ECO CITY Sustainable Urbanism

As the Earth’s atmosphere continues to warm, cities around the Great Lakes will need to adapt to changes in regional climate over the next century. These changes include higher air temperatures; shifts in the timing, frequency, and severity of precipitation events; declining lake levels; and higher water temperatures. Changes to regional climate pose increased risks to the water resources, built environment and infrastructure, ecosystems, and recreation and tourism sectors that already face other pressures such as invasive species, urban development, and economic competition.


In response, this research studio investigates innovative methods, models and measures of urban design for the 21st century. Foregrounding the nascent reciprocity between ecology, economy and energy, the studio opens a horizon on reimagining urban form in response to climate change, sustainable practices and new patterns of habitation.

Organization
The first half of the semester will be organized around design, theory, ecology and technology. There will be individual work for the first project; teams of two for the second project. The Chicago River site is currently slated for development. Additional guest lectures, discussions, field trips, digital workshops, and public events will be planned to introduce and involve students with contemporary design culture, as well as a DIY approach responding to current socio-economic trends by promoting:

- A Platform of Collaboration where innovative people come together to leverage the opportunities of association with other innovators, small and large firms that form an ecosystem of ideas creation and knowledge sharing;
- Providing Public Spaces and Programs that help incubate exchange between people, ideas and creativity;
- Developing a 24-hour Neighborhood that works for flexible lifestyles, fully embracing the live-work nature of housing, providing a mix of uses that are active both day and night.

Design Proposals will be submitted to LAGI Land Art Generator International Design Competition
May 1, 2014

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

Required texts
Bjarke Ingels – Yes is More (2009)
Serge Salat – Cities And Forms: On Sustainable Urbanism (2011)
ECO CITY  ecological urbanism
PROJECT NARRATIVE
Learning from Silicon Valley, Google has decided to relocate its R&D headquarters to Chicago. In a strategic private/public partnership between Google, UIUC and City of Chicago, an ECO DISTRICT will be designated that advances intelligent and sustainable design. It will also serve as a testbed for environmental models, including new modes of transportation.

The eco-district integrates a DIY approach that responds to current socio-economic trends by promoting:

• **A Research Platform of Collaboration** where innovative people come together to leverage the opportunities of association with others – designers, software engineers, and students – forming an ecosystem of ideas creation and knowledge sharing;

• **Providing Public Spaces and Programs** that help incubate exchange between people, ideas and creativity;

• **Developing a 24-hour Neighborhood** that works for flexible lifestyles, fully embracing the live-work nature of urban environments by providing a mix of uses that are active both day and night.
02_ Diagramming + Analysis of Urban Relationships

STUDIO GANG 2012

TERRAFORM 2013
03_Performative Enclosure Systems

Field Trip to UT Austin  TEXFAB SKIN Digital Assemblies  February 19-24 2014

STUDIO PREREQUISITE: Students must be familiar with RHINO software