

Institute Graduate Curriculum Committee
Minutes
Thursday, December 1, 2016

Present: Breedveld (ChBE), Pikowsky (Registrar), Bafna (CoD-ARCH), Balch (CoC-IC), Chow (CoC-CSE), Cozzens (Vice Provost), Dixon (ME), Jagoda (AE), Scripka (GCC Student Rep), Jayaraman (MSE), Macrakis (HSOC), Schmidt-Krey (BIOL)

Visitors: Hodges (REG), Bamburowski (Graduate Studies), Borenstein (Graduate Studies/PUBP), Richardson (Graduate Studies), Bruner (Graduate Studies), Mitra (CoB), White (CoC), Guzdial (CoC-IC), Castro (CoD-BC), Bramblett (IRP/EDM/AE)

Note: All action items in these minutes require approval by the Academic Senate. In some instances, items may require further approval by the Board of Regents or the University System of Georgia. If the Regents' approval is required, the change is not official until notification is received from the Board to that effect. Academic units should take no action on these items until USG and/or BOR approval is secured. In addition, units should take no action on any of the items below until these minutes have been approved by the Academic Senate or the Executive Board. It may also be that approval of the Southern Association of Colleges and Schools is also required.

There are 24 voting members, 13 needed to reach a quorum.

All votes are unanimous except as noted.

Academic Matters

1. A motion was made to *table* a request from the School of Materials Science and Engineering for a modification to an existing course. The motion was approved.

Course Other – TABLED

MSE 6754: Engineering Communication

This request included eliminating the phrase “cross-listed with CEE 6754” from the catalog description.

Note: This proposal was tabled due to no representation present at the meeting to address questions from the Committee. The Committee discussed if the courses are no longer to be cross-listed and students are now able to receive credit for both that it is likely these courses will need to be approved with new course numbers by the Committee.

2. A motion was made to *table* a request from the School of Civil and Environmental Engineering for a modification to an existing course. The motion was approved.

Course Other – TABLED

CEE 6754: Engineering Communication

This request included eliminating the phrase ‘cross-listed with MSE 6754’ from the catalog description.

Note: This proposal was tabled due to no representation present at the meeting to address questions from the Committee. The Committee discussed if the courses are no longer to be cross-listed and students are now able to receive credit for both that it is likely these courses will need to be approved with new course numbers by the Committee.

3. A motion was made to *approve* a request from the College of Business for a degree modification. The motion was seconded and approved.

Degree Modification – APPROVED

Master of Business Administration

The MBA graduate degree requires the completion of MGT 6510 Leadership Development Workshop (1.5 credits). Full time MBA students register for MGT 6510 in the Fall semester of their second year. To complete some preparatory work in the prior semester related to their summer internships, full time MBA students also register for a zero-credit course MGT 6510P (Leadership Development Prep - 0 credits) in the Spring semester of the first year.

Evening MBA students complete the work for MGT 6510 (Leadership Development Workshop) during a single semester and do not need the MGT 6510P (0 credit) course to do preparatory work in an earlier semester.

We are requesting the IGCC to remove MGT 6510P as a requirement for Evening MBA students. Please note that MGT 6510P is a zero-credit course and this will not affect the credit hour requirements of the MBA degree.

Note: The Chair of the Committee advised the unit to submit the appropriate completed proposal packet in order to have this item presented at the subsequent Academic Senate meeting. The memo submitted to the ICC site in the proposal should serve as an accompanying document and not as the proposal itself. The unit agreed to complete the proposal packet.

4. A motion was made to *approve* a request from the School of Interactive Computing for a new course. The motion was seconded and approved.

New Course – APPROVED with Edits

CS 6461: Computing Education Research (3-0-3)

Note: The Committee requested the following edits to the New Course Proposal form:

- Pre-requisites (Box 7): Removal of CS 6601 (not intended to be listed per the unit). *Updated on NCP.*
 - Has this course been taught as a special topics course? (Box 8): Confirm terms the course has been taught.
 - Course equivalency (Box 9): Add 'NO'. *Updated on NCP.*
5. A motion was made to *approve* a request from the School of Building Construction for a degree modification. The motion was seconded and approved.

