

**Institute Undergraduate Curriculum Committee  
Academic Matters and Appeals (Full Committee)  
Tuesday, July 21, 2015**

**Present:** Mayor (ME), Pikowsky (Registrar), Hollengreen (ARCH), Goodisman (BIOL), Sankar (AE), Parsons (CoB), Scott (CEE), MacIntyre (CoC-IC), Senf (LMC), Berry (PUBP), Burbach (Student Rep), Wilkinson (CHEM), Loss (MATH)

**Visitors:** Laros (Registrar), Hodges (Registrar), Bowman (INTA), White (CoC), Tone (IAC), Strickland (ISyE), Nazzal (ISyE), Cook (MSE), Pishdad-Bozorgi (BC), Belmate (C2D2/CETL), Essa (CoC), Pearsall (CoA), Tucker (ARCH)

**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.

**Note:** All votes are unanimous unless specifically noted otherwise.

**Academic Matters**

1. A motion was made to *approve* a request from the Ivan Allen College for a new subject code. The motion was seconded and approved.

**New Subject Code - Approved**

Subject code – IAC

The Ivan Allen College of Liberal Arts requests the use of the IAC prefix on course numbers for cross-disciplinary Liberal Arts courses open to all majors. An example of courses that would have this designation would be "Science, Engineering and Religion: An Interfaith Dialogue" and other courses that we plan to teach as part of the new Leadership and Multi-Faith Program, an Ivan Allen collaboration with Emory University. Currently, CoA, CoE, and CoS utilize college prefixes for some of their courses.

We would like to start with a simple sequence of special topics numbers: IAC 2803, 2813, 4803, 4813. Once the classes have been taught this way, we will ask for permanent numbers in one or two instances.

The Committee recommended that numbers 3803 and 3813 also be added. These numbers are used by other units and it would make sense to add them to this

sequence now so that all options are all levels are available.

2. A motion was made to *approve* a request from the School of International Affairs to participate in the Research Option program. The motion was seconded and approved.

### **Add Research Option – Approved**

School of International Affairs to participate in Research Option

Degrees are:

**Bachelor of Science in International Affairs**

**Bachelor of Science in International Affairs and Modern Language**

**Bachelor of Science in Economics and International Affairs**

The Sam Nunn School of International Affairs requests Institute Undergraduate Curriculum Committee approval to participate in the *default* research option with minor additions. Guidelines for participation have been approved by the School's faculty as described below.

### **Default Research Option Requirements**

To complete the research option, the student must:

- Complete nine units of supervised research, over a period of preferably three but at least two terms.
  - Research may be either for pay or credit (typically 4698 or 4699)\*
  - At least six credit hours must be on the same research project, broadly defined
- Write an undergraduate thesis or other substantial, written report showing results of the research.
  - A research proposal must be approved by a faculty advisor and one other faculty member. The proposal will normally be completed by the end of the student's first semester of research, but must be approved at latest before the start of their final term of research. An approved proposal is required for admission to the class "Writing an Undergraduate Thesis" (see below).
  - The thesis/report must be approved and graded by two faculty members.
  - Theses will be published in the Georgia Tech Library.
- Take the sequence of two 1-credit classes LMC 4701 :Undergraduate Research Proposal Writing and LMC 4702: Undergraduate Research Thesis Writing). The writing course is on top of the required 9 hours.

\*NOTE: For each hour of research for pay (audit), an hour of for-credit work must be substituted by the student to meet general degree requirements in the major.

Additional course numbers (other than 2698 and 4699) that may be used for research credits (if any).

Additional requirements. Students are required to send a weekly update of progress of research to the supervising faculty member. Along with their application, students must explain in two or three sentences how the instructor's research experience will benefit the student's research.

**Note:** The Committee would like clarification on the research courses (paid or unpaid) and asks the Registrar's Office to review the original proposal for the Research Option to determine what it actually says about the use of paid or unpaid research experiences.

