

High Performance Building

at Georgia Tech

Advance study in architecture, building construction and various engineering fields, for advancing practice and knowledge in the built environment

M.S. Programs:

- Green Building Technology

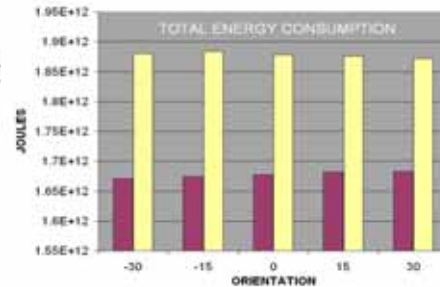
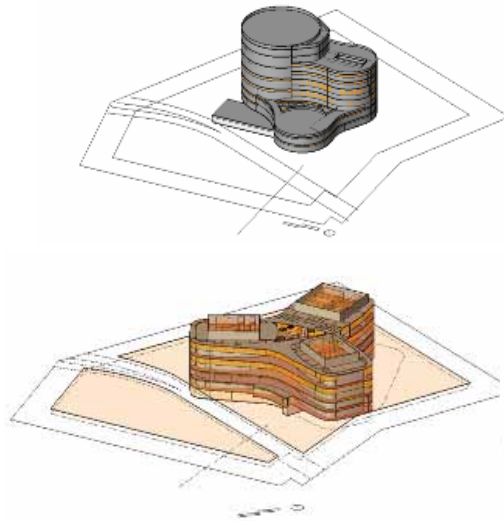
- AEC Integration

- Digital Modeling & Fabrication

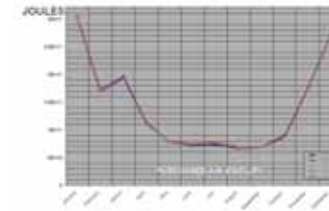
Joint programs sponsored by Architecture, Building Construction, with collaboration with the College of Computing and College of Engineering

Green Building Technology

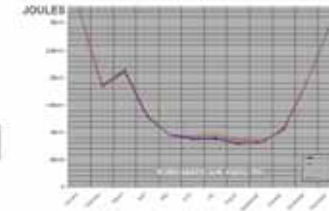
Advancing the tools and concepts for energy, daylighting, and sustainable analysis in design



Orientation	Month 1 (Joules)	Month 2 (Joules)	Month 3 (Joules)	Month 4 (Joules)
January	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
February	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
March	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
April	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
May	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
June	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
July	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
August	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
September	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
October	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
November	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000
December	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000



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December	100,000,000,000	100,000,000,000	100,000,000,000	100,000,000,000



Building envelope design and analysis, energy-lighting, air-flow- and human comfort-analysis, photo-voltaic integration in design, energy control systems, zero energy residences, daylighting control and enhancement

Digital Modeling & Fabrication

Unique capabilities and resources in
generative design and prototype fabrication



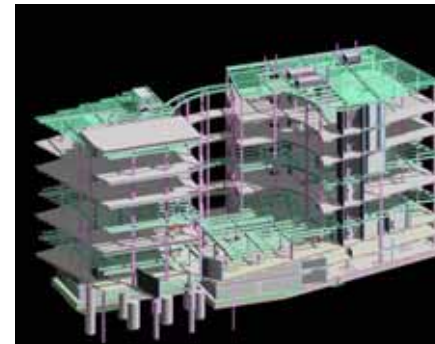
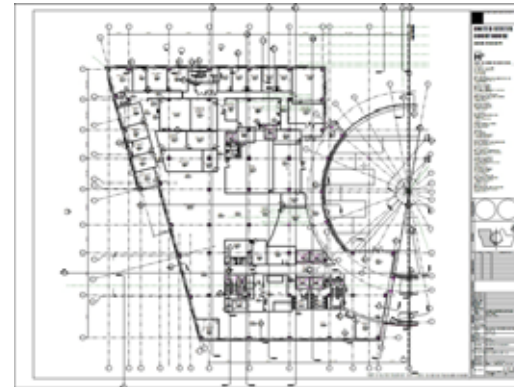
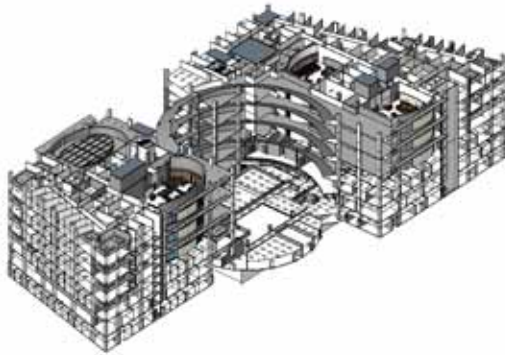
Developing design-for-fabrication
expertise



Generative systems, parametric modeling of complex geometries,
fabrication planning methods, design-for-assembly, structural and other
planning, NC-production planning, in-house and contract fabrication,
prototype production

AEC Integration

Collaborative and integrated design with architects, construction managers, engineers and fabricators



Working practices that utilize Building Information Modeling (BIM) and Integrated Project Delivery (IPD) to design and construct better buildings in less time and lower cost. It emphasizes collaborative methods of design and construction, 3D, 4-D and N-D of project review and assessment.

Implementation

High Performance Building

three areas:

Green Building Technology

AEC Integration

Digital Design & Fabrication

Initial offerings for the fall, 2009, with full program accreditation in the Fall 2010.

Some programs joint with Architecture and Building Construction programs. Later collaboration with ME and CEE expected.

Student fellowships and interns currently being sought.

Additional post-professional programs in Healthcare Facilities, Urban Design.