

General Syllabus for the 4th Year of the Integrated Master in Architecture Specialization in Integrated Architecture

THE ARCHITECTURE OF THE CITY

FROM URBAN DESIGN TO COLLECTIVE HOUSING AND PUBLIC FACILITIES

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Introduction

The course units of Integrated Project I and II begin, across the two consecutive semesters of the 4th Year, the path completed throughout the two years that constitute the second cycle of training of the Integrated Master in Architecture. Under these circumstances, and in order to support a pedagogy based on the progressive mastery of Project Practice, the Integrated Project I and II course system adopts the study of the **Architecture of the City** as the reference theme for its annual pedagogical journey, within the framework of the design process of its built form.

The theme for this academic year focuses on the built structure of the city and its morphological, typological, and spatial-functional design. It is grounded in the understanding of reference models and transformation processes, with the aim of (re)designing the current city to meet future needs. This reflection is supported by the introduction of Collective Housing and Public Facilities in city areas that need regeneration, or by infilling expectant areas that create urban discontinuity, aiming for their requalification.

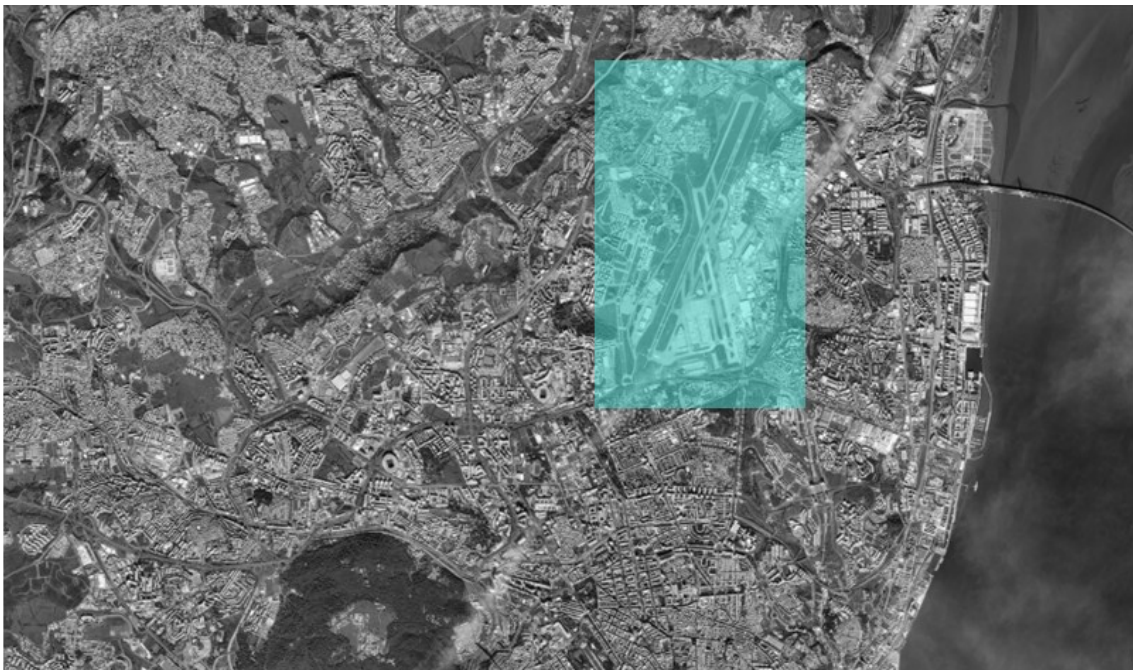
All 4th Year classes of MiArq – Integrated Architecture I and II will develop the same design exercises, sharing objectives, content, methodologies, standards, and calendars. However, two intervention territories will be addressed: one will be developed in five classes and the other in two classes, out of the seven operating in the current academic year. It is worth noting that Classes A, B, and C will be taught in English.

The first intervention territory, which will be studied by Classes **A** (Prof. Hugo Farias + Guilherme Maia), **B** (Prof. Pedro Rodrigues), **C** (Prof. Wim Wambecq), **D** (Prof. António Leite), and **E** (Prof. Miguel Baptista-Bastos), will be the city of Montijo, specifically its riverfront. Montijo, located on the south bank of the Tagus estuary and part of the Lisbon Metropolitan Area, holds a relevant geostrategic position due to its proximity to the capital and good accessibility. Its economy, once centered on fishing, salt pans, and floriculture, has diversified into industry, commerce, and services. Over the years, a process of deindustrialization led to the degradation of the economic, social, and urban fabric of the historic center and the riverfront. As a consequence, there currently remains a set of urban voids and spaces near the river that are abandoned or underutilized.



