ARCH 4893: Space Lab

3 Credit Hours

The course is aimed at entangling the complex relationship between society and built environment. It addresses several fundamental questions that concern the understanding, synthesis and design of architectural and urban space: How do social norms influence the structure of the built environment? The course introduces students to the spatial analysis of various scales of the built environment, representations and analytical techniques of space syntax, depthmap software tutorials, and correlations between behavior observations and spatial measures.

ARCH 4894: Architecture Advocacy

3 Credit Hours

The course focuses on the revitalized and critical role of architecture and architects in environmental, and social change within a rapidly changing world. Pedagogically, the focus is placed on advancing the students' commitment to sustainability with a distinctive lens - in an era, which as raised in the current debates, "Design is Not Enough". Such commitment extends not only to designing and building, but also generating innovate ways to reach out to a broader community, and policy-makers, to form and inform sustainability in social and built environment; and to make a meaningful contribution to environmental literacy, and responsibility.

ARCH 4895: Computational Methods Advanced Generative-Analytical Technologies in Architecture

3 Credit Hours

This course introduces students to computational thinking and the fundamental concepts of computation through explorations with generative scripting and parametric tools. The goal is to understand the potential of computation and the role it can play as part of one's design process, not as a collection of specific tools, but as a way of thinking about design. By the end of the semester, students will have the vocabulary and an understanding of computing that will inform their future explorations with more advanced tools and technologies.

ARCH 4896: Advanced Production: Precast

3 Credit Hours

This course examines the potential of additive manufacturing to streamline the production, reduce the costs, and enhance the architectural expression of precast concrete.