

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

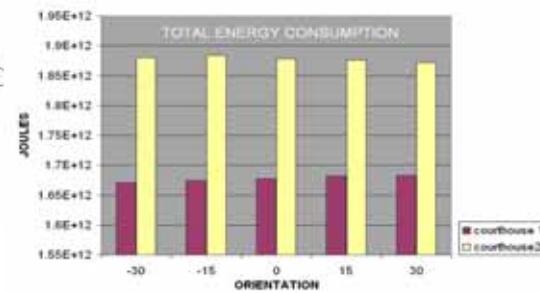
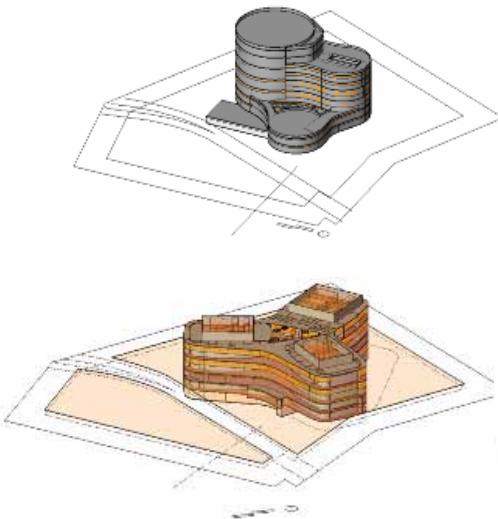
AEC Integration

Digital Modeling & Fabrication

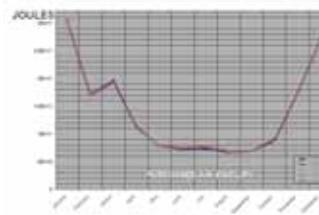
Joint programs sponsored by Architecture, Building Construction, with collaboration with the College of Computing and College of Engineering

Green Building Technology

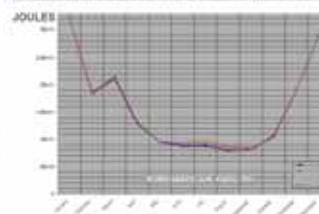
Advancing the tools and concepts for energy, daylighting, and sustainable analysis in design



Month	Year 1 (W)	Year 2 (W)	Year 3 (W)	Year 4 (W)
January	120,153,000,766.70	105,448,000,000.20	105,147,204,000.00	105,249,000,719.21
February	112,250,000,445.32	97,165,000,271,000.89	98,170,000,270,000.00	97,489,000,249.32
March	113,000,000,000.00	105,000,000,000.00	105,000,000,000.00	105,000,000,000.00
April	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
May	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
June	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
July	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
August	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
September	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
October	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
November	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
December	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00	113,000,000,000.00
Total	1,364,432,000,000.00	1,204,272,000,000.00	1,204,272,000,000.00	1,204,272,000,000.00



Month	Year 1 (W)	Year 2 (W)	Year 3 (W)	Year 4 (W)
January	127,349,000,000.00	120,196,203,447.90	122,710,007,986.20	123,349,000,000.00
February	124,149,000,000.00	115,004,465,000.70	120,408,011,000.40	124,149,000,000.00
March	124,149,000,000.00	127,321,710,000.40	128,017,015,220.20	127,497,012,000.00
April	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
May	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
June	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
July	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
August	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
September	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
October	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
November	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
December	124,149,000,000.00	128,017,015,220.20	128,017,015,220.20	127,497,012,000.00
Total	1,571,534,000,000.00	1,420,007,452,400.40	1,423,004,000,000.00	1,423,004,000,000.00



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



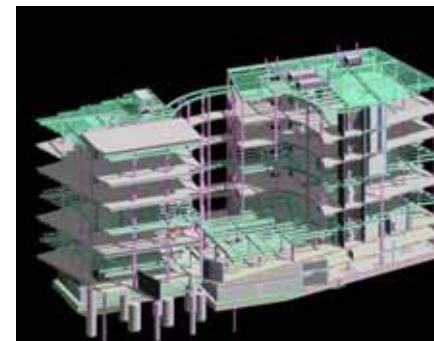
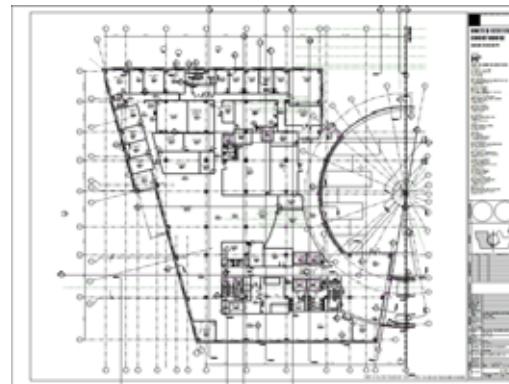
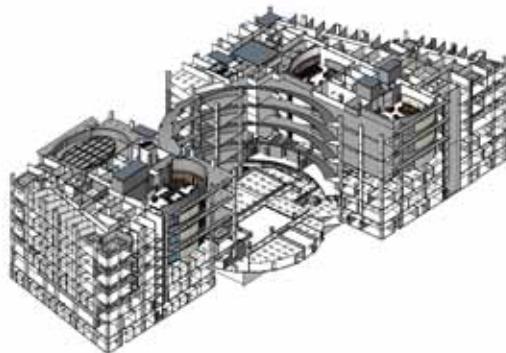
Developing design-for-fabrication expertise



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.