

Integrated Parametric Delivery

Session B: A4713

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Thursday 7-9pm

Fayerweather 202

Emerging technologies in architectural design find their own time and place to be implemented. Today we have access to a vast number of specialized digital tools that span across disciplines, moreover within our industry we have a variety of complex platforms that we use to design and deliver projects. These design tools allow us to closely analyse, automate, simulate, optimize, rationalize, integrate hardware, connect to databases, work with point clouds, write scripts, etc...in deployable and sharable forms.

Too often these tools become constraints rather than enablers. Though when utilized effectively, parametric methodologies can facilitate numerous iterations with greater insights and control, enabling a more resolved final product.

Designers often favor one tool over another, mainly out of familiarity. This course will build on session A, Rethinking BIM, and focus on achieving a set of design goals through an effective interoperable workflow that utilizes the strengths of each tool. The majority of the class will focus on developing a foundational knowledge of this adaptive approach and use Rhino/Grasshopper as the platform from which students will extend their workflows to develop and achieve their design goals set by a conceptual proposal for the redesign of the New Museum in New York.

A basic understanding of Revit is suggested—taking ReThinking BIM (Session A) is highly recommended, but may be exceptions.

Schedule:

WEEK 07 - Lecture // Intro to Interoperability, Project Introduction, Get into Groups
WEEK 08 - Lecture // Workflow Design, Rhino & Grasshopper, Concept Proposals Due
WEEK 09 - Lecture // Help Sessions // Adv. Adaptive Components
WEEK 10 - Lecture // Simulation, Analysis, and Optimization
WEEK 11 - Lecture // Help Sessions // Galapagos, Analysis and Optimization
WEEK 12 - Help Session // Desk Crit