

## 1. BASIC INFORMATION

<b>Course</b>	TALLER DE INTEGRACIÓN II
<b>Degree program</b>	Grado en Fundamentos de la Arquitectura
<b>School</b>	Escuela de Arquitectura, Ingeniería y Diseño
<b>Year</b>	Tercero
<b>ECTS</b>	6 ECTS
<b>Credit type</b>	Obligatoria
<b>Language(s)</b>	Español/Inglés
<b>Delivery mode</b>	Presencial
<b>Semester</b>	Segundo semestre
<b>Academic year</b>	2024/25
<b>Coordinating professor</b>	José Jurado Egea

## 2. PRESENTATION

One of the aspects that distinguishes architects from other professionals in the construction world is the ability to manage complexity. To achieve this, the students receive a large amount of specialized knowledge throughout their career that, in theory, must be integrated, as they are trained 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 design character, this subject seeks for the student to incorporate information about the place, space, materiality, structure, expression, and detail into their project.

The subject is taught in a workshop format 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 an architecture possible. It involves learning to develop architectural design, structural and construction systems, main installation systems, and understanding their relevance within the urban space.

Among the learning outcomes, creativity stands out; the completion of projects in a real context, which must integrate formal, structural, and constructive criteria in relation to the specific environment. Likewise, the richness of the proposed spaces and their suitability to social and environmental conditions will be taken into account, as well as the materiality in the definition of architecture.

The working methodology is based on the collaborative workshop format, and therefore, the continuous assessment system. The regular presence and active participation of the student in the subject are essential to pass the course.

### 3. COMPETENCIES AND LEARNING OUTCOMES

#### Core competencies:

- CB1: Students have demonstrated possession and understanding of knowledge in their area of study that is based on general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study.
- CB2: That students know how to apply their knowledge to their work or vocation in a professional manner and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.
- CB3: That students have the ability to gather and interpret relevant data (normally within their area of study) to make judgments that include a reflection on relevant issues of a social, scientific or ethical nature.
- CB4: That students can transmit information, ideas, problems and solutions to both a specialized and non-specialized audience.
- 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 face the responsibility that raises awareness of the role that the architect's profession plays in society, particularly by developing projects that take into account social and environmental factors.
- **CT2: Self-confidence.**
- **CT3: Awareness of ethical values:** Ethical commitment, which includes understanding and knowledge of the rights and obligations of individuals and professionals, promoting respect for human rights, protecting the weaker sectors of society, and respecting the environment.
- **CT4: Communication skills** in the native language (either by oral or written means) and in the English language, according to 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.
- **CT6: Flexibility.**
- **CT7: Teamwork:** Ability to work in teams of architects or interdisciplinary teams (with shared responsibilities in many cases), managing and planning workgroups necessary in the competency and work scheme that defines a project of a certain magnitude involving various disciplines. This capacity includes **interpersonal relationship skills and leadership** ability in teams.
- **CT8: Initiative** and entrepreneurial spirit.
- **CT9: Planning and time management:** Ability to plan work to meet deadlines and respect the limits imposed by budgetary factors and construction regulations.
- **CT10: Innovation and creativity:** Creativity, imagination, and aesthetic sensitivity aimed at design, simultaneously satisfying aesthetic and technical requirements. This competence includes critical reasoning and historical culture.

#### Specific competencies:

- CE34: Ability to remove architectural barriers.
- CE35: Ability to resolve passive environmental conditioning, including thermal and acoustic insulation, climate control, energy performance and natural lighting.
- 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 develop functional programs for buildings and urban spaces.

- CE44: Ability to draft civil works projects.
- CE60: Knowledge of feasibility analysis and supervision and coordination of integrated projects.

**Learning outcomes:**

- RA1: Collective creativity exercises through teamwork.
- RA2: Execution of projects within in a spatial, temporal and social context, which considers a specific program, the conditioning factors of the urban location in which it is located and the material and cultural pre-existence of the place.
- RA3: Integration of structural, construction, and environmental comfort criteria into the project process. Includes considerations for natural and artificial lighting conditions, integration into water, energy, and waste cycles, and other building features. Requires knowledge of the feasibility of various applied technical systems and explicit articulation of one's stance regarding studied aesthetic models.
- RA4: Documentation and communication of workshop activities.

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: Collective creativity exercises through teamwork.
CB1, CG4, CG5, CG6, CE34, CE38, CE53, CE60	RA2: Execution of projects within in a spatial, temporal and social context.
CB2, CG1, CG2, CG3, CT1, CT2, CT3, CT8, CT9, CE35, CE37, CE40, CE44, CE60	RA3: Integration of structural, construction, and environmental comfort criteria into the project process. Includes considerations for natural and artificial lighting conditions, integration into water, energy, and waste cycles, and other building features. Requires knowledge of the feasibility of various applied technical systems and explicit articulation of one's stance regarding studied aesthetic models.
CB4, CB5, CG7, CT10	RA4: Documentation and communication of workshop activities.

