

## **48-531 / 48-771 Fabricating Customization**

Photo: Meghan Pisarcik, Blown Glass Mold detail

*"A prototype is both a question and an answer. An agent Provocateur. A dry run. A rehearsal. A preview. And, at its best, a revelation. The prototype is an architecture of neither here nor there, a projective and reflective act, somewhere between a castaway and a hidden treasure. Prototypes, in other words, enable us to overcome the barriers of representation and fabrication, allowing messier forms of human and environmental context to wield their dirty influence - for instance, how scale and meaning operate differently between the place of design, the place of production, and the place of rest."*  
– Bob Sheil

While architects continue to develop their work principally through mediated environments of drawing and modeling, computational design and fabrication methodologies are affording opportunities to bolster design processes through the infusion of physical and virtual prototypes. More than a large model or mere three-dimensional rendering of form, the prototype is a testbed and instrument of design projection. The prototype brings with it the physical instantiation of design ideas at larger scale and in actual materials to provide the designer with the feedback of latent material qualities and performance. The prototyping process is a potential vehicle for discovery in which affordances of fabrication processes and unanticipated results expand the realm of possibilities and challenge assumptions of linear design to fabrication processes.

Students in this advanced digital fabrication course will leverage the full range of fabrication techniques (digital and analog) in the school of architecture to bring prototyping processes to bear upon a significant element of a previous design project. Through a range of large-scale physical artifacts, students will translate a schematic design proposal from familiar conventions of representation to an architectural element that is informed by its material constitution and methods of fabrication. The course places great emphasis upon the reciprocity of design and prototyping, challenging students to leverage physical artifacts as tools for thinking. In this way, prototyping is a means of exploration, not merely a method of production or fabrication.