Georgia Institute of Technology
Institute Graduate Curriculum Committee
2014-2015 Annual Report

Tuesday, October 20, 2015
3-5:00 p.m.
Student Center Theater
Fall Meeting of the Faculty, Faculty Senate, & Academic Faculty Senate

Members: Baabak Ashuri (CoA-BC), Hayriye Ayhan (ISyE), Victor Breedveld (ChBE), Marco Ceccagnoli (CoB), Edmond Chow (CoC-CSE), Susan Cozzens (VP-Graduate Education & Faculty Dev.), Rob Dickson (CHEM & BIOCHEM), Benjamin Flowers (ARCH), Jim Foley (CoC-IC), Jeff Jagoda (AE), Sundaresan Jayaraman (MSE), Kristie Macrakis (HTS), Paul Neitzel (ME), Reta Pikowsky (Registrar), Christine Ries (ECON), Ingeborg Schmidt-Krey (BIOL), David Sluss (CoB), Marilyn Smith (AE), May Wang (BME), Daegene Koh (Graduate Student Rep), Tucker Balch (Fac. Exec. Board Liaison)

Meetings: The Graduate Committee met 9 times during the 2014-2015 year. Dr. Victor Breedveld served as Chair of the Committee. Dr. Benjamin Flowers served as Vice-Chair of the Committee. Reta Pikowsky served as Secretary of the Committee. The business of the Committee is related to curriculum proposals and student petitions. Occasionally work groups are formed to discuss specific matters of policy or procedure.

Meetings were held on:

September 4, 2014
September 11, 2014
October 2, 2014
November 6, 2014
January 15, 2015
February 5, 2015
March 5, 2015
April 9, 2015
June 4, 2015

Curriculum Items: Over the 2014-2015 academic year, the GCC approved several modifications and additions to Georgia Tech's degrees, clarifications on policy, new courses, changes to courses, student petitions, and review of academic policies.

Informational/Discussion Items:

- There was discussion of the Study Abroad Committee, which has representatives from both Undergraduate and Graduate Curriculum Committees. Although most of the programs are related to undergraduate studies, both Committees feel graduate committee representation is important.
- The proposed BS/JM (Juris Master's) was presented to the Committee with a recommendation to move it forward.
- Based on existing written agreements and past practices in reviewing applicants for Georgia Tech - Lorraine (GTL), the Office of Graduate Studies approves qualified applicants for full-standing, degree-seeking admission in the case where a student has completed two years of the lycées plus at least two of the three years of the Grandes Écoles program. Students at this level are determined to be bachelor's degree equivalent.
    - The Office of Graduate Studies requested the same admission process and full-standing, degree-seeking admission offered for all approved and Graduate Curriculum Committee qualified applicants with similar backgrounds (having completed two years of the lycées plus at least two of the three years of the Grandes Écolesprogram), regardless of campus. That is, both GTL and non-GTL applicants may be admitted under such guidelines. The Committee agreed and approved this process.
- The Committee had a preliminary discussion of a new concept for a graduate credential that would be called a "modulum"; comments and potential concerns about the concept were raised for further consideration.
- The Office of Graduate Studies updated the Committee throughout the year on new cooperative agreements. This change in procedure ensures that the Graduate Committee is aware of these cooperative agreements and their general requriements.

Clarification of Catalog Language:

- The Committee approved clarification in Catalog language with regards to: 1) the Graduate Course Option, and 2) credit accounting for BS/MS programs.

Responsible Conduct of Research Requirement:

- The Committee discussed and approved a proposal for the RCR Committee, which was a free-standing Committee, to become a Sub-Committee of the IGCC per April 2015.

New Cooperative Agreements:

The following new cooperative agreements were discussed:

- Tongji University (Civil and Environmental Engineering)

- Ecole Nationale Superieure D'Arts ET Metiers (France) and GT Lorraine
- Memorandum of Understanding between GT Lorraine and EPF Sceaux (France)

Pre-Proposals:

- The Committee heard a pre-proposal presentation for a Ph.D. in Quantitative Biosciences.

New Program Prospectus:

The Committee discussed the following new program prospectuses and approved submission to the Board of Regents:

- Doctor of Philosophy with a major in Ocean Science & Technology
- Professional Masters in Occupational Safety and Health Management

New Degree:

The Committee discussed and approved the following new degree programs:

- Doctor of Philosophy with a major in Quantitative BioSciences
- Professional Master's in Sustainable Electrical Energy
- Professional Master's in Manufacturing Leadership

Online and International Delivery Formats:

- Professional Master's in Sustainable Electrical Energy

Degree/Program Modifications:

Modifications to the following degrees programs were considered. All were approved except as noted.

