Studio Brief

In a world of ever expanding population and diminishing resources, it is imperative to explore sustainable models for the built environment.

This spring, the studio will focus on the potential of a material - WOOD - to transform architecture by its inherent material properties. Employing the concept of “lightness” as a strategy, the studio will attempt to use the least amount of material to provide maximum benefit to achieve a new typology of the vertical city. We will focus on how “the invention of form coincides with the invention of the building process.”¹ The studio will also explore sustainability, building technology, long term preservation and rehabilitation of wood.

We will create a community in the sky for the brave citizens of tomorrow. This new model for urban growth can be considered by the creation of living landforms, one that is built over time as the metropolis matures. Investigation will be undertaken to evaluate the scale of the civilization versus the building. New modes of transportation will be also be investigated for a community with a commute time of less than 15 minutes. New systems will enable new forms of building instead of the building informing systems. Concurrent with the studio is a seminar/laboratory on materials where we will work both technically and programmatically to achieve our goals. Materials having a high strength to weight ratio have the highest potential for gains yet builders and designers have been resistant to embrace such materials.

The vertical city has been idealized and romanticized throughout history from Babylon to Manhattan. Mythic cities such as Gotham from the Batman series to Starwars’ Coruscant provide provocative models of an imagined utopia. Adriaan Beukkers identifies “lightness” in his book of the same title as “interrelated analogies of shape, structure, process or idea”.

Embracing the embodiment of lightness in the crafting of space will be our goal.

¹Rafael Moneo from his discussion of the origin of architectural form in the work of Antonio Gaudi)
Project / Site

The studio will create a hybrid-housing proposal engaging both culture and infrastructure that will spark dialogue on long term growth and sustainable development in the city of Miami. Building upon the research that was completed in the fall semester, the studio will explore both the present and future transportation systems.

The project site is situated in the waterfront and adjacent land surrounding the bay between Miami Beach and Miami’s mainland - between the 79th and the 123rd Street causeways.

Knowledge / Expertise

While this studio is specific in the material resolution, the cultural engagement of this project is not. Students will develop their own definitions of what living in the sky would mean. They will define approaches to the infrastructural requirements needed to capture both a humanistic position and organizational hypotheses. Questions to be answered in addition to the production of a material-based city form include but are not limited to:

What are the conditions that define quality of life?
What are the qualities that make a space desirable, both physical and emotionally?
How is “sustainable” defined?
What are my responsibilities as an architect?

Schedule

The studio will consist of individual desk critiques, discussions with educators/professionals and formal reviews with outside professionals. The studio will examine precedents, explore site strategies, and the design process will emphasize physical models – both conceptual and representational - to critically develop, interpret and present ideas. The studio will meet three times a week – MWF beginning at 2 pm in Crown Hall unless specified by the professors.

First 5 weeks: (IN GROUPS)

Research planning strategies/case studies of structural form for high-rise architecture. Research timber extraction/ species and biomass produced with construction of superstructure.
Models to be considered are:
  • Le Corbusier’s Villa Radieuse,
  • Frank Lloyd Wright’s Broadacre city
  • Rem Koolhaas’ Downtown Athletic Club.
  • Daniel Burnham, White City, Burnham Plan
  • Frederick Law Olmstead, Park-City Beautiful
  • Ebenezer Howard, Garden Cities of Tomorrow
  • Buckminster Fuller, Cloud Nine, The Floating City
  • Kenzo Tange, Metabolism
  • Larry Harvey, Burning Man
  • Winny Maas “3-D City”
  • Kenzo Tange, Tokyo Bay
**Weeks 5-12:**
Who will occupy this city in the sky?

Assumptions:
Development of scenarios/stories: Ethnicity, gender, myth, demographics, etc.
- Family
- Single person
- Elderly
- Student

From those assumptions, Project a shared city as it relates to:
- Infrastructure,
- Circulation systems,
- climatic control,
- energy issues,
- Commerce,
- Recreation,
- Culture,
- Institutional governance

**Weeks 13-15:**
Development of the design of living in the sky.

Deliverables:
Create a program that embodies the potential of living in the sky.
Students will develop a concept to express the promise that living in a city of tomorrow will bring.