Montijo Waterfront, 2025

The second intervention territory, which will be studied in Classes **F** (Prof. José Nuno Beirão) and **G** (Prof. Tiago Mota Saraiva), will be part of the area of the current Lisbon Airport. Considering the future relocation of the airport to the south bank of the Tagus, to a more isolated location that is less disruptive and polluting to the urban environment within Lisbon's consolidated fabric, the speculative question arises as to what to do with the territory where the airport is currently located, and what opportunities this relocation opens up for the city of Lisbon.



Humberto Delgado Airport, Lisbon, 2025

Taking these two intervention territories, each professor, alongside their class, will develop their own research theme—in coherence with their own research in Architecture and in vertical coordination with the 5th Year classes and professors. This opens up potentially interesting research lines and themes for the students' future Final Master's Projects (PFM).

1. General Syllabus for the 1st Semester – Integrated Project I

THE DISCOURSE OF THE CITY:

STITCHING, INTEGRATING, AND PROMOTING A NEW URBANITY

Urban Redesign and Expansion, Housing, and Public Facilities

Programmatic Objectives

The design exercises developed within each of the intervention territories aim for the redesign and requalification of the urban structures in the defined areas. Students' proposals must establish links and relationships with pre-existing urban and architectural structures, based on a driving idea of requalification and planning for each territory under study.

It is considered fundamental to understand urban settlement processes and their frameworks at various scales, to identify critical and problematic situations from a physical, functional, and environmental point of view, as well as to recognize the existing landscape and cultural values and potential.

Thus, the aim is to build a renewed and requalified urban design proposal for both study and intervention areas, through the proposed redesign of public spaces, everyday residential architecture, and landmark buildings.

The exercise must include a reflection on contemporary challenges and needs in the field of affordable housing, shared collective spaces, and new socio-spatial arrangements and practices, under a broader commitment to responding to climate change and sustainable development goals.

Organization and Phasing of the Exercise

The process to be developed in all classes will have the following procedural phases: (1) Critical reading of the study area, identifying problems and opportunities; (2) Development of an Urban Design for the intervention area and the main surrounding urban spaces, to be carried out in two sub-phases; (3) Typological exploration of morphological units, including the specification of housing models and the characterization of public spaces.

• **Phase 1: Analytical Reading**

The first phase consists of developing an analytical and critical reading of the intervention area. This reading must address physical, landscape, social, and cultural aspects, as well as build an understanding of the evolution of the urban structure, fabric, mobility, and uses/functions. These approaches should mobilize the knowledge, reading, and urban analysis resources acquired during the 1st cycle of architectural training.

Reference scales: 1:5000 to 1:2000

Work to be developed in groups of 4 to 5 students.

• **Phase 2: Urban Plan – Preliminary Study**

This phase aims to build a Strategic Vision for each intervention area, consolidated into a general urban design, exploring a set of alternative scenarios worked on in groups.

The Vision must be based on three components: 1) a spatial logic, explored in plan and section and through speculative images for the intervention area; 2) a system of internal and external connections that allow for use and continuity within the intervention area; 3) a system of reference facilities and interventions established as collective spaces for convergence and articulation.

The overall urban proposal must integrate a coherent morphological sense, articulated with 1) the physiography, 2) the structural open spaces of the intervention area, and 3) the surrounding urban fabric. Within this framework,

the public space structure constitutes a fundamental support to be clearly defined, namely through its hierarchy, its relationship with ground floors and collective spaces, and its integration with mobility, tree planting, and green space systems.

Reference scale: 1:2000 to 1:1000.

Work to be developed in groups of 4 to 5 students.

• Phase 3: Urban Plan — Detailed Study

In this phase, the proposal will be developed within a sector to be specified, articulating the logic defined in the Strategic Vision with an urban program predominantly focused on housing, complemented by commercial, service, and public facility uses. Special attention must be given to the design of public spaces and the design of the buildings' ground floors.

Reference scale: 1:500 to 1:200.

Work to be developed in groups of 4 to 5 students.

