

ITU MIM 484E, 2025-2026 SPRING

CONSTRUCTION PROJECT

Course Day and Hour

Tuesday 13:30-17:29 &

Thursday 08:30-12:29

Course Room

3405

COURSE INSTRUCTOR

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COURSE ASSISTANT

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STUDIO DESCRIPTION

The objectives of the Construction Project Studio are:

- to gain the ability to find holistic, ready for construction, architectural solutions considering constructional and technological factors, legislative factors (codes, standards etc) and aesthetic criteria in the process of design, development, and integration of building sub-systems taking user requirements and environmental factors into account
- to gain the ability to generate and to integrate building elements and their details in the context of a comprehensive design
- to gain the ability to select proper building materials and to select and arrange structural system components in the context of a comprehensive design
- to gain the ability to select or to generate passive and active environmental control systems considering energy efficiency and sustainability criteria and to integrate those systems with other building sub-systems in the context of a comprehensive design
- to gain the ability to prepare drawings and other related documents (specifications etc) for each design stage according to the relevant national and/or international legislation and drawing principles in the context of a comprehensive design

The content of the Construction Project Studio is:

- research and material selection and decision making on; building construction type and environmental control systems, structural system arrangement in comprehensive building design
- preparation of projects for all design stages (preliminary, developed, construction) according to building regulations (i.e. earthquake directive, thermal insulation directive, noise control directive, fire protection directive)
- integration and coordination of building sub-systems (building elements, structural, service) with other building components
- preparing documents for each design stage according to the relevant national and/or international legislation and drawing principles.

The topic is a single family detached house.

STUDIO ASSESSMENT

Students are expected to make project submissions (schematic design, developed design, and research report) and participate in all research work, seminars, and studio works during the semester. Students are also expected to make a final submission of the construction project at the end of the semester.

- Project submissions during the semester: 40%
- Construction project final submission: 60%

Requirements of Construction Project Final Submission

- Site plan (1/200)
- Plans, Sections & Elevations (1/50)
- Structural Plans & Sections (1/50)
- Sanitary System Plans (1/50)
- Heating System Plans (1/50)
- Lighting System Plans (1/50)
- Sub-system integration at external envelope level (1/20)
- Sub-system integration at wet space level (1/20)
- Sub-system integration in stair systems (1/20)
- Sub-system integration at building level (1/5)
- Door & Window Schedule
- Zone list
- Material file
- A3 Posters (supported by 3D models)

STRUCTURE AND PLAN

Week	Date	Topic
1	10 February 2026	Introduction: Design Brief and Process
	12 February 2026	Architectural program, Building Codes and Standards
2	17 February 2026	Preliminary design studies, Scale: 1/100
	19 February 2026	Preliminary design studies, Scale: 1/100
3	24 February 2026	Preliminary design studies, Scale: 1/100
	26 February 2026	Preliminary design studies, Scale: 1/100
4	03 March 2026	PRELIMINARY DESIGN SUBMISSION
	05 March 2026	Design development: Structural system, Scale: 1/50
5	10 March 2026	Design development: Structural system, Scale: 1/50
	12 March 2026	Design development: Sanitary system, Scale: 1/50
-	17 March 2026	MID-TERM BREAK
	19 March 2026	
6	24 March 2026	Design development: Sanitary system, Scale: 1/50
	26 March 2026	Design development: Heating system, Scale: 1/50
7	31 March 2026	Design development: Lighting system, Scale: 1/50
	02 April 2026	Design development: Lighting system, Scale: 1/50
8	07 April 2026	Integration of building subsystems, Scale: 1/50
	09 April 2026	Integration of building subsystems, Scale: 1/50
9	14 April 2026	DEVELOPED DESIGN SUBMISSION
	16 April 2026	Sub-system integration at external envelope level, Scale: 1/20
10	21 April 2026	Sub-system integration at external envelope level, Scale: 1/20
	23 April 2026	PUBLIC HOLIDAY
11	28 April 2026	Sub-system integration in stair systems, Scale: 1/20
	30 April 2026	Sub-system integration in stair systems, Scale: 1/21
12	05 May 2026	Sub-system integration at wet space level, Scale: 1/20
	07 May 2026	Sub-system integration at wet space level, Scale: 1/21
13	12 May 2026	Sub-system integration at building level, Scale: 1/5
	14 May 2026	Sub-system integration at building level, Scale: 1/5
14	19 May 2026	PUBLIC HOLIDAY
	21 May 2026	Preparation of technical documents

Recommended Readings

- Bovill, C., 1991. Architectural design: Integration of structural and environmental systems. New York: Van Nostrand Reinhold.
- Ambrose, J., Tripeny, P., 2012. Building structures. Hoboken, N.J.: Wiley
- Hegger, M., Auch-Schwelk, V., Fuchs, M., & Rosenkranz, T., 2006. Construction materials manual. Basel: Birkhäuser
- Lechner, N., 2015. Heating, cooling, lighting: Sustainable design methods for architects. Hoboken, N.J.: Wiley
- Rich, P., Dean, Y., 1999. Principles of Element Design. Oxford: Architectural Press.
- Wienand, N., 2008. Materials, Specification and Detailing: Foundations of Building Design. Abingdon: Taylor & Francis.
- Binalarda Enerji Performansı Yönetmeliği (2008, 5 Aralık). Resmi Gazete, Sayı: 27075
- Binaların Gürültüye Karşı Korunması Hakkında Yönetmelik (2017, 31 Mayıs). Resmi Gazete, Sayı: 30082
- Binaların Yangından Korunması Hakkında Yönetmelik (2007, 19 Aralık). Resmi Gazete, Sayı: 26735
- İstanbul İmar Yönetmeliği (2018, 20 Mayıs). Resmi Gazete, Sayı: 30426
- Türkiye Bina Deprem Yönetmeliği (2018, 18 Mart). Resmi Gazete, Sayı: 30364
- TSE, 2013. TS825: Binalarda Isı Yalıtım Kuralları. Ankara: TSE.
- TMMOB, MO, 2015. Mimari Proje Çizim ve Sunuş Standartları. İstanbul: TMMOB, MO, İstanbul Büyükşehir Şubesi.
- TMMOB, MO, 2015. Ulaşılabilirlik Kılavuzu. İstanbul: TMMOB, MO, İstanbul Büyükşehir Şubesi.