MASTER OF SCIENCE IN BUILDING CONSTRUCTION AND FACILITY MANAGEMENT

The master’s degree program in the School of Building Construction focuses on management-based education for industry professionals seeking executive leadership positions in the industry. Our graduate training offers a holistic approach to business processes, integrating coursework, seminars, and hands-on learning to equip today’s industry professionals with the resources they need to excel in their professional careers. The graduate program consists of two concentrations:

1. Building Construction
2. Facility Management

The Building Construction concentration offers two tracks of study in construction management and program management.

Students can complete either a thesis or non-thesis option for the degree.

Students in the program come from a variety of backgrounds, often with experience in facility management, construction, architecture, engineering, city planning, management, or business. The program is tailored to meet the needs of professionals by offering evening classes, giving students the flexibility of continuing to work while taking courses.

Thesis Option

The curriculum for graduate study with the Thesis Option consists of the following 30 semester hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td>12</td>
</tr>
<tr>
<td>Required Elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved Elective</td>
<td>6</td>
</tr>
<tr>
<td>Research Methods Course</td>
<td>3</td>
</tr>
<tr>
<td>Master’s Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>30</td>
</tr>
</tbody>
</table>

Non-Thesis Option

The curriculum for graduate study with the Non-Thesis Option substitutes twelve semester hours of thesis for coursework and consists of the following 30 semester hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>Core Courses</td>
<td>12</td>
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<tr>
<td>Required Elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved Elective</td>
<td>6</td>
</tr>
<tr>
<td>Common Electives</td>
<td>6</td>
</tr>
<tr>
<td>Capstone Project Course</td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>30</td>
</tr>
</tbody>
</table>

Students applying for a MS in Building Construction and Facility Management (MSBCFM) will declare a concentration of interest at application and be directed into a set of core courses and electives totaling 30 credit hours that provide depth in the particular area chosen. All MSBCFM students will have common preparation in technology, leadership, communications, accounting and finance, plus two approved electives and a required elective that is a required course from the other concentration. Common electives consist of two courses to be chosen by the student with input from the advisor, from a list of three available courses (i.e., BC 6600 Fac Mgt Financial Analy, BC 6685 Leadership in Des&Constr, BC 6005 Special Topics: Tech Apps in the Cons Industry/NCP attached). Further, a capstone project course will be required so students will be exposed to different perspectives (e.g., owner, contractor, facility manager) in the industry.

The Graduate Record Exam (GRE) or Graduate Management Admission Test (GMAT) is required for all students. The application can be completed online at http://www.grad.gatech.edu/apply. Applicants are also asked to submit a resume of professional accomplishments.

International applicants must also submit a minimum TOEFL score of 100 (internet-based test) and financial documentation of support.

The Facility Management Concentration

The graduate concentration in Facility Management offers a clear understanding of this complex field and its theoretical concepts. It focuses on developing and fine-tuning the management skills necessary for success in the facility management industry. Courses explore the many facets of integrated facility management including asset management, project management, facility operations and maintenance, energy management, workplace design and consulting, facility technology integration, design and construction, and real estate development. The program is accredited by the International Facility Management Association (IFMA) Foundation.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC 6100</td>
<td>Professional Trends in Facility Management</td>
<td>3</td>
</tr>
<tr>
<td>BC 6200</td>
<td>Maintenance Management of Built Assets</td>
<td>3</td>
</tr>
<tr>
<td>BC 6300</td>
<td>Safety and Environmental Issues</td>
<td>3</td>
</tr>
<tr>
<td>BC 6500</td>
<td>Real Estate Asset and Income Property Management</td>
<td>3</td>
</tr>
<tr>
<td>Required Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Common Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Approved Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>BC 6850</td>
<td>Building Construction and Facility Management Capstone</td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

The Building Construction Concentration

The graduate concentration in Building Construction focuses on the activities and processes that deliver a building, from concept inception or need from an owner, to the design by architects and engineers, to the actual construction of the building by the contractor and subcontractors. This graduate concentration has two tracks: Construction Management (the contractor’s perspective), and Program Management (the owner’s perspective).

The Construction Management Track (within the Building Construction concentration)

The Construction Management track educates students to understand, analyze, select, and manage the most appropriate and effective project delivery systems for constructing a facility, from the contractor’s perspective. The curriculum emphasizes integrated problem-solving through state-of-the-art technical and management techniques. A variety of project delivery systems, that can be used independently or integrated, are examined. The delivery methods explored include the design-build system, the construction management/agent method, the hybrid bridging
and partnering system; the negotiated select team method, as well as the traditional delivery method.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC 6025</td>
<td>Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>BC 6250</td>
<td>Value Management for Integrated Facility Design and Construction</td>
<td>3</td>
</tr>
<tr>
<td>BC 6550</td>
<td>Design and Construction Processes for Integrated Services</td>
<td>3</td>
</tr>
<tr>
<td>BC 6650</td>
<td>Advanced Project Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Required Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Common Electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Approved Electives</td>
<td></td>
</tr>
<tr>
<td>BC 6850</td>
<td>Building Construction and Facility Management Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 24

Program Management Track (within the Building Construction concentration)

This track is designed to educate students to manage projects from inception (programming and pre-design) and through the entire project acquisition process to occupancy by the user. Students are taught to manage pre-design activities, design procurement and management, construction procurement and management, and the overall management of the building acquisition process from the owner’s (rather than the designer’s or builder’s) perspective. Graduates are prepared to work in program management positions for consulting firms or organizations who build often and must manage complex, often multi-building programs.

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<tbody>
<tr>
<td>BC 6025</td>
<td>Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>BC 6185</td>
<td>Introduction to Construction Program Management</td>
<td>3</td>
</tr>
<tr>
<td>BC 6285</td>
<td>Management of Pre-design Phase as Owner</td>
<td>3</td>
</tr>
<tr>
<td>BC 6385</td>
<td>Management of Design Phase as Owner</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Required Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td>BC 6850</td>
<td>Building Construction and Facility Management Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 30

School of Building Construction (http://www.bc.gatech.edu/content/master-science-building-construction-and-facility-management)