

1. BASIC INFORMATION

Course	TALLER DE INTEGRACIÓN I
Degree program	Grado en Fundamentos de la Arquitectura
School	Escuela de Arquitectura, Ingeniería y Diseño
Year	Third course
ECTS	6 ECTS
Credit type	Compulsory
Language(s)	Spanish/English
Delivery mode	Campus-based mode
Semester	First semester
Academic year	2025/26
Coordinating professor	Jorge Nieto Pujol
Professor	María Martínez Morón, Lorenzo Fernández-Ordóñez

2. PRESENTATION

INTRODUCTION

The Integration course is inscribed, according to the Degree Memory, within the group or Module of Projects.

CURSOS	MATERIAS				
5	EXPRESION GRAFICA I+D	TALLER DE PROYECTOS DE TECNOLOGIA	PROYECTO TERRITORIAL Y PAISAJE	TRABAJO FIN DE GRADO	
	PRÁCTICAS PROFESIONALES		SOSTENIBILIDAD EN EL ENTORNO CONSTRUIDO	TALLER DE PROYECTOS G7	
4	SISTEMAS TECNICOS	DISEÑO DE ESTRUCTURAS Y CIMENTACIONES	DEONTOLOGIA Y VALORACIONES	TALLER DE PROYECTOS G6	
	INGLES GENERAL	CONSTRUCCION IV: ENVOLVENTES	HISTORIA DEL ARTE Y LA ARQUITECTURA II	TALLER DE PROYECTO-CIUDAD	TALLER DE PROYECTOS G5
3	CONSTRUCCION III: ESTRUCTURA	DIMENSIONADO DE ESTRUCTURAS	HISTORIA DEL ARTE Y LA ARQUITECTURA I	TALLER DE INTEGRACIÓN II	TALLER DE PROYECTOS G4
	INSTALACIONES EN LA EDIFICACIÓN	GESTION EMPRESARIAL	ORDENACION DE LA CIUDAD	TALLER DE INTEGRACIÓN I	TALLER DE PROYECTOS G3
2	TÉCNICAS DE ACONDICIONAMIENTO	ANÁLISIS DE LAS ESTRUCTURAS	ÁREAS URBANAS Y DISEÑO SOSTENIBLE	TALLER DE DIBUJO INTEGRADO IV	TALLER DE PROYECTOS G2
	CONSTRUCCIÓN II: MATERIALES	MECÁNICA DE LAS ESTRUCTURAS	ARQUITECTURA Y ARTE DE LOS SIGLOS XX Y XXI	TALLER DE DIBUJO INTEGRADO III	TALLER DE PROYECTOS G1
1	FISICA DE LOS PROCESOS	CONSTRUCCIÓN I: SISTEMAS	BASES DE LA URBANÍSTICA	GEOMETRIA ARQUITECTONICA	TALLER DE DIBUJO INTEGRADO II
	MATEMÁTICAS APLICADAS	HABILIDADES COMUNICATIVAS	INTRODUCCIÓN A LA ARQUITECTURA Y ARTE CONTEMPORÁNEOS	DIBUJO ARQUITECTÓNICO	TALLER DE DIBUJO INTEGRADO I

Table of subjects according to the Degree Report.

This is Campus-based mode, compulsory course (6ECTS and 150h).

One of the aspects that distinguishes architects from other professionals in the world of construction is the ability to manage complexity. To this end, students receive a great deal of specialised knowledge throughout their studies, which they should, in theory, integrate as they train, in the project subjects. The experimental and investigative nature of these subjects sometimes clouds the necessary incorporation of learned knowledge, replacing it with innovative work. Maintaining a markedly projective character, that is to say, seeking the realisation of a project, this subject aims for the student to incorporate information about place, space, materiality, structure, expression and detail into his or her project.

The course is taught in the form of a workshop in which students rehearse and exercise one of the basic and fundamental aspects of the architectural profession: the integration of architectural design with the different areas of knowledge that make the construction of architecture possible. The aim is to learn how to develop architectural design, structural and construction systems, the main installation systems, as well as the relevance in the decisions of the urban space project.

The learning outcomes include creativity; the realisation of projects in a real context, which must be integrated with formal, structural and constructive criteria in relation to the specific environment. The richness of the proposed spaces and their suitability to the social and environmental conditions, as well as the materiality in the definition of the architecture, will also be taken into account.