3. A motion was made to acknowledge a request the School of Industrial and Systems Engineering for prerequisite modifications. The motion was acknowledged without concern.

### **Prerequisite Modifications – Acknowledged without concern**

ISYE 2027: Probability with Apps

ISYE 3770: Statistics and Applications

Starting from summer, 2015, GT will start to offer the new mathematics sequence. ISyE 2027 and ISyE 3770 are affected. The new Math courses are added to the prerequisite list.

#### ISYE 2027 Probability with Apps

The prerequisites will be:

(Undergraduate Semester level MATH 1502 Minimum Grade of D or Undergraduate Semester level MATH 1512 Minimum Grade of D or (Undergraduate Semester level MATH 15X2 Minimum Grade of T and Undergraduate Semester level MATH 1522 Minimum Grade of D) or (Undergraduate Semester level MATH 1552 Minimum Grade of D and Undergraduate Semester level MATH 1553 Minimum Grade of D) or (Undergraduate Semester level MATH 1X52 Minimum Grade of T and Undergraduate Semester level MATH 1553 Minimum Grade of D) ) and (Undergraduate Semester level MATH 2401 Minimum Grade of D with Concurrency or Undergraduate Semester level MATH 2411 Minimum Grade of D with Concurrency or Undergraduate Semester level MATH 24X1 Minimum Grade of T or Undergraduate Semester level MATH 2551 Minimum Grade of D with Concurrency or Undergraduate Semester level MATH 2561 Minimum Grade of D with Concurrency or Undergraduate Semester level MATH 2X51 Minimum Grade of T)

#### ISYE 3770: Statistics and Applications

The prerequisites will be:

Undergraduate Semester level MATH 2401 Minimum Grade of D or Undergraduate Semester level MATH 2411 Minimum Grade of T or Undergraduate Semester level MATH 24X1 Minimum Grade of D or

Undergraduate Semester level MATH 2605 Minimum Grade of D or Undergraduate Semester level MATH 2551 Minimum Grade of D or Undergraduate Semester level MATH 2561 Minimum Grade of D or Undergraduate Semester level MATH 2X51 Minimum Grade of T, all with Concurrency.

**Note:** There was a question raised about how to handle prerequisite changes due to the new Math sequence in the future. Although there was discussion of how the approved changes in Math would have a ripple effect on the curriculum and on prerequisites, there was no procedure approved by the IUCC that would provide a path forward. At the next meeting, the Registrar's Office will propose and call for a vote on how to manage the prerequisite changes in an efficient manner with a determination as to when they would have to come to the Committee for a vote or not.

4. A motion was made to *acknowledge* a request from the School of Building Construction for prerequisite modifications. The motion was acknowledged without concern.

### **Prerequisite Modifications – Acknowledged without concern**

BC 3600 - Construction Cost Mgt  
BC 3610 – Construction Law  
BC 4610 – Value Engr & Bldg Econ  
BC 4630 – Senior Capstone Project  
BC 4710 – Green Construction

#### **BC 3600 - Construction Cost Mgt**

**Old Prerequisites:** Construction Tech II (BC 2620)

**New Prerequisites:** None

**Rationale:** The intent of this course is to serve as elective on the undergraduate certificate, and also as basis for students interested in construction management, such as construction scheduling, law or value engineering and building economics. Construction technology terms are covered in class along with cost estimating principles and applications, and construction contracting.

#### **BC 3610 – Construction Law**

**Old Prerequisites:** Construction Contracting (BC2600) and Construction Tech II (BC 2620).

**New Prerequisites:** Construction Cost Mgt (BC 3600)

**Rationale:** Topics covered in BC 3600, such as cost estimating principles and applications, and construction contracting, are appropriate substitutes for the old prerequisites as BC 3610 becomes an elective.