## 4. CONTENT

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

- Collective analysis of the problems proposed for the course.
- Formulation of appropriate programs to address the stated issues within the physical working context, in coordination with the relevant areas and their corresponding subjects in the same course.
- Consideration of materiality, technical systems, and energy as integral parts of the project, emphasizing the integration of technology and design.
- Exploration of contemporary material and perceptual strategies: from solid consistency to the pursuit of intermediate states of matter.

In all blocks the student is asked to:

- Understanding of the assignment and its conditions, and therefore of the repercussion of the decisions in the project.
- Contribution of 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.
- Orientation to results in the preparation of both proposals and documents.
- Effective time planning and management both at a personal and collective level.

The subject is structured into different learning units and phases:

- The Client
- The Program
- The Site
- Urban and Social Integration
- Expressiveness and Design
- Materialization and Technology
- Execution Documentation
- Quantification and Planning
- The Construction Work
- Reflective Summary and Presentation

## 5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies that will be applied are indicated below:

The class is primarily structured as a workshop. The entire working methodology is based on active participation in the workshop and the continuous assessment system. Therefore, the constant presence and active participation of the student in the subject are crucial to pass the course.

The following will be delivered:

- Lectures
- Guided work, practical exercises and problem solving
- Exhibition of works
- Team work
- Individual work
- Tutoring, academic monitoring and evaluation

## 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**

Lectures	6,25
Directed work, practical exercises and problem solving	50,00
Exhibition of works	12,50
Team work	12,50
Individual work	50,00
Tutoring, academic monitoring and evaluation	18,75
<b>TOTAL</b>	<b>150</b>

## 7. ASSESSMENT

The assessment will be 100% based on the development of a common project. The following are the evaluation systems, along with their respective weights on the overall grade for the course:

### Campus-based mode:

Assessment System	Weight
Delivery 1	5%
Delivery 2	15%
Delivery 3	20%
Delivery 4	20%
Delivery 5	40%

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. The 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.

As this is a collaborative workshop, the student's presence is essential, and they can only pass the course with an attendance rate of 80%. Punctuality and active participation are also essential conditions and will impact the grade for each submission.

## 7.2. The 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).

As the subject constitutes a collaborative workshop and concludes at the end of the semester, the following conditions apply to students who fail the course:

- A. Students with an average grade  $\geq 4.0$  but have failed will be assigned a complementary assignment.
- B. Students who, reaching a course average of 5.0 by the 5th submission, have only achieved a grade between 3.5 and 4.0 will be assigned a complementary assignment.

Students with insufficient attendance or a course average  $< 4.0$  or a grade on the 5th submission below 3.5 must independently complete an extensive integrated assignment during the second exam period. The specific details for this new assignment will be published at the end of Semester 2.

## 8. SCHEDULE

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

Assessable activities	Deadline
Delivery 1	Week 2
Delivery 2	Week 4
Delivery 3	Week 7/8
Delivery 4	Week 11
Delivery 5	Week 15/16

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
- ARNDT, Ingo & TAUTZ, Jurgen: Animal Architecture, 2014
- REED, Chris & LISTER Nina-Marie: Projective Ecologies, 2020.

**Periodicals:** \_Tectónica, ATC Ediciones, en especial números 1 (envolventes I fachadas ligeras), 2 (envolventes II cerramientos pesados), 6 (cubiertas planas), 8 (cubiertas inclinadas), 10 (vidrio), 16 (muro cortina), 17 (geometrías complejas), 19 (plásticos), 21 (instalaciones), 22 (aluminio) 25 (hormigón III), 32 (envolventes metálicas) y 34 (cubiertas). \_DETAIL edición española, en especial números: 7+8/2003 y 7/2001 (Fachadas y muros exteriores), 11/2005, 7+8/2004 y 5/2001 (Estructuras de cubiertas), 7+8/2002 y 7+8/2005 (Cubiertas planas, inclinadas y onduladas).

## 10. DIVERSITY MANAGEMENT UNIT

From the Educational Guidance and Diversity Unit we provide support to our students throughout their university life to help them reach their academic achievements. Other pillars of our work include the inclusion of students with specific educational support needs, universal accessibility in various university campuses, and equal opportunities.

From this unit, the students are offered:

1. Accompaniment and follow-up through 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 evaluation for those students with specific educational support needs, thereby aiming for equity of opportunities for all students.
3. We provide students with various 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](mailto: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.