- Master of Science in Economics
- Master of Science in Building Construction and Facility Management, added a Program Management Track
- Doctor of Philosophy in Biomedical Engineering – Tabled
- Master of Science in Biomedical Engineering – Tabled
- Master of Science in Computer Science, Concentration in Social Computing
- Master of Science in Economics
- Master of Science in Computer Science, concentration in Machine Learning and concentration in Computer Graphics
- Master of Science in Computer Science, concentration in Databases & Software Engineering
- Doctor of Philosophy with a major in Biomedical Engineering (Joint Degree with Emory University)
- Master of Science in Biomedical Engineering (Joint Degree with Emory University)
- Master of Science in Supply Chair Engineering

- Master of Science with a Major in Architecture (Current Name), Master of Science in Architecture (Proposed Name), this change also involved changing the concentrations
- Master of Business Administration
- Master of Science in Computer Science (reduced the total hours required from 36 to 30)
- Master of Architecture
- Master of Science in Computer Science, Visual Analytics concentration

Renaming of a Degree:

The Committee approved a degree name change (from BSSTC/MSDM to BSLMC/MSDM):

- When the School of Literature, Media, and Communication converted the BSSTC program to BSLMC that change was also meant to apply to the 5-year BSSTC/MSDM degree, so that it would become the 5-year BSLMC/MSDM program. This was not formally called out in the original documents pertaining to the degree modification, but was implied. The registrar has already begun to address this matter by changing all references in the catalog.

Renaming of School:

The Committee approved a School name change from "School of History, Technology, and Society" to "School of History and Sociology"

Deactivation/Termination of Degrees:

Termination of the following degree was approved:

- Master of Science in Civil Engineering with the University of Pretoria, Joint MS Degree

New Subject Code:

The following new subject codes were approved:

- ECEP –new subject code for ECE courses in professional programs
- MLDR – new subject code for Manufacturing Leadership program (College of Engineering)

New Courses:

The following new course proposals were discussed and approved, unless otherwise indicated:

1. CETL 8723: Academic Writing for International Graduate Students 2-0-2

2. CETL 8796: Presentation Skills for International Graduate Students 2-0-2
3. CETL 8797: Oral Communication for International Graduate Students 2-0-2
4. BMED 7004: Teaching & Research Practicum I 1-0-1
5. BMED 7005: Teaching & Research Practicum II 1-0-1
6. ECE 6274: Statistical Natural Language Processing 3-0-3
7. ECE 6283: Harmonic Analysis for Signal Processing 3-0-3
8. ECE 7103: Advanced Memory Systems 3-0-3
9. MUSI 6005: Music Ensemble 0-3-1
10. AE 6552: Advanced Topics in Humans and Anatomy 3-0-3
11. ECE 6790: Information Processing Models in Neural Systems 3-0-3
12. BMED 6790: Information Processing Models in Neural Systems 3-0-3
13. BIOL 6755: Foundations in Quantitiave BioSciences – TABLED
14. AE 6701: Wind Engineering 3-0-3
15. ME 6701: Wing Engineering 3-0-3
16. ARCH 6531: Environmental Systems I 3-0-3
17. ARCH 6532: Environmental Systems II 3-0-3
18. CS 6726: Privacy, Technology, Policy, and Law 3-0-3 (cross-listed with MGT 6726) – TABLED – Later APPROVED
19. MGT 6664: Managing Innovation 3-0-3
20. MGT 6725: Information Security Strategies and Policies 3-0-3
    Note: Cross-listed with CS 6725
21. MGT 6500: Analytical Tools for Decisions 1.5-0-1.5
22. MGT 6501: Operations Management 1.5-0-1.5
23. MGT 6502: Leading People and Organizations 1.5-0-1.5
24. MGT 6503: Managing Information Resources 1.5-0-1.5
25. MGT 6504: Principles of Finance 1.5-0-1.5
26. MGT 6505: Marketing Management 1.5-0-1.5
27. MGT 6506: Managerial Economics 1.5-0-1.5
28. MGT 6508: Strategic Management 3-0-3
29. MGT 6509: Legal and Ethical Business 1.5-0-1.5
30. MGT 6510P: Leadership Assessment Preparation 0-0-0
31. MGT 6510: Leadership Assessment Workshop 1.5-0-1.5
32. MGT 6726: Privacy, Technology, Policy, and Law 3-0-3 – TABLED – Later APPROVED
33. MGT 6507: Business Communication 1.5-0-1.5
34. ECE 7056: GT-TU (Placeholder – Audit only) 12-0-12
35. CHBE 6050: The Science and Engineering of Microelectronic Fabrication 3-0-3, TABLED, Later APPROVED
36. ARCH 6251: Building Structures I 2-3-3
37. ARCH 6252: Building Structures II 2-3-3
38. ARCH 6069: Advanced Architectural Design Studio I 1-15-6
39. ARCH 6070: Advanced Architectural Design Studio II 1-15-6
40. BC 6050: Building Information Modeling for Multi-disciplinary Integration 2-3-3
41. ECEP 6301: Power System Control and Operation 3-0-3

