

Wentworth Institute of Technology
School of Architecture & Design
M.Arch Program
Graduate Electives, Spring 2027

Design in the Context of Migration

ARCH 7700, Sec. 01
Instructor: Shirine Boulos Anderson
Wednesday and Friday, 10:00-11:45am
Maximum enrollment: 12

Course description: Global migration trends coupled with rapid urbanization are creating stresses to urban environments in the western world while hampering the progress of Sustainable Development Goals set by the United Nations for cities in the developing world. This seminar explores the drivers of migration and the resulting inequities faced by migrants due to the loss of cultural and social infrastructure and examines the role that design professionals play in addressing social justice. Students analyze and evaluate existing and new strategies for providing housing and community hubs (e.g., green space, libraries, community spaces that support youths at risk) for migrant populations, employing urban and architectural design solutions to bridge between established communities and refugees and asylum-seekers.

Note: First priority in this course is given to students who are pursuing the Graduate Certificate in Community-Engaged Design and Social Practice. The remaining seats will be limited.

Restorative Community Design

ARCH 7750, Sec. 01
Instructor: Ignacio Cardona
Tuesday and Thursday, 10:00-11:45am
Maximum enrollment: 12

Course description: This graduate seminar examines the role of architecture and design in addressing spatial inequalities in our built environment. Restorative community design is an innovative field situated at the intersection of three established theoretical discourses: participatory design, restorative justice, and spatial opportunity. Participatory design advocates for integrating people's voices into design processes, while restorative justice promotes a sense of community togetherness to address spatial inequalities and heal harmful polarizations. Lastly, spatial opportunity synthesizes design techniques to support communities' Right to the City. The seminar includes readings, lectures and discussions, and case study analyses from a global context.

Note: First priority in this course is given to students who are pursuing the Graduate Certificate in Community-Engaged Design and Social Practice. The remaining seats will be limited.

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Structure and Spectacle in Contemporary Architecture

ARCH 7800, Sec. 01

Instructor: Mark Mulligan

Wednesday and Friday, 10:00-11:45am

Maximum enrollment: 12

Course description: The twenty-first century has produced an increasingly diverse range of expression in high-profile architecture, moving beyond twentieth-century orthodoxies and “isms”. Many leading contemporary practices prioritize spectacle – sculpting building forms and crafting spatial experiences that evoke wonder and awe – often by challenging, concealing, or reinterpreting conventional structural systems and elements. This graduate seminar explores these developments through a series of lectures, readings, and case studies, examining how digital tools and computational modeling have reshaped the architect-engineer collaboration. Students will learn and apply 3D structural modeling software to analyze the impact of various design parameters and alternative configurations. The seminar encourages students to incorporate new tools and insights to their own design work, critically engaging the role of structural expression in contemporary architecture.

Note: although not a prerequisite, students taking this course are most likely to succeed if they have already successfully completed Structures 01 and 02.

Architecture + AI

ARCH 7800, Sec. 03

Instructor: Antonio Furguele

Tuesday and Thursday, 10:00-11:45am

Maximum enrollment: 12

Course description: This course focuses on the historical, theoretical, and technical relationships between architecture and artificial intelligence. The course is part seminar, part workshop, and open colloquium. It allows students to obtain knowledge of artificial intelligence for current and future applications in architecture and the environment. It is structured to allow students to engage in an array of topics, with readings and discussions that directly frame the history and theory of artificial intelligence, workshops to gain technical literacy, and bi-monthly colloquia to critically engage the emergent discourse. Students learn to use generative AI tools, style transfer, neural networks, autoencoders, deep computer vision, to develop a research project, present it to a group of experts, and display work within an exhibition.

Architecture and Storytelling

ARCH 7800, Sec. 04

Instructor: John Ellis

Tuesday and Thursday, 10:00-11:45am

Maximum enrollment: 12

Course description: Architecture is not merely the design of buildings but a cultural practice that constructs meaning and shapes collective narratives. This graduate seminar explores storytelling as a transformative tool for architectural thinking, empowering students to create compelling narratives that give purpose, clarity, and emotional resonance to their work while developing a critical awareness of the

architectural environments that shape daily life and cultural experience. Drawing upon the research and creative practice of architect and educator John Stephen Ellis, AIA, this seminar investigates the relationship between architecture and storytelling, exploring how buildings, cities, landscapes, and spaces serve as powerful narrative media that express cultural values, construct spatial and material meaning, preserve collective memory, and enrich human experience. Through critical readings, case studies, writing exercises, graphic and video storytelling, and design explorations, students will examine the narratives embedded within the built environment while developing their own methods of architectural storytelling. Participants will learn to frame design projects as compelling narratives that connect research, design intent, and lived experience, fostering a deeper understanding of how architecture communicates meaning. The course equips emerging architects with the creative, analytical, and communication skills necessary to create more meaningful projects and to present their ideas with clarity, imagination, and persuasive impact.

Prototyping and Computing in Design

ARCH 7800, Sec. 05

Instructor: Katarina Richter-Lunn

Monday and Wednesday, 6:30-8:

Maximum enrollment: 5 graduate students (12 total)

Course description: Building on skills developed in Creative Coding, this course expands students' understanding of programming through physical computing and digital prototyping. Students learn to integrate computation with sensors, actuators, and embedded systems to create responsive objects, immersive environments, and interactive systems that bridge digital and physical experience. Through a series of hands-on exercises and projects, students develop workflows for parametric modeling, real-time interaction, and simulation across multiple design platforms and programming environments. As the course progresses, students may extend their digital explorations into physical form through digital fabrication techniques, using code as a generative tool for both virtual and tangible outcomes.

Fabrication Methods

ARCH 8650, Sec. 01

Instructor: Rob Trumbour

Tuesday, 8:00-11:35am

Maximum enrollment: 5 graduate students (12 total)

Course description: With a focus on making as a means of applied research, graduate students work with both manual + digital fabrication tools, techniques and fabrication methodologies. Design and Applied

Research will range in scale and scope from the making of artifacts to prototyping to one to one scale manufacturing.

Theories of Practice

ARCH 8820, Sec. 01

Instructor: Mark Pasnik

Tuesday and Thursday, 10:00-11:45am

Maximum enrollment: 12

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Course description: Over the past decades, architects have engaged a wide range of approaches to conceiving and making buildings, or more aptly, to forming the theories behind their practice of architecture. The seminar will study and critique architects whose work illustrates a broad spectrum of contemporary outlooks. Themes will be introduced relating to the transformation of the discipline of architecture—from drawing to materials to site strategies and other philosophical approaches. These themes will be investigated through case studies of modernist, postmodern, and contemporary architects in comparison to historically important architectural texts and treatises. The seminar will emphasize critical thinking and analytical skills through extensive readings, in-depth seminar discussions, and student presentations. It will help students formulate and critique methods—graphic, verbal, and written—to present theories of their own as they embark on their own careers in practice.

Courses for the M.Arch + MSCM Dual Degree

Students who are pursuing the dual degree option and earning a Master of Architecture and a Master of Science in Construction Management are required to complete two foundational ‘leveling courses’ as their electives during the M.Arch program before they can start the MSCM program in the subsequent year. The courses can be taken in either order.

The leveling courses are:

CONM 7150: Construction Estimating

CONM 7175: Construction Project Scheduling and Controls

If you are interested in registering for one of the courses above, you are responsible for making sure that the courses will work with your fall schedule by reviewing the days and times they are available on LeopardWeb. For more information about each course, see the academic catalog descriptions here:

<https://catalog.wit.edu/course-descriptions/>