

Digital Interfaces: Architecture for Invisible Cities

COURSE SYLLABUS

Course Coordinators: Assoc. Prof. Şeyda Emekci
Research Assistants: Aslı Zeynep Doğan

COURSE DESCRIPTION

If digital systems already organize the city, why do they have almost no architectural form?

This studio asks students to rethink the city as an **interface between digital systems and urban life**. Inspired by Italo Calvino's Invisible Cities, the studio treats the city not as a single entity **but as a set of overlapping conditions** such as control, memory, speed, communication, and networks. Each project begins by defining its own "**invisible city**" through a specific digital theme, identifying its conditions, and translating it into an architectural problem.

The challenge is to design an architectural intervention that makes digital systems spatially legible and publicly accessible. Rather than representing technology symbolically, students are encouraged to explore **how data, algorithms, and networks can shape plans, sections, thresholds, and public spaces**. Possible programs may include public data interfaces, digital commons, urban control and coordination spaces, digital archives and exhibitions, AI research hubs, or hybrid civic infrastructures.

The surrounding site Eskişehir Road corridor (Ankara), an area dominated by ministries, business centers, data-driven institutions, and smart infrastructures. Students will focus on reading the urban context through both visible elements - buildings, roads, and open spaces - and **invisible layers such as data flows, surveillance zones, connectivity fields, and algorithmic control points**.

Understanding these layered conditions and experimenting with their spatial translation form the core of the studio. This studio positions architecture as a mediator between invisible systems and everyday urban experience, asking how design can give form to what already governs the city.

The work will begin in two-person groups, where **collaboration** is central to exploring shared concepts and **urban scale strategies**. As the semester advances, projects will evolve into individual proposals, ensuring that both teamwork and individual interpretation are part of the design process. The students will work individually after the 6th week.

The **case study** analysis will support this assignment, as the student will experience researching and documenting (through writing, drawing, sketching, modeling, etc.) an existing example of the design problem as well as getting familiar with the relevant terms like structure, tectonics, transparency, etc. The **site analysis** assignment will help students to exercise on how to start a project by expanding on the context including the location, built environment, natural elements, topography, ecological or social conditions. The **logbook** assignment will help students to document a process and develop their ability to take notes, sketch, collect and organize data through the semester. The course will be supported by various readings, lectures, juries, and **in class assignments** related to the given topic.

KEYWORDS

Public Interface, Place-Making, Urban Continuity, Digital infrastructure, Urban interfaces, Invisible systems, Spatial mediation, Public accessibility

SITE: Çukurambar, Kızılırmak, Muhsin Yazıcıoğlu Cd. 06510 Çankaya/Ankara

<https://maps.app.goo.gl/7mGoZPqyxrJtwsad8>



SPATIAL REQUIREMENTS:

The total project site covers approximately 55,000 m². For each two-person group, the expected total program may include around 12,000–15,000 m² of closed spaces (plus ~20% for circulation and service), 5,000–10,000 m² of semi-open spaces, and 15,000–20,000 m² of open public spaces. Individual sqm's will be announced later.

*sqm's are flexible, changes according to individual student concepts are acceptable.

METHOD OF LEARNING

- ARCH 202-301-302-401 are applied courses in the form of a studio. The studio is the essential environment where students come together with the instructors to discuss and develop their term projects by class discourses, **panel or table critics**, in class assignments and **individual working hours** based on learning by doing understanding.
- The course might include **teamwork** assignment.
- First 6 weeks of the course all the design critics will be given on **only hand drawings and sketches!!**

COURSE OUTCOMES

1. The student is able to define a place with the help of tangible and intangible elements and concepts.
2. The student is able to formulate a guiding theme and is aware that this should structure the design activities and the required spaces for a public space project.
3. The student can integrate information from different scales in the design and offer a holistic approach to an ill-defined design problem.
4. The student can analyze and interpret a given program of requirements, the location, and the surrounding landscape. The student shows awareness of the value of this interpretation for the design and offers unique, flexible solutions that have future potential.
5. The student can document the design process in architectural signatures, sketches, and models.