Degree Modification – APPROVED with Edits

Master of Science in Building Construction and Facility Management

The School of Building Construction is requesting to modify the MSBCFM curriculum, from four tracks (not appearing in the transcripts), 36 credit hours (12 courses on non-thesis option, or eight courses on thesis option), to two concentrations (appearing in the transcripts), 30 credit hours (10 courses on non-thesis option, or eight courses on thesis option). In the non-thesis option, add one new three credit hour elective course and one new three credit hour capstone project course for both concentrations. In the thesis option, reduce the required thesis hours from 12 to 6 and require one research methods course. The reason for the change is based on feedback from the 2016 APR report, the external 2016 Facility Management Accreditation Commission (FMAC) accreditation report, and the 2015-2020 Strategic Operational Plan. Courses in the existing Residential Construction Development Track will be covered under the new proposed Master of Real Estate Development and will be moved to this degree.

The current program has 36 total credit hours (thesis and non-thesis options); non-thesis option: six core courses/six electives; thesis option: six core courses/two electives/one 12-credit hour thesis; one track to choose from four options, which do not appear in the transcript. The proposed program will have 30 total credit hours (thesis and non-thesis options); two concentrations (to appear in the transcripts); in the non-thesis option: four core courses/two common electives/one course from the other concentration/two approved electives/one capstone project course; in the thesis option: four core courses/one course from the other concentration/two approved electives/one research methods course/one 6-credit hour thesis.

Master of Science in Building Construction and Facility Management

Requirements

The minimum requirements for a graduate degree in BC are as follows:

Thesis Option

The curriculum for graduate study with the Thesis Option consists of the following ~~36~~ 30 semester hours:

Courses	Hours
Core Courses	18 12
Required Elective	3
Approved Professional Electives	6
Research Methods Course	3
Master's Thesis	12 6
Total	36 30

The research methods course can be either BC 7100 Quantitative Methods of Construction Research (taught in the fall semester), or BC 8100 Research Methodology (taught in the spring semester).

Non-Thesis Option

The curriculum for graduate study with the Non-Thesis Option substitutes twelve semester hours of coursework for the thesis ~~thesis~~ for coursework and consists of the following ~~36~~ 30 semester hours:

Courses	Hours
Core Courses	18 12
Required Elective	3
Common Electives	6
Approved Professional Electives	18 6
Capstone Project Course	3
Total	36 30

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 79 90 (internet-based test) and financial documentation of support.

The Building Construction Integrated Facility Management Track Concentration

The graduate track concentration in Integrated Facility and Property 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 and property 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; Georgia Tech is one of three universities in the country to hold this prestigious designation.

Core Courses		
BC 6100	Prof Trends-Facility Mgt	3
BC 6200	Maint Mgt-Built Assets	3
BC 6300	Safety & Environ Issues	3
BC 6400	Fae Pln, Proj Mgt & Benchmk	3
BC 6500	Real Est Assesst & Prop Mgt	3
BC 6600	Fae Mgt Financial Analy	3
Required Elective		3
Common Electives		6
Approved Professional Electives		18 6
BC 6850	Bldg Cons Fac Mgmt Capst	3
Total Credit Hours		36
		30

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 Building Construction Integrated Project Delivery Systems Construction Management Track

The Integrated Project Delivery Systems **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.

Core Courses		
BC 6150	Design-Build Orgn & Mgt	3
BC 6025	Construction Management	3
BC 6250	Value Mgt-Integrated Dgn	3
BC 6350	Design& Construction Law	3
BC 6400	Fac Pln, Proj Mgt& Benchmk	3
BC 6550	Design&Constr Processes	3
BC 6650	Advanced Project Mgt	3
Required Elective		3
Common Electives		6
Approved Professional Electives		18 6
BC 6850	Bldg Cons Fac Mgmt Capst	3
Total Credit Hours		36
		30

The Building Construction Residential Construction Development Track

The graduate track in Residential Construction Development focuses on the largest and fastest growing area of the construction industry. Students are exposed to the complexities and challenges associated with Residential Construction and Development. All segments of the housing industry are studied, including single family, multi-family, mixed-use, affordable, senior, and renovation. Students are provided with a comprehensive view of relevant public policy, development, design, and construction issues, and gain a realistic understanding of the current business environment and prospects for the future.