The work methodology is based on the workshop, and therefore on the continuous assessment system, so that the student's assiduous presence and participation in the course is essential to obtain a pass for the course.

3. COMPETENCIES AND LEARNING OUTCOMES

Core competencies:

- CB1: Students have demonstrated possession and understanding of knowledge in their field of study which builds on the foundation of general secondary education, and is usually at a level which, while relying on advanced textbooks, also includes some aspects involving knowledge from the cutting edge of their field of study.
- CB2: Students know how to apply their knowledge to their work or vocation in a professional manner and possess the competences that are usually demonstrated through the development and defence of arguments and problem solving within their field of study.
- CB3: Students have the ability to gather and interpret relevant data (usually within their area of study) in order to make judgements that include reflection on relevant social, scientific or ethical issues.
- CB4: Students are able to convey information, ideas, problems and solutions to both specialist and non-specialist audiences.
- CB5: That students have developed those learning skills necessary to understand further studies with a high degree of autonomy.

Cross-curricular competencies:

- CT1: Responsibility: Aptitude or ability to cope with responsibility that raises awareness of the role of the architectural profession in society, in particular by developing projects that take into account social and environmental factors.
- CT2: Self-confidence.
- CT3: Awareness of ethical values: Ethical commitment, including understanding and knowledge of the rights and obligations of individuals and professionals, promoting respect for human rights, protection of the weaker sections of society and respect for the environment.
- CT4: Communication skills in the native language (either orally or in writing) and in the English language, in accordance with the ideology of the European University of Madrid, any concept or

specification specific to the development of the regulated profession of Architect. This will include learning the specific vocabulary of the degree. This aptitude includes the ability to manage information.

- CT5: Interpersonal understanding.

Specific competencies:

- CE34: Ability to remove architectural barriers.
- CE35: Ability to address passive environmental conditioning, including thermal and acoustic insulation, climate control, energy efficiency and daylighting.
- CE37: Capacity for the conception, practice and development of basic and execution projects, sketches and preliminary projects.
- CE38: Capacity for the conception, practice and development of urban projects.
- CE40: Ability to draw up functional programmes for buildings and urban spaces.
- CE44: Ability to draft civil engineering projects.
- CE60: Knowledge of feasibility analysis and the supervision and coordination of integrated projects.

Learning outcomes:

- RA1: Research and analyse in a creative and rigorous way the starting data of reality and its physical, programmatic and contextual conditioning factors, through teamwork.
- RA2: To make and devise projects in a spatial, temporal and social context, taking into account a specific programme, the determining factors of the urban location in which it is situated and the material and cultural pre-existences of the place.
- RA3: Integrate in the project process the urban parameters, the formal criteria in relation to the urban structure, the physical environment and the territory, as well as the social, environmental and material conditions in the definition of the intermediate spaces, and make explicit their position with respect to the research carried out.
- RA4: Demonstrate the ability to communicate and express the ideas and concepts resulting from one's own work, by means of discourses, drawings and graphics in contemporary languages and appropriate scales.

The following table shows the relationship between the competencies developed during the course and the learning outcomes pursued:

Competencies	Learning outcomes
CB3, CT4, CT5, CT6, CT7,	RA1: Research and analyse in a creative and rigorous way the starting data of reality and its physical, programmatic and contextual conditioning factors, through teamwork.
CB1, CG4, CG5, CG6, CE34, CE38, CE53, CE60	RA2: To make and devise projects in a spatial, temporal and social context, taking into account a specific programme, the determining factors of the urban location in which it is situated and the material and cultural pre-existences of the place.
CB2, CG1, CG2, CG3, CT1, CT2, CT3, CT8, CT9, CE35, CE37, CE40, CE44, CE60	RA3: Integrate in the project process the urban parameters, the formal criteria in relation to the urban structure, the physical environment and the territory, as well as the social, environmental and material conditions in the definition of the intermediate spaces, and make explicit their position with respect to the research carried out.
CB4, CB5, CG7, CT10,	RA4: Demonstrate the ability to communicate and express the ideas and concepts resulting from one's own work, by means of discourses, drawings and graphics in contemporary languages and appropriate scales.

CB3, CT4, CT5, CT6, CT7,	RA1: Research and analyse in a creative and rigorous way the starting data of reality and its physical, programmatic and contextual conditioning factors, through teamwork.
CB1, CG4, CG5, CG6, CE34, CE38, CE53, CE60	RA2: To make and devise projects in a spatial, temporal and social context, taking into account a specific programme, the determining factors of the urban location in which it is situated and the material and cultural pre-existences of the place.

