1. BASIC INFORMATION

Course	Architectural Drawing
Degree program	Bachelor's in the Fundamentals of Architecture
School	Architecture, Engineering and Design
Year	First year
ECTS	6 ECTS
Credit type	Basic
Language(s)	English
Delivery mode	Classroom
Semester	First semester
Academic year	2025/2026
Coordinating professor	Ángela Ruiz Plaza
Professor	Ángela Ruiz Plaza

2. PRESENTATION

This subject is taught in the first year of the degree, during the first semester. It introduces students to the graphic language of architecture and the use of various tools, so that they can acquire the ability to express themselves graphically and effectively, and to represent and critically analyse forms and concepts concerning architecture. The workshop develops knowledge and skills acquired in the other subjects taught simultaneously with which a coordination project is carried out through exercises, activities and joint sessions (Construction I: Systems and Integrated Drawing Workshop II). In this way, the student will get a global vision of their studies, understanding the need for the continuous connection between different types of knowledge.

3. COMPETENCIES AND LEARNING OUTCOMES

Core competencies:

- CB1 That students have demonstrated knowledge and understanding in a field of study that is based on general secondary education, at a level which, although supported by advanced textbooks, imply some knowledge of the latest advances in 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 defence of arguments and the resolution of problems within their area of study.

- CB3 That students have the ability to gather and interpret relevant data (usually within their field of study) to make judgements that include reflection on relevant social, scientific or ethical issues.
- CB4 That students can communicate information, ideas, problems and solutions to both the specialist and non-specialist.
- CB5 That students have developed the necessary learning skills to undertake further studies with a high level of autonomy.

Cross-curricular competencies:

- CT01 Responsibility: aptitude or capacity to face responsibility that the profession of architect has in society, particularly when elaborating projects that take into consideration social and environmental factors.
- CT04 Communication skills in the native language (both oral and written) and in the English language, in accordance with the principles of the *Universidad Europea de Madrid*, any concept or specification for the development of the regulated profession of architect. This includes learning the specific vocabulary of the degree as well as the ability to manage information.
- CT05 Interpersonal skills.
- CT06 Flexibility.
- CT09 Planning and time management: ability to plan work in order to comply with delivery times and to respect the limits imposed by budgets and building codes.
- CT10 Innovation and creativity: creativity, imagination and aesthetic sensitivity applied to design in order to satisfy both the aesthetic and technical demands. This competence includes critical reasoning and historical culture.

Specific competencies:

- CE01 Ability to apply graphic procedures to the representation of spaces and objects.

Learning outcomes:

- LO1. Adapt construction materials to the typology and use of the building, manage and direct the reception and quality control of the materials, their installation, implementation of work units, testing and final trials.
- LO2. Has basic knowledge of the socioeconomic processes that affect the overall model of the city.
- LO3. Has knowledge of the specific control procedures for the material implementation of construction.
- LO4. Has basic knowledge of the public administration's legal system and the procedures for administrative and private contracts.
- LO5. Has knowledge of the concept of business, its institutional framework, organisational models, planning, control and strategic decision-making in different settings that are certain, risky or uncertain; types of promotion, planning, sources of financing and the elaboration of investment feasibility analyses and decision-making.
- LO6. Adopts attitudes for implementing team work on subjects of the programme susceptible to the application of problem-solving methodology.
- LO7. Adopts attitudes for conceiving, calculating, designing, integrating interior divisions, carpentry, stairs and other finished work in buildings and urban units with exterior walls, roofing and other structural work.

