Istanbul Technical University - Department of Architecture

MIM 312E - Architectural Design VI, 21877

Course Syllabus | 2020-2021 Spring Semester

Course Day and Hour: M,R- 13:30-17:30
Online Studio: Ninova+Zoom
Course Credit: 5
Course Web Site: TBA

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The Metabolic Spaces

Through the concept of "Metabolic Spaces", the studio aims to explore a new balance between the relations, processes, flows and multiple factors of the place that contain a myriad of agents for design —both human, natural and nonhuman for achieving impact on urban ecology, economy and society.

Projects under the auspices of "Metabolic Spaces" should have both spatial, natural and technological elements, providing buildings and environments adapted to a range of different needs and sufficient infrastructure to support–self-sustaining living and production conditions. Public places encourage a modernized sense of active landscaping, drawing on various forms of communal living with shared recreation spaces. Such solutions may be devised for a range of social housing typologies and it is also relevant for providing both contextual and physical –form, structure, scale, urban identity link to the selected project district.

Environments adhering to the concept of "Metabolic Spaces" should rely on these factors:

- Strong communities in modern dwelling environments integrated with the existing social context;
- Enhanced living environments for providing the benefit of social interaction, quality of life and improved public health;
- Supporting individual and independent and collective learning;
- Flexible and adaptive spaces for creative activities and production.

Aiming to create a new generation understanding of living, the project is expected/targeted to reflect the ideals of a pluralistic, democratic and egalitarian society and individuals' development, participation and self-expression in a city like Istanbul, which is the intersection point of different cultures and civilizations.

Project Site Locations

The project sites are located on the Tuzla region of Istanbul . Students are encouraged to study the history, demographics and environmental characteristics of the given districts. The project sites are prone to rapid urban transformation along with the existing cultural and neighborhood life. The context should be taken as the key factor for realization of the design potentials of the particular place.

The program and the process

The program is flexible which will be customized to the particular project site and the design approach. Students are expected to create innovative scenarios, living modules and social production spaces organized around the cultural, natural and socio-economic context of the selected urban district. Spatial flexibility, affordability and constructability are the quality dimensions for design interventions.

A comprehensive analysis of the project site will be followed with theoretical discussions, scenario development, conceptual design proposals and design development. Various aspects of design will be explored including urban connections and scale; spatial layout; indoor/outdoor functions; structural composition, materiality and architectonics; landscaping and green integration.

The studio will examine precedents, urban information, explore innovative design strategies/production methods, and the design process will emphasize digital models—both conceptual, representational and analytical—to critically develop, interpret and present ideas.

Project Studio Description

Engaging architecture with urban dynamics in national and international contexts and develop visions for future scenarios; analysis and evaluation of various scales of urban, regional and global dynamics to translate them into architectural knowledge; discussion of architecture's socio-cultural aspect concerning natural, historical and cultural heritage; building dialogues and integrating with other disciplines; developing creative and innovative solutions to large scale, complex and multi-use architectural programs with advanced construction systems and detailing, developing a personal position in the design process based on the accumulation of skills and experiences earned in previous years.

- 1. Addressing urban dynamics through the design of multi-layered architectural design problems,
- 2. Development and detailing of advanced complex architectural design solutions,
- 3. Application of advanced technologies, materials and construction systems,
- 4. Providing the experience of interdisciplinarity in the architectural design process,
- 5. Developing an architectural position in the preservation and enhancement of the values around natural, historic and cultural heritages,
- 6. Enabling the atmosphere for obtaining a personal stance in the issues regarding architectural design, research, production of architectural knowledge, criticism and representation.

Course Outcomes

- 1. Managing the integration of different scales of urban factors into architecture
- 2. Translating complex data on function, program and parameters into architectural knowledge to be used as design inputs,
- 3. Application of advanced technologies and materials in architectural design,
- 4. Working in collaboration with various fields of expertise,
- 5. Developing a personal vision and initiative in the professional field.

Project Studio Structure and Plan

Studio Schedule

Week	Date	Module	Studio Topic
1	01.03.2021	Studio Warm-up	Studio Introduction
	04.03.2021	Urban Analysis	Site Analyses
2	08.03.2021	Orban Analysis	Site Analyses
	11.03.2021	Conceptual Discussions	Pin-Up Session
3	15.03.2021	Masterplanning & Concepts	Studio / Online Crits
	18.03.2021		Studio / Online Crits
4	22.03.2021	Masterplanning & Concepts	Studio / Online Crits
	25.03.2021		Studio / Desk Crits
5	29.03.2021	Masterplanning & Concepts	Studio / Desk Crits
	01.04.2021		Studio / Desk Crits
6	05.04.2021	Masterplanning & Concepts	Pin-Up Jury & Presentations
	08.04.2021		Studio / Desk Crits
7	12.04.2021	Jury Week I	Jury Session
	15.04.2021		Collective Assessment & Discussions
•	19.04.2021	Danier Davidsonat	Studio Discussions
8	22.04.2021	Design Development	Studio / Desk Crits
9	26.04.2021	Design Development	Studio / Desk Crits
9	29.04.2021		Pin-Up Jury & Presentations
10	03.05.2021	Design Development	Studio / Desk Crits
10	06.05.2021		Studio / Desk Crits
11	17.05.2021	Design Development	Studio / Desk Crits
77	20.05.2021		Studio / Desk Crits
42	24.05.2021	Jury Week I	Jury Session
12	27.05.2021		Collective Assessment & Discussions
40	31.05.2021	Design Development	Studio / Desk Crits
13	03.06.2021		Studio / Desk Crits
44	07.06.2021	Studio Wrap-Up	Studio Discussions
14	10.06.2021		Studio Discussions
	•	June 2021 - Project Sub	missions

Project Studio Assessment

MIM 312E is a design class that requires substantial dedication and investment of student time, skill, and critical thought both during and after official studio hours. As a part of design studio instruction, students are required to participate in all lectures, discussions, and jury reviews, as well as group and individual critiques of exercises, assignments and projects. Production and hard work are important keys to success in this studio. Specific drawings and models will be requested during studio project phases.

The studio often begins with a group review, followed by assignments, lectures, presentations, discussions, or individual critiques on the project as needed. Considering the current online studio environment students are encouraged to be prepared for online critics and digital information/knowledge exchange.

Students will be evaluated according to their performances in the online studio, digital crits, virtual pin-up reviews, jury sessions and final submissions. Midterm grades (40%) will be based on participation, pin-up reviews and midterm jury sessions. 60% of the final grade will come from final project submission. Quality dimensions include:

- Architectural approach / contextual and conceptual stance
- Social and cultural programming
- Spatial and formal configuration
- Sustainability and environmental integration
- Tectonics, materiality and structural composition
- Design accessibility
- Design communications (visual/verbal)

The jury sessions will be assessed collectively and each student will be given a detailed feedback about their progress.

Course Requirements

Studio sessions will be held as online meetings via ITU Ninova site. Students are required to attend these meetings as advised by the university administration. Such absence may result in failiure.

Students are expected:

- To attend all times and come to class fully prepared to execute course assignments and other related material; this means that
 each week students have to share their design works during the online class.
- To develop effective studio work habits (punctuality, time management, regular submission, coming equipped to class, appropriate studio behavior)
- Critics are essential parts of the course and they will be accepted as attendance.

Required deliverables for the jury reviews and the final submission are:

- Project narrative and report
- Conceptual diagrams, sketches and axonometric explanations
- Site plans,
- Plans and sections including modular living units
- 3D renders and visuals
- Structural and Architectonic diagrams