4. CONTENT

The development of the Integration I workshop course project comprises (numbering does not necessarily imply sequential order):

1. Understanding of the problem in its dimension of responsible cooperation.
2. Review of the documentation received.
3. Discussion and proposal for the development of the site.
4. Initial proposal. Preliminary draft.
5. Basic Project.

In all the blocks the student is asked to:

- Understanding of the assignment and its constraints, and hence the impact of decisions on the project.
- Adding value to the proposal at each level of development.
- Change management and flexibility in the face of the uncertainty that accompanies the development of projects.
- Results orientation in the development of both proposals and documents.
- Efficient planning and time management both at a personal and collective level.

The subject is organised into learning units, which in turn are divided into themes:

Unit 1. Materiality, spatiality, light.

Unit 2. The place

Unit 3. Urban/social integration

Unit 4. The Programme.

Unit 5. Structural and installation systems.

Unit 6. Expressiveness and Design.

Unit 7. The Work.

Unit 8. Exhibition

- 8.1. Communication and exhibition.

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

As a basis, the class is a workshop. The whole work methodology is based on active participation in the workshop and on the continuous assessment system, so that the student's assiduous (permanent) presence and participation in the subject is essential to obtain a pass in the course.

They will be given:

- Lectures
- Directed work, practical exercises and problem solving.
- Exhibition of work
- Group work
- Independent work
- Tutorials, academic monitoring and assessment

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Campus-based mode:

Learning activity	Number of hours	AI use
Master Sessions	10	Allowed
Directed work, practical exercises and problem solving	32	Promoted in research, not allowed in development
Exhibition of works	11	Allowed
Group work	11	Promoted in research, not allowed in development
Autonomous work	64	-
Tutorials, academic monitoring and evaluation	22	Not allowed
TOTAL	150	

Online mode:

Learning activity	Number of hours

TOTAL	

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Campus-based mode:

Assessment system	Weight
Submission of Exercises 1, 2, 3 and 4, and joint Jury with G3.	20%
Submission of Exercises 5, 6, 7 and 8 joint Jury with G3.	20%
Submission of Exercises: Project development Intermediate work	25%
Submission of Exercises: Project development Final work	25%
Participation	10%

Online mode:

Assessment system	Weight

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

7.1. First exam period

To pass the course in the first exam period, you must obtain a final course grade of at least 5 out of 10 (weighted average).

In any case, you will need to obtain a grade of at 4.0 in the final exam in order for it to count towards the final grade along with all the grades corresponding to the other activities.

7.2. Second exam period

To pass the course in the second exam period, you must obtain a final grade of at least 5 out of 10 (weighted average).

In any case, you will need to obtain a grade of at 4.0 in the final exam in order for it to count towards the final grade along with all the grades corresponding to the other activities.

The student must deliver the activities not successfully completed in the first exam period after having received the corresponding corrections from the professor, or those that were not delivered in the first place.

8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Assessable activities	Deadline
Submission 1	20/09
Submission 2	27/09
Submission 3	4/10
Submission + Jury	18/10
Submission 5	25/10
Submission 6	8/11
Submission 7	8/11
Submission 8 + Jury	15/11
Intermediate project development	13/12
Final project development	17/01

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

9. BIBLIOGRAPHY

The recommended Bibliography is:

- WAGENSBERG, Jorge. "La rebelión de las formas, o como perseverar cuando la incertidumbre aprieta", 2004.
- THOMSON, D'Arcy. On Growth and Form
- BACHELARD, Gaston: The Poetics of Space, 1969 and 2014
- MORTON, Timothy: The Ecological Thought, 2010.
- GARCÍA-GERMÁN, Jacobo: Estrategias operativas en arquitectura, 2012.
- JAQUE, Andrés: Eco-ordinary. Codes for everyday architectural practices, 2011.
- SENNETT, Richard: El artesano, 2008.
- OBÓN, David: Dinámicas emergentes. 2022
- **Magazines:** _ Tectónica, ATC Ediciones, in particular issues 1 (envelopes I light façades), 2 (envelopes II heavy envelopes), 6 (flat roofs), 8 (pitched roofs), 10 (glass), 16 (curtain walling), 17 (complex geometries), 19 (plastics), 21 (installations), 22 (aluminium) 25

(concrete III), 32 (metal envelopes) and 34 (roofs). _ DETAIL Spanish edition, in particular issues: 7+8/2003 and 7/2001 (Facades and external walls), 11/2005, 7+8/2004 and 5/2001 (Roof structures), 7+8/2002 and 7+8/2005 (Flat, pitched and corrugated roofs).