**Bi-Weekly Media Event**

Students will watch media specifically addressing the triumphs and perils of visions of a built utopia. Students will be required to incorporate the fundamentals or solutions of the following:

- Fountainhead: Wynand Building
- Towering Inferno: Glass Tower
- Metropolis: New Tower of Babel
- Fifth element: Zorg Headquarters
- Blade Runner: Dark City
- Batman: Gotham
- Star Wars, Attack of the Clones: 500 Republica ([Coruscant](#))
- Brazil
- Power of Ten: Eames

**Final Deliverables**

Creation of large-scale city model with tower concept,
Scale model of a dwelling in the sky
Diagrams/graphic analysis of the city
Section perspectives through city
Section, plan, 3 d drawings
ATTENDANCE POLICY

The studio provides a working environment that thrives on group interaction, dialogue and a sharing of ideas with classmates. In order to foster a sense of community, as well as to support one's personal development, students are strongly encouraged to work within the assigned studio space rather than in isolation. Work away from the assigned studio space is allowed (model shop, computer lab) as long as it is communicated to the Professor. If a student is unable to attend class, notification must be sent via email or text prior to the class. No person will be absent from any presentations. Missing more than three classes without notification will result in a failing grade for the class.

GRADING POLICY

A: excellent work
B: above average work
C: average work
D: below average work or late/incomplete
E: Failed work; late or incomplete

Criteria for evaluation includes:
Architectural Quality of work
Depth and rigor of the design process (investigation, development) and
Effort (participation in class, fulfillment of assignments and attendance)

AMERICANS WITH DISABILITIES (ADA):

Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must go through the Center for Disability Resources office. The Center for Disability Resources (CDR) is located in Life Sciences Room 218, telephone 312 567.5744 or disabilities@iit.edu.
CV

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EXPERIENCE
FOUNDER / PRINCIPAL Endrestudio / CHICAGO, IL / EMERYVILLE, CA 1994-Present
Licensed Architect and Structural Engineer
Founder of a multi-disciplinary, research-based design practice located in California and Illinois.

AWARDS / PUBLICATIONS
2014 American Institute of Steel Construction National Award
2013 Structural Engineers of America Award of Excellence
2014 Custom Home Design Award
2010 Elevation to American Institute of Architects Fellow
Winner for 2006 West End Bridge Competition
2009-2010 Illinois Institute of Technology Morgenstern Chair
Finalist for 2014 Adobe Bridge Competition Palo Alto, CA
Winner for 2007 MOMA PS1 competition: NYC
Finalist for 2010 Providence Pedestrian Bridge Competition Providence, RI
2012 Creative Achievement Award for American College Schools of Architecture
2007 Museum of Modern Art (New York) P.S.1: Young Architects Program
2007 Carnegie Museum of Art (Pittsburgh, PA): West End Bridge Competition
2015 “Evolution of an Iconic Dome in San Diego” SEI Structures Conference, Portland, OR
2006 “West End Bridge”, International Bridge Conference, Pittsburgh, PA

Susan Conger-Austin

Professor Susan Conger-Austin AIA is both an educator and practicing architect. As principal of S. Conger Architects LLC, she has worked on institutional, commercial and residential projects. Her teaching approach derives directly from her career in professional practice, both adhering to the same process, standards, and methodology. Prior to starting her own firm, Susan was a Studio Head and Associate Partner in the Chicago office of Skidmore Owings & Merrill, working on large scale commercial projects throughout the United States and Europe.

Since 2000, Susan has collaborated with numerous universities and faculty throughout the world in various educational workshops, seminars and exchanges. As a Fulbright Specialist Scholar, Susan taught in Chile. As a result, she has been an invited participant to an international design workshop in Santiago, Chile for the past several years. Over the past 3 years, Susan traveled to Sao Paulo, Brazil, to work with the Escola da Cidade in their post-graduate seminars that are focused on urban issues within Brazil and the United States. In addition, she is a current member of the Fulbright Specialist Peer Review Committee and the National Architectural Accrediting Board.

Professor Conger-Austin received her Masters in Architecture degree at Princeton University and her Bachelor of Arts degree in economics and art history at Stanford University.