48-305 Architecture Design Studio: Integration II

"The way to solve the conflict between human values and technological needs is not to run away from technology. That's impossible. The way to resolve the conflict is to break down the barriers of dualistic thought that prevent a real understanding of what technology is--not an exploitation of nature, but a fusion of nature and the human spirit into a new kind of creation that transcends both."

Robert Pirsig

The Advanced Construction Studio focuses on the detailed development and refinement of architectural design as informed by the integration of structural, enclosure, environmental, and material systems and the process of construction. Students will be introduced to more advanced community design projects and will develop design skills while negotiating the complex issues of site, culture, climate, aesthetics, and performance. This studio will introduce a range of technologies and analysis techniques, such as Climate Studio, Covetool and Virtual Reality (VR) technology, for designing architectural spaces that respect the natural environment. Students are expected to apply advanced tools and technologies and explore the role climate, light and energy can play in shaping our spaces. Studio design projects are expected to comprehensively articulate concepts and develop designs with more precision and in greater detail than done in previous studios and courses. Students are expected to synthesize all the criteria, and to carry forward all their experience and knowledge from previous studios AND supporting classes to assignments.

As a result of this course, students should be able to: translate a program into a building design that responds to user requirements; demonstrate the form making implications of structural systems; demonstrate the energetic implications of materials selection, enclosure systems and building form; integrate multiple systems to achieve elegance, efficiency and economy in design; develop criteria for evaluating design alternatives; generate - represent - evaluate multiple design alternative; and draw technical documentation for the project using the conventions of architectural representation.

The Green Machine by Malka Architecture