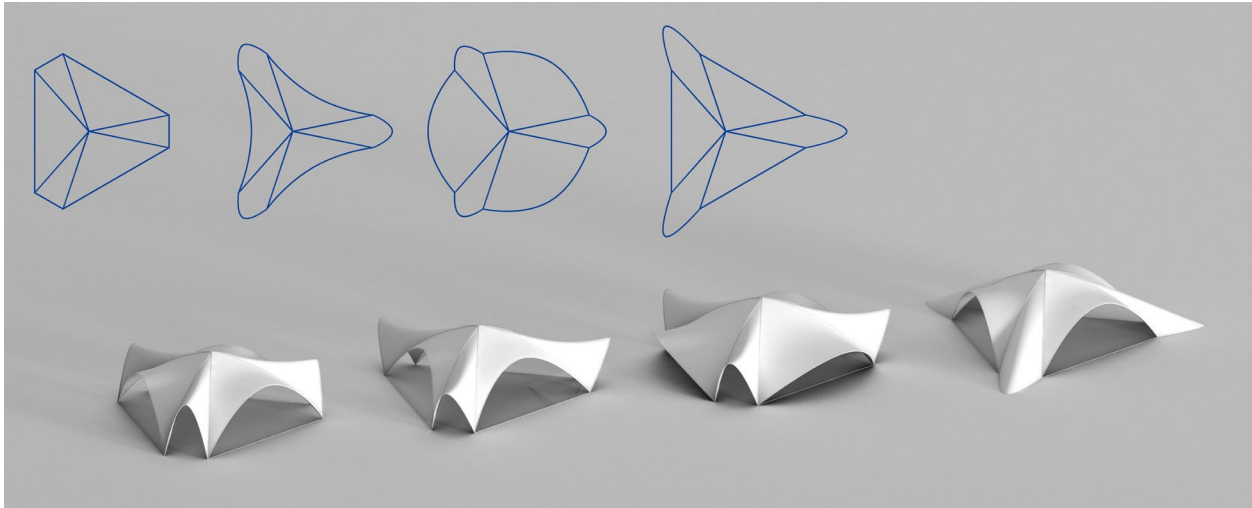




Carnegie Mellon University

School of Architecture  
College of Fine Arts, CFA 201  
Carnegie Mellon University  
Pittsburgh, PA 15213



*Parametric explorations from FCD project by Monica Toren*

## 62-275: Fundamentals of Computational Design

Units: 9

Instructor: Eddy Man Kim

As analog mechanisms; as metaphors; as bodily extensions or prosthetics; as material systems; as building envelopes; as partners — or slaves? — of humans. This course takes computers outside the box and outs a journey of discovery revealing computation as the connective tissue encompassing multiple facets of architectural practice and experience. Addressing conceptual and practical aspects of the relationship between computation and design, the course explores the fundamentals of generative and rule-based systems for designing and making, simulation, and responsiveness, along with basic approaches to creative data processing, representation, and realization.

The course offers a holistic view of computation, exploring the different roles computing plays in the design of our built environment. Organized in two-week modules, the course explores six themes, each combining historical insight, architectural examples, and hands-on design exploration.