MEGASTRUCTURES
Designing Bigness

Before the theory of the hyperobject, architecture was developing a theory of the megastructure, a term which comprises ambiguities in implication, since it is situated somewhere between form and performance. More recently, Kenneth Frampton revisited the term and placed it in a broader context by considering a wide array of projects that respond to urban conditions [1998]. While megastructures are related to Koolhaas’ concept of Bigness, the term dates back to the writings of avant-garde architects Yoni Friedman and Fumihiko Maki during the early 1960s. It later came to popular attention in Reyner Banham’s book ‘Megastructures: Urban Futures of the Recent Past’ [1976] – a provocative response to the developing awareness of issues such as urban densification and overpopulation.

Today, as cities around the globe continue to expand and natural resources dwindle, urban densification remains increasingly relevant. This research studio considers the speculative and projective potential of megastructures as a theory and practice of architecture, specifying it as a particular response to territorial transformation.

In addition to formal experimentation, this graduate level studio aims at investigating emerging forms of design production by reimagining the physical city through intelligent and mediated processes. It represents an innovative approach by addressing ongoing agendas in robotics, simulation, physical computing, parametric design, digital fabrication, and other emerging design methodologies. Specific emphasis is placed on understanding the multi-scalar implications of design decisions, thus creating critical research based on the application of new design technologies.

The project site is located in Chicago adjacent to Lake Michigan. There will be guest speakers, workshops, and several field trips over the course of the semester.

**Studio Requirements:** All students must be familiar with Rhino software.
http://tracesf.com/2013/02/acadia-2012-synthetic-digital-ecologies/

**Required Texts:**
Bjarke Ingels *BIG Hot to Cold* [2015]
Timothy Morton *Hyperobjects* [2013]
Reyner Banham *Megastructures* [1976]