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

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.