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

orientacioneducativa@universidadeuropea.es

11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation.

WORK PLAN FOR THE COURSE

HOW TO COMMUNICATE WITH YOUR PROFESSOR

Whenever you have a question about the content or activities, don't forget to post it to your course forum so that your classmates can read it.

You might not be the only one with the same question!

If you have a question that you only want to ask your professor, you can send him/her a private message from the Campus Virtual. And if you need to discuss something in more detail, you can arrange an advisory session with your professor.

It's a good idea to check the course forum on a regular basis and read the messages posted by your classmates and professors, as this can be another way to learn.

SCHEDULE ACTIVITIES

This table shows the delivery deadline for each assessable activity in the course, as well as the delivery dates:

Week	Contents	Learning activities /Assessables	Weight of evaluable activity
1	LIGHT	- Graphic documentation. - Physical documentation	5%
2	DARKNESS	- Graphic documentation. - Physical documentation	5%
3	WATER	- Graphic documentation. - Physical documentation	5%
4	LIGHT (2) + JURY 1	- Graphic documentation. - Physical documentation	5%
5	REHABILITATION - PLACE	- Graphic documentation. - Physical documentation	5%
6	ENERGY 1	- Graphic documentation. - Physical documentation	5%
7	ENERGY 2	- Graphic documentation. - Physical documentation	5%
8	TOPOGRAPHY + JURY 2	- Graphic documentation. - Physical documentation	5%
9-18	PROJECT DEVELOPMENT + JURY	- Graphic documentation. - Physical documentation	25%
	FINAL SUBMISSION + JURY	- Graphic documentation. - Physical documentation	25%
	PARTICIPATION	PARTICIPATION AND PRESENTATIONS	10%

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

DESCRIPTION FOR ASSESSMENT ACTIVITIES

The course is divided into three parts:

-Part One. Research.	Approximately 4 weeks.	Group work
-Part Two. Proposal.	Approximately 4 weeks.	Individual Work.
-Part Three. Project.	Rest of the course.	Individual work.

The course runs in parallel to the G3 project workshop, with which it establishes joint critical sessions, as well as the completion of documentation to be provided in both subjects.

FIRST STAGE.

In the first part, weekly submissions are established.

Each of the weekly submissions (focused on the specific topics) should include:

- **Graphic documentation** (minimum 10 pages) containing at least (suggestions of sections, plans, images, perspectives, etc.). Each drawing shall have a graphic scale, and the document shall be no longer than 500 words. Each exercise will present a reference building, well documented.
- **Physical documentation** (a mock-up or prototype based on a Din A4 sheet)

At the end of the first phase, the group must present, therefore, 4 models with a minimum size of Din A4, and an A5 document with the summary of the 4 investigations carried out, duly bound in a single document.

At the end of each Phase, or Part of the subject, a joint Jury will be held with G3 projects and an intermediate Jury is also foreseen in the final phase.

SECOND PHASE.

The second phase will focus on the development of a Proposal based on the research topics of the previous phase (and/or a specific programme and location provided by the teachers).

The second phase will also have weekly submissions.

At the end of the second phase, each individual student will have developed a proposal.

The submissions at the end of this phase will include:

- Graphic documentation** (A3 format) containing at least:
Concept and investigations of Phase 1 applied.
Sections, elevations and plans.
1 or two perspectives summarising the proposal.
The drawings shall have a graphic scale from 1/500 to 1/200.
Each drawing shall have a graphic scale.
The text shall be a maximum of 250 words.
- **Physical documentation** (a mock-up or prototype based on a Din A3)

THIRD PHASE.

During the rest of the course each student will develop a project.

The scope of the graphic and physical documentation to be submit will be at least:

-Graphic documentation (A1 format) containing at least:

Concept and investigations of the previous phase.

- Definition of Intermediate Spaces.
- Urban relationship
- Sections, elevations and floor plans.
- Structural scheme
- Energy diagram
- Section of the envelope.
- Images of the exterior and interior.