Core Courses		
BC 6175	Real Estate Dev & Constr	3
BC 6275	Community Dsgn & Constr	3
BC 6375	Trends & Pol For Res Dev	3
BC 6400	Fae Pln, Proj Mgt & Benchmk	3
BC 6575	Real Estate Prod Finance	3
BC 6675	Res Design & Constr	3
Approved Professional Electives		18
Total Credit Hours		36

Program Management Track

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.

Core Courses		
BC 6025	Construction Management	3
BC 6185	Intro to Const Prog Mgt	3
BC 6285	Mgt of Predesign Phase	3
BC 6385	Mgt of Design Phase	3
BC 6400	Fae Pln, Proj Mgt & Benchmk	3
BC 6585	Mgt of Constr as Owner	3
BC 6685	Leadership in Des & Constr	3
Required Elective		3
Common Electives		6
Approved Professional Electives		18
BC 6850	Bldg Cons Fac Mgmt Capst	3
Total Credit Hours		36
		30

Note: The Committee suggested clarification of the language for the Required Electives and Common Electives as there appeared to be ambiguity in the current phrasing.

- Instead of 'Required Electives', the requirement could be listed as 'Take one class from complementary concentration'.
- Instead of 'Common Electives', the requirement could be listed as 'Integrated Core' or 'Common Core'.

A motion was made to *approve* a request from the School of Building Construction for new courses. The motion was seconded and approved.

New Courses – APPROVED with Edits

BC 6005: Technology Applications in the Construction Industry (3-0-3)

Note: Box 15 should note Elective instead of Required on NCP. This was updated.

BC 6850: Building Construction and Facility Management Capstone (2-3-3)

Note: Pre-requisites (Box 7) on NCP should be updated to Pre-requisites instead of Pre-requisites with concurrency and the courses should include a list of each concentration's requirements with 'OR' to separate. This was updated. The syllabus should be updated to include up to date Office of Disability Statement.

Discussion Items

1. Marla Bruner, Assistant Director of Office of Graduate Studies, presented feedback received from the iThenticate plagiarism detection software pilot effort.
 - Thirty-six users were part of the pilot group.
 - There were approximately 1,000 of our allotted 1,000,000 pages used, so we used a fraction of our contracted amount.
 - There was very little feedback from anyone.
 - Committee members noted that some “expert tips” for using the product would be very helpful. For example, it might be good for users to know that it does not scan tables and charts.
2. David Scripka, Graduate Curriculum Committee Student Representative, gave a presentation from 2016 Graduate Student Experience Survey – Qualifying Exams Analysis. The presentation items have been uploaded to the ICC site as Proposal 5174. The Committee suggested that this be brought back for additional discussion in the Spring.

Student Petitions

1. A motion was made to approve Petitions Subcommittee and Administrative actions on petitions. The motion was seconded and approved.

Petitions reviewed from 9/08/16 to 12/1/16:

(All approved except where noted.)

14- Late registration for the current term

- 8- Term withdrawal
- 2- Change grade mode
- 3- Full graduate standing
- 10- Registration hour adjustment for current term
- 4- Seven-year rule waiver
- 8-Readmit after 1st drop
- 3- One-hour registration rule waiver
- 3- Petition to return after withdrawing from previous term
- 4- Six-year rule waiver
- 11- Cancel registration for current term
- 4- Selective withdrawal
- 4- Count 9000-thesis hours as 7000-level thesis hours
- 1- Request to take 22 hours during the Fall term
- 7- Adjust course registration to correct CRN
- 1- Count course toward degree requirement
- 1- Enrollment waiver (as approved by Graduate Studies)
- 4- Course Substitution
- 5- Double count undergraduate course toward MS degree
- 1- Postpone completion of BS/MS degree
- 2- Use excess pass-fail hours

The following petition was reviewed by the Full Graduate Committee on 10/13/16.

- 1- Admit student to degree program without necessary credentials (Denied)

Administrative Item

1. A motion was made to approve RCR Subcommittee voting standards. The motion was seconded and approved.

This motion clarified that *ex officios* have voting rights with the exception of a staff member who acts as a scribe in meetings.

Adjourned,

Reta Pikowsky,
Secretary