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

Competencies	Learning outcomes
CB1, CG2, CT10, CE1	LO1: Adapts construction materials to the typology and use of the building, manage and direct the reception and quality control of the materials, their installation, implementation of work units, testing and final trials.
CB5, CG1, CG2, CG7, CT10	LO2: Has basic knowledge of the socioeconomic processes that affect the overall model of the city.
CB2, CB4, CT4, CT5, CT10	LO3: Has knowledge of the specific control procedures for the material implementation of construction.
CT9	LO4: Has basic knowledge of the public administration's legal system and the procedures for administrative and private contracts.
CB2, CT4, CT5, CT6	LO5: Has knowledge of the concept of business, its institutional framework, organisational models, planning, control and strategic decision-making in different settings that are certain, risky or uncertain; types of promotion, planning, sources of financing and the elaboration of investment feasibility analyses and decision-making.
CT1, CT6, CT9	RA6: Adopts attitudes for implementing team work on subjects of the programme susceptible to the application of problem-solving methodology.
CB3, CB5	RA7: Adopts attitudes for conceiving, calculating, designing, integrating interior divisions, carpentry, stairs and other finished work in buildings and urban units with exterior walls, roofing and other structural work.

4. CONTENT

The subject is organized into five Learning Units (L.U.), plus a zero unit, directed but autonomous, of investigation and recognition of the characteristics of architectural drawing which, in turn, are divided into subjects each (depending on the units). In addition, the set of objectives that were set globally for the module are specifically linked to the development of each unit:

Unit 0: Introduction to architectural drawing: language and representation systems.
The student is immersed in a specific graphic world. It recognizes the representation systems, makes its own the graphic elements that make the drawing understandable (dimensions, scale, graphic scale, etc.). Directed research on authors and ways of representing is proposed.

Unit 1: CAD: basic coordinate layouts.

- **1.1**: CAD: basic layer management.
- **1.2**: CAD: Basics editing operations
- **1.3**: CAD: Basics editing operations in architectural drawing
- **1.4:** CAD: Graphics in architectural drawing (stairs, ramps, doors, windows)

Unit 2: Architecture Drawing I. - Drawing of the building: Site, floor plan, elevation, section.

- **2.1**: Floor plans in architecture drawing
- **2.1**: Elevations in architecture drawing.
- **2.3**: Sections in architecture drawing
- **2.4**: Site and Placement
- **2.5**: Layout / layers

Unit 3: Architecture Drawing II. - Integration of architectural representation techniques. Graphic narration of the project.

3.1: Analysis and representation of an existing project
3.2: Transformation of the existing project into a different one
3.3: Layout and presentation of the proposal

Unit 4: Portfolio. - Layout: image, color and typography.

4.1: Preparation of a graphic portfolio with the course exercises. Workshop format, presentation and public-collective review.

5. TEACHING-LEARNING METHODOLOGIES

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

- Master class.
- Cooperative learning.
- Problem-based learning.
- Project based learning

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one and the course policy about the use of artificial intelligence (AI) in that activity.

Campus-based mode:

Learning activity	Number of hours	Use of AI
Lectures	12.5 h	Allowed
Guided studies, practical exercises and problem solving	50 h	Not Allowed
Presentation of projects	12.5 h	Assesed
Teamwork	12.5 h	Assessed
Independent study/work	37.5 h	Promoted
Tutorials, academic monitoring and evaluation (short term exercises)	25 h	Not Allowed
TOTAL	**150 h**	

USE OF AI REGULATION

The student must be the author of his/her work/activities.
The use of Artificial Intelligence tools (AI) must be authorized by the teacher in each assignment/activity, indicating in what way it uses is permitted. The teacher will inform in advance in which situations AI tools may be used to improve spelling, grammar and editing in general. The student is responsible for clarifying the information given by the tool and duly declaring the use of any AI tool, according to the guidelines given by the teacher. The final decision on the authorship of the work and the appropriateness of the reported use of an AI tool rests with the lecturer and those responsible for the degree.

Further details about the use of IA policy will be published through the virtual campus platform once the course has started.

For AI generated content in any assignment, indicate the tool name and version, the aim of the use, and examples of the literal prompts used, or reference images used.