• Phase 4: Typological Exploration - Housing

In this phase, the proposal must include the specification of housing models and the characterization of the public spaces of a relevant morphological unit or building complex. Here, it should be possible to identify the dominant typology, the resolution of structural building elements, and the characterization of the relationship with the ground and public space, potentially incorporating commercial and/or service uses.

Reference scales: 1:200 and 1:50

Work to be developed in groups of 2 to 3 students, or individually.

For all phases, the drawing elements and three-dimensional models to be submitted will be defined. Students must systematically compile elements related to the conception and design process (sketches, diagrams, perspectives, etc.) into a booklet to be presented at the end of the semester.

Methodology

The course unit will be taught at two levels:

Theoretical lectures held every 2 weeks, focusing on themes relevant to the development of the ongoing exercises.

Practical studio classes for systematic guidance of the students' work development.

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2. General Syllabus for the 2nd Semester — Integrated Project II

THE PUBLIC FACILITY AS AN URBAN FACT

Morphology, typology, tectonics, materiality, and expression of the architectural project

Introduction

In continuity with the work carried out in the first semester of the academic year in the Integrated Project I course unit, the second-semester design exercises for the 4th year will take place in the urban territories defined for each class.

The project will consist of developing a public facility of medium size and complexity—to be defined in each class based on the urban reading and analysis completed in the first semester. It will be treated as an urban element with strong potential to create a new centrality, contributing to the regeneration and requalification of each Place.

The project will focus on the typological, morphological, spatial-functional, tectonic, and expressive dimensions of architecture. It will address its importance within the urban context, seeking its appropriate insertion into the territory and establishing meaningful relationships with the surrounding public space, assuming it as a qualifying element that promotes a new identity for its context.

The facility to be designed will have an approximate area of 1,500–2,000 m², including all the functional requirements of the selected program. The facility's design will be developed based on the functional program and area charts provided by the faculty, following research conducted in classes on similar case studies.

The design process will feature articulation with the different course units of this semester, as well as vertical coordination with 5th Year Faculty. This opens up potentially interesting research lines and themes for the students' future Final Master's Projects (PFM).

Content and Objectives

The course unit is structured around a theoretical component and a design practice component.

The theoretical component continues the in-depth study of the Architecture of the City issues, namely morphology, typology, uses and functions, tectonics, and the expression and image of architecture. It further explores the relationships between public and private space, as well as reflection on the concept of Place.

The practical component aims to continue developing students' analytical and design skills, focusing on the architectural design of the facility building and its surrounding public space within an urban context.

The main **pedagogical objectives** of the course unit are:

- . To continue deepening the understanding of urban design elements: urban-architectural morphology and typology, and the design and qualification of urban public spaces.
- . To deepen the understanding of the relationship systems between private and public space, as well as the connections between morphology, typology, uses, and the meaning of the built environment.
- . To deepen the understanding and mastery of design practice, considering a program and its relationship with the Place, as well as the mastery of form, spatiality, tectonics, language, and the regulatory/legal framework, focusing particularly on public facilities.

. To expand the students' disciplinary culture regarding the City and Architecture.

Program

The Public Facility project will be developed in accordance with the Functional Program and Area Chart that will be provided to the students.

Organization and Phasing of the Exercise

The exercises to be developed throughout the semester begin with an analytical reading approach of case studies similar in nature to the project to be developed, along with the preparation of a preliminary urban study. This is followed by four development phases for the building design and surrounding public space, moving from the conceptual phase to the detailing and definition of structural, constructive, spatial qualification, and image aspects.

Phase 1: Analytical Reading of Case Studies of a Similar Nature

Methodology: Group work.

Phase 2: Preliminary Urban Study for the Integration of the Facility

Methodology: Group work.

Reference scale: 1:1000 - 1:500.

Phase 3: Preliminary Study of the Facility

Methodology: Individual work.

Reference scale: 1:500 - 1:200.

Phase 4: Base Project of the Facility

Methodology: Individual work.

Reference scale: 1:200 - 1:100.

Phase 5: Construction Definition and Materialization

Development of a section of the project, which must include the definition of the structural system, construction system, main finishes, and construction detailing.

Methodology: Individual work.

Reference scales: 1:50 - 1:20.

Methodology

The course unit will be taught at two levels:

Theoretical lectures held approximately every 2 weeks, focusing on themes relevant to the development of the ongoing exercises.

Practical studio classes for systematic guidance of the students' work development.

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