<u>ASSESSMENT*</u>	
Assignment	Weight (%)
Warm Up Project	5
Assignment 01: Site Analysis	5
Assignment 02: Case Study	5
Logbook	5
Midterm Jury	15
Pre-Jury	15
Final-Jury	50

ATTENDANCE

- * There is a total of 15 weeks (120 hours) of class for this course.
- * Each week has 2 theory hours and 6 application hours. In total there are 30 hours of theory and 90 hours of application. If the student misses more than % 30 of the theory hours (9 hours) or more than % 20 of the application hours (18 hours) they will get NA and fail. (approximately 3 studio classes)
- * Missing any of the juries (midterm – prejury – final) may result in **failing**.
- * Medical reports do not change the attendance status for the classes but are acceptable for exams.

READING LIST

- Calvino, I. (1974). *Invisible cities* (W. Weaver, Trans.). Harcourt Brace Jovanovich. (Original work published 1972)
- Farrelly, L. (2007). *The Fundamentals of Architecture*. AVA Academia.
- Hill, D. (2012). *The street as platform*. City of Sound. <https://www.cityofsound.com/blog/2012/02/the-street-as-platform.html>
- Lefebvre, H. (1991). The production of space. In *The production of space*. <https://doi.org/10.4324/9780203132357-14> (pp. 1–11, 26–46)
- Lynch, K. (1960). *The image of the city*. MIT Press.
- Mattern, S. (2017). *Code and clay, data and dirt: Five thousand years of urban media*. University of Minnesota Press. (pp. 1–18; pp. 163–190)
- Norberg-Schulz, C. (1996). *Genius loci: Towards a phenomenology of Architecture*. Rizzoli.
- Zumthor, P. (2006). *Peter Zumthor - atmospheres architectural environments - surrounding objects*. Birkhäuser.

**the pdf's of the readings are available upon request.*

TIME PLAN

Week Nr.	Date	Program
ASSIGNMENT 01 & ASSIGNMENT 02		
1	09/02/2026	Introduction Given: Warm-Up Assignment & Assignment 01 - Site Analysis Site Visit
2	16/02/2026	Presentations of Assignment 01 - Site Analysis – <i>Teamwork</i> Submission: Warm-Up & Assignment 01 Given: Assignment 02 – Case Studies
3	23/02/2026	Presentations of Assignment 02 – Case Studies – <i>Teamwork</i> Given: Initial Scenario / Concepts – <i>Teamwork</i>
4	02/03/2026	Presentations of Initial Scenario / Concepts, Stain Study/ Bubbles on Site - <i>Teamwork</i>
MIDTERM ASSIGNMENT		
5	02/03/2026	Discussions of Early Design Decisions - <i>Teamwork</i>
6	09/03/2026	Panel Critics of Early Design Decisions & Spatial Organization - <i>Teamwork</i>
7	16/03/2026	Discussions of Spatial Organization, Plan – Section Drawings – <i>Individual</i>
8	date tba	Midterm Jury: Site Analysis & Conceptual Design & Floor Plans – Sections - <i>Teamwork & Individual</i>
9		Good luck for the midterms!
FINAL ASSIGNMENT		
10	06/04/2026	Final Design: Spatial Organization, Plan – Section – Elevation Drawings – <i>Individual</i>
11	13/04/2026	Final Design: Spatial Organization, Plan – Section – Elevation Drawings – <i>Individual</i>
12	20/04/2026	Pre-Jury: Spatial Organization & Drawings
13	27/04/2026	Overall Critics
14	04/05/2026	Façade Critics
15	11/05/2026	Discussions of Drawing Quality, Poster & 3D Model Quality
16		Eid Mubarak!
17	date tba	Final Jury: Digital Interfaces: Architecture for Invisible Cities