DISCLAIMER

If there are doubts regarding the authorship of the submitted material, even within the AI usage policy of the subject, the teacher reserves the right to request additional observation to verify and properly control the origin of the produced work and to ensure that the expected learning outcomes have been duly achieved.

Further details about the AI use policy will be published through the virtual campus platform once the course has started.

Activities to be handed-in (short term and long-term assignments 1st and 2nd) mimic an exam, so AI tools are not allowed in any form.

For AI generated content used in 3rd assignment, indicate the tool name and version, the aim of the use, and examples of the literal prompts used, or reference images used.

AI tools are not allowed in activities 0,1,2 but the responsible use of Artificial Intelligence (AI) is promoted in Activity 3 and may have a clear impact in the evaluation. Students may consider using AI tools for tasks such as:

- **Creation of content drafts**
- **Generate slides for the presentation**
- **Generate designs that will be the origin of new architectures that will be represented with plans, sections and elevations drawn by the student without IA.**

As stated before, every use of AI tools must be properly described in the "References" entry of the activity portfolio.

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
Activity 0- My bedroom, my class	10 %
Activity 1- Santander Pavilion	15 %
Activity 2- House	20 %
Activity 3- Adopt&adapt	25 %
Activity 4- Portfolio	10 %

Short Activities – In-class exercies	20%

When you access the course on the *Campus Virtual (Canvas)*, 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).

An additional test will be required if there are authorship doubts.

The portfolio is to be submitted printed and securely bound, in A3 or A4 format, with all corresponding scales clearly indicated. A digital version of the portfolio is also to be uploaded to Canvas.

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).

The student must attend to at least, two sessions in person, and deliver all the activities from the first exam period after having received the corresponding corrections from the professor. An additional test will be required in this second call.

8. SCHEDULE

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

Assessable activities	Deadline
Activity 0	September 25
Activity 1	October 25
Activity 2	November 25
Activity 3	December 25
Activity 4	January 26

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 main reference work for this subject is:

- ALMAGRO GORBEA, Antonio. El levantamiento arquitectónico. Granada: Universidad de Granada, 2004.
- BOIS, Yves-Alain. 'Metamorphoses of axonometry' in AAVV, De Stijl. Neo Plasticism in Architecture. Delft: Delft University Press, 1983.
- CHING Francis D. K. 'Architecture: Form, Space, & Order'. John Wiley & Sons Inc., 4th edition, 2014.
- CHING Francis D. K. 'Architectural Graphics'. John Wiley & Sons Inc., 6th edition, 2015.
- LEWIS, Paul and TSURUMAKI, Marc. 'Manual of section'. Princeton: Princeton Architectural Press, 2016.
- DI MARI, Anthony and YOO, Nora. 'Operative Design: a catalogue of Spatial Verbs'. Amsterdam: BIS Publishers, 2013.
- ZELL, Mo. 'The architectural drawing course: understand the principles and master the practices'. Thames and Hudson Ltd., 2008.
- NEUFERT, Ernst and NEUFERT, Peter. 'Architect's data'. Wiley-Blackwell, 4th edition, 2012.

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: raquel.serrano@universidadeuropea.es

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
Weeks 1-2	Introduction to Architectural Drawing	Activity 0	10 %
Week 3-6	CAD Basic Plans. Sections, elevations	Activity 1	15 %
Week 7-10	Architectural Drawings,Urban, site plan	Activity 2	20 %
Week 11-14	Advanced Architectural Drawing	Activity 3	25 %
Week 15-17	Portfolio	Activity 4	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

