basic knowledge, established by the subject, with a score of 5.0 or higher.

Description	Criteria	Type	Weighting system
Part 1: Active Participation	APPROVED	ACTIVITIES OF EVALUATION DURING THE SEMESTER	15
Part 2: Individual Practical Exercises	APPROVED	ACTIVITIES OF EVALUATION DURING THE SEMESTER	30
Part 3: Practical Team Exercise	APPROVED	ACTIVITIES OF EVALUATION DURING THE SEMESTER	55

Official exam dates for academic year 2024-25

Exam session	Date	Time	Group - Classroom(s) allocated	Comments
(C3) Periodo ordinario para asignaturas de segundo semestre y anuales	09/06/2025			Teoría
(C4) Pruebas extraordinarias para asignaturas de grado y máster	08/07/2025			Teoría

Academic staff



RUIZ CACERES, JOSE ANGEL

Lecturer responsible

THEORY CLASS: Groups: 1

TALLER: Groups: 1

Groups

THEORY CLASS


Group	Semester	Morning or afternoon session	Language	No. of enrolled students
Gr. 1 (THEORY CLASS) : 1 (ENG)	2S	Morning	English	4

TALLER

Group	Semester	Morning or afternoon session	Language	No. of enrolled students
Gr. 1 (TALLER) : 1 (ENG)	2S	Morning	English	4

Timetables

THEORY CLASS

Group	Start date	End date	Day	Start time	End time	Lecture room
1	27/01/2025	23/05/2025	LUN	09:00	11:00	0039P2109 

TALLER

Group	Start date	End date	Day	Start time	End time	Lecture room
1	27/01/2025	23/05/2025	LUN	11:00	13:00	0039P2109 