The drawings shall have a graphic scale of 1/200 to 1/50.

Each drawing shall have a graphic scale.

The text shall be a maximum of 350 words.

- **Physical documentation** (a mock-up or prototype based on a Din A3)

RUBRICS FOR ASSESSMENT ACTIVITIES

	D (0-2) bajo o nulo	C (2-4) insuficient.	B (4-6) regular	A (6-8) bien	A+ (8-10) muy bien
<u>Maquetación:</u>	Trabajo muy escaso, imágenes y/o textos no elaborados por los estudiantes, dibujos escasos y con errores graves, maquetación desordenada y confusa.	Imágenes o dibujos desenfocados o con bordes de color, textos no propios, desordenados y confusos, dibujos que no cumplen criterios de AF o con errores graves, maquetación desordenada.	Imágenes o dibujos desenfocados o poco legibles, textos redactados pero desordenados o confusos, dibujos que no cumplen algunos criterios de AF o con errores, maquetación desordenada.	Imágenes o dibujos correctamente escaneadas, textos propios pero poco claros o demasiado largos, dibujos conforme a criterios de AF con errores no graves, maquetación ordenada.	Imágenes o dibujos correctamente escaneados, textos propios breves y claros, dibujos propios conforme a criterios de AF, maquetación ordenada, clara y legible.
<u>Calidad gráfica:</u>	Trabajo muy escaso, dibujos no realizados por los estudiantes.	Dibujos y escalas inadecuados a tamaños de papel; grosores de líneas no diferenciados por importancia de elementos/criterios constructivos.	Dibujos o escalas no adecuados a tamaños de papel; o grosores de líneas poco diferenciados por importancia de elementos/criterios constructivos.	Dibujos y escalas adecuadas a tamaños de papel, grosores de líneas adaptado a importancia de elementos/criterios constructivos.	Dibujos y escalas adecuadas a tamaños de papel, grosores de líneas adaptados a importancia de elementos/criterios constructivos, uso colores y/o tramas para destacar elementos importantes.
<u>Cumplimiento:</u>	Trabajo escaso o con falta de dibujos esenciales para la comprensión/explicación de la envolvente. Falta de textos explicativos.	Envolvente mal comprendida/explicada, falta de secuenciación de las fases constructivas, relación con la estructura ausente o mal comprendida.	Envolvente comprendida pero mal explicada, secuenciación de las fases constructivas ausente o incompleta, relación con la estructura de soporte sin explicar/comprender con claridad.	Correcta explicación/comprensión de la envolvente y de la secuenciación de las fases constructivas aunque con alguna ausencia y de su relación con la estructura de soporte.	Presencia de todos los documentos necesarios para la correcta explicación/comprensión de la envolvente, secuenciación de las fases constructivas de la misma y su relación con la estructura de soporte.
<u>Adecuación:</u>	Trabajo muy escaso, no se explica o no se ha comprendido en absoluto la relación entre los elementos de la envolvente y sus funciones ni con los objetivos del proyecto.	Relación de cada uno de los elementos de la envolvente (incompleta: ausencia de cubierta o fachada o contacto con el terreno) con las funciones y prestaciones que realizan confusa o mal comprendida y ausencia de explicación de su relación con los objetivos pretendidos por el proyecto.	Relación de cada uno de los elementos de la envolvente (incompleta: ausencia de cubierta o fachada o contacto con el terreno) con las funciones y prestaciones que realizan sin explicar con claridad o falta por explicar su relación con los objetivos pretendidos por el proyecto.	Relación clara y bien explicada de cada uno de los elementos de la envolvente (pero incompleta: ausencia de cubierta o fachada o contacto con el terreno) con las funciones y prestaciones que realizan, así como con los objetivos pretendidos por el proyecto aunque con alguna ausencia.	Relación clara y bien explicada de cada uno de los elementos de la envolvente completa (cubierta, fachada, contacto con el terreno) con las funciones y prestaciones que realizan, así como con los objetivos pretendidos por el proyecto.

PLAGIARISM REGULATION

In accordance with the current student disciplinary regulations at Universidad Europea:

- Plagiarism, in full or in part, of intellectual works of any kind, is considered a very serious offense.
- Very serious offenses relating to plagiarism and the use of fraudulent means to pass assessment tests shall result in exclusion from the exams for the relevant period, as well as the inclusion of the offense and its details in the student's academic record.