UNIT	ACTIVITY	DESCRIPTION
U.0. - Introduction to Architectural Drawing	Act. 0.0	Hand-drawing of existing spaces
U.0. - Introduction to Architectural Drawing	Act. 0.1	Presentation: architectural drawing concepts
U.1. -CAD: basic drawings.	Act. 1.1	CAD: Layout / layers.
U.1. -CAD: basic drawings.	Act. 1.2	CAD: basic drawing tools.
U.1. -CAD: basic drawings.	Act. 1.3	CAD: Basics edition operations
U.1. -CAD: basic drawings.	Act. 1.4	CAD: Architectural drawing graphism
U.2. - Architecture Drawing I	Act. 2.1	Plans in architecture drawing
U.2. - Architecture Drawing I	Act. 2.2	Elevation in architecture drawing
U.2. - Architecture Drawing I	Act. 2.3	Section in architecture drawing
U.2. - Architecture Drawing I	Act. 2.4	Section of stairs
U.2. - Architecture Drawing I	Act. 2.5	Layout / Scales
U.3. - Architecture Drawing II	Act. 3.1	Project analysis
U.3. - Architecture Drawing II	Act. 3.2	Project transformation
U.3. - Architecture Drawing II	Act. 3.3	Transformed proposal presentation
U.4. - Portfolio	Act. 4	Portfolio

RUBRICS FOR ASSESSMENT ACTIVITIES

In relation to the activities, the rubric model is shown below for its evaluation:

• How is it evaluated in general? This activity is qualified by the following heading:

	Not finished	Not enougth	Enougth	Good
Compliance with deadlines and submissions criteria	Did not hand in	Not complete submission	There is submission and it is complete	There is relevant additional material
Content quality	The work appears careless, messy and, in general, unacceptable to submit to a potential client	The work is presented with many errors according to the criterio considered in the attached table	The work is presented according to the criterio condidered in the attached table	The work exceeds expectations
Team work	All members of the team agree that the contributions of the student being evaluated have been scarce or nil	Most of classmates show complaints about the contributions to the student team being evaluated	Mosto f classmates show conformity about the contributions to the student team being evaluated	All group members indicate that they are satisfied with the collaboration and contributions of the entire group

• How is it evaluated with particular character? This activity is qualified by the following heading:

Thematic solution	Define the general theme of graphic narration: composition, materiality, scale, context, functionality, benefits, social component, perception …	Details the project
		Analizes the project
		Synthesize the project
	Identify references of recognized quality	Study the reference
		Find a proper representation system
	Properly verbalize the proposal	Exposition
		Estrategy
		Technique and representation
Composition	Generates a document with coherence and graphic unity.	Optimize typography
		Design a slogan
		Recognize layout strategy
		Assess the visual weight
		Control of full and empty
		Graphic continuity of the document
Layout	Select different representation systems	Diedric system: descriptive character
		Axonometric system: general character and global image
		Conic system: perceptual and visual character
	Look for interaction and correspondence between representations	Views selection

	Use of scales	Urban scale, highlighting the relationship with the context
		Intermediate scale, highlighting the relationship between the parties and with the human scale
		Detail scale, which analyzes its geometry thoroughly
Representation extras	Use resources that allow readability	Numerical scale and graphic scale
		Lettering
		Line hierarchy
Submission	Plan and organize the work	Meets submissions deadlines
	Respond to the proposal	Quality and quantity
		Response to the statement
	He/she generates critical mass in the class	Work Tracking
		Active participation

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.

USE OF AI REGULATION

The student must be the author of his/her work/activities.

The use of Artificial Intelligence tools (AI) must be authorized by the teacher in each assignment/activity, indicating in what way it uses is permitted. The teacher will inform in advance in which situations AI tools may be used to improve spelling, grammar and editing in general. The student is responsible for clarifying the information given by the tool and duly declaring the use of any AI tool, according to the guidelines given by the teacher. The final decision on the authorship of the work and the appropriateness of the reported use of an AI tool rests with the lecturer and those responsible for the degree.

DISCLAIMER

If there are doubts regarding the authorship of the submitted material, even within the AI usage policy of the subject, the teacher reserves the right to request additional observation to verify and properly control the origin of the produced work and to ensure that the expected learning outcomes have been duly achieved.