42. ECEP 6304: Power System Economics 3-0-3
43. ECEP 6305: Power System Planning & Reliability 3-0-3
44. ECEP 6310: Capstone Project 1-6-3
45. ECEP 6351: Power System Protection 3-0-3
46. ECEP 6302: Conventional Generation 3-0-3
47. ECEP 6303: Renewable Energy Systems 3-0-3
48. ECEP 6352: Advanced Power Electronics 3-0-3, TABLED
49. ECEP 6353: Smart Grids 3-0-3, TABLED
50. ECEP 6354: Computational Intelligence in Power 3-0-3, TABLED
51. ECEP 6355: Solar Energy 3-0-3 , TABLED
52. ECEP 6356: Engineering Economics & Risk Management for Energy, 3-0-3, TABLED
53. ECEP 6357: Demand Response 3-0-3, TABLED
54. ECEP 8803: Special Topics 3-0-3
55. ECEP 8813: Special Topics 3-0-3
56. ECEP 8823: Special Topics 3-0-
57. APPH 6500: Classics in Neuroscience 1-0-1
58. AE 6015: Advanced Aerodynamics 3-0-3
59. AE 6120: Fundamentals of Solid Mechanics 3-0-3
60. AE 6121: Fundamentals of Aerospace Structural Analysis 3-0-3
61. AE 6370: Optimization for the Design of Engineered Systems 3-0-3
62. AE 6530: Multivariable Linear Systems and Control 3-0-3
63. BIOL 6607: Molecular Biology of Microbes: Disease, Nature, and Biotechnology 3-0-3 - TABLED – Later APPROVED
64. BIOL 6428: Population Dynamics 3-0-3 – TABLED – Later APPROVED
65. ISYE 6380: Production Planning and Control 3-0-3
66. ISYE 6381: Manufacturing Reliability 3-0-3
67. ISYE 6382: Quality Control and Six Sigma 3-0-3
68. ISYE 6383: Manufacturing Supply Chain Operations 3-0-3
69. CHBE 6701: Foundational Topics in the Manufacturing of Forest Bioproducts 3-0-3
70. MLDR 6701: Foundational Topics in the Manufacturing of Forest Bioproducts 3-0-3
71. MLDR 6800: Manufacturing Leadership Capstone Project 1-6-3
72. CS 6476: Computer Vision 3-0-3
73. CS 7476: Advanced Computer Vision 3-0-3

<u>Course Corrections:</u>

The Committee approved the following administrative corrections regarding courses:

- BC 6050: Building Information Modeling BC 6050 was approved on March 5, 2015 as 2-3-3. This course will be jointly listed with BC 4050. After further discussion, it was decided that the proper was decided that the structure of this course should be 3-0-3.

- Correction in new course numbers due to numbers having been previously used - Courses approved April 9, 2015.
    - AE 6120 changed to 6114
    - AE 6121 changed to 6115
    - AE 6370 changed to 6310

Online Delivery of Courses:

The Committee discussed and approved online delivery for:

- MGT 6107: Leadership and Organizational Change
- MGT 6114: Leadership Development
- MGT 6753: Principles of Management for Engineers

Course Prerequisite Modifications:

The Committee approved pre-requisite modifications for

- CS 7460: Collaborative Computing (remove prerequisite course CS 6750/PSYC 6750)

Course Deactivation:

The Committee approved deactivation of the following courses:

- MGT 6773: High Tech Ventures (similar to MGT 6789)
- ARCH 6051: Options Studio I
- ARCH 6052: Options Studio II

Student Petitions and Appeals:

The Graduate Committee acted on 231 student petitions in academic year 2014-2015. Of these, 172 were handled administratively in areas where the Committee had delegated responsibility to the Registrar. There were 2 written appeals that were acted on in 2014-2015. For reference, in academic year 2013-2014, the Committee acted on 288 petitions.

Submitted by:

Dr. Victor Breedveld, Chair, Chemical and Biomolecular Engineeering
Chair, GCC, 2014-2015