#### **BC 4610 – Value Engr & Bldg Econ**

**Old Prerequisites:** Construction Cost Mgt (BC 3600) and Construction Law (BC3610) and Real Est&Cnst Fin&Acct (BC 3620) and Project Management I (BC 3630)

**New Prerequisites:** Construction Cost Mgt (BC 3600)

**Rationale:** Topics covered in BC 3600, such as cost estimating principles and applications, and construction contracting, are appropriate substitutes for the old prerequisites. The proposed certificate will cover real estate peripherally (there is already an existing certificate in Real Estate Development offered by the School of City and Regional Planning with collaboration from BC) so there is no need for BC 3620 as prerequisite. Fundamentals of construction scheduling will be covered in BC 4610 as needed.

### **BC 4630 – Senior Capstone Project**

**Old Prerequisites:** Construction Cost Mgt (BC 3600) and Construction Law (BC3610) and Real Est&Cnst Fin&Acct (BC 3620) and Project Management I (BC 3630)

**New Prerequisites:** Intg Design Constr & Dev (BC 4130)

**Rationale:** It is expected that students will enter BC 4630 with the need to apply knowledge of construction cost estimating, scheduling, and contracting, besides having been exposed to interdisciplinary project collaboration tools in BC 4130. The former content is covered in two electives that are also required as prerequisites this will be monitored by BC (allowed to be taken concurrently). Since BC 4630 is project based, students will be applying on the project the knowledge learned from the electives as the semester progresses.

### **BC 4710 – Green Construction**

**Old Prerequisites:** Construction Tech II (BC 2620)

**New Prerequisites:** None

**New Corequisite:** Environmental Systems I (ARCH 3231) or equivalent

**Rationale:** This modification will allow students in the B.S. Arch major to take BC 4710, while being consistent with its equivalent graduate course Green Construction (ARCH 6226), or newly approved equivalent ARCH 4226 offered by the School of Architecture. These two courses (BC 4710 and ARCH 6226) have been cross-listed for the past 10 years, so unifying the corequisite is actually an improvement.

5. A motion was made to *approve* a request from the Ivan Allen College, College of Computing, College of Sciences, and College of Engineering for a modification of a Collaborative agreement. The motion was seconded and approved.

**Note:** The vote was not unanimous. There was one vote to abstain.

### **Modify Collaborative agreement - Approved**

Georgia Institute of Technology-Georgia State University BS/MAT Option

*Change request 1: Change of wording in the MOU title*

Change 1 request is to change the title of the MOU from “Collaboration Between Georgia Institute of Technology and Georgia State University to Offer Bachelor of Science/Master of Teaching Degree Program” to “Collaboration Between Georgia Institute of Technology and Georgia State University to Offer Bachelor of Science/Master of Arts in Teaching Option.” The MOU details the degree

program collaboration for a BS from Georgia Tech and a Master of Arts in Teaching (MAT) from Georgia State University (Georgia State/GSU). The Master of Teaching referred to in the original MOU title is a non-existent degree, and the use of the term creates an inconsistency between the title, the collaboration description, and the MAT programs (links 1-5 in part 1a) in middle (grades 4-8) and secondary (grades 6-12) level education. The change request is to provide consistency and clarity.

*Change request 2: Change of minimum cumulative 3.5 GPA eligibility requirement*

Change request 2 is to change the minimum cumulative 3.5 GPA eligibility requirement (link 5 in part 1a.) to participate in the collaboration program to a 3.0. The 3.5 requirement is based upon requirements for existing five-year BS/MS programs at Georgia Tech (link 6 in part 1a). These are dual degree programs in which a student earns both degrees from Tech. A Georgia Tech student is able to take only six hours of graduate level coursework at Georgia Tech in the content area of the Georgia State MAT middle level or secondary level program. A student must first graduate from Georgia Tech before entering into the MAT program at Georgia State. Georgia Tech is the degree granting institution for the BS degree. GSU is the degree granting institution for the MAT. The minimum GPA eligibility requirement for a MAT program at GSU (known as TEEMS MAT) is a 2.5, which is aligned with the Georgia Professional Standards Commission requirements for teaching certification (link 7 in part 1a).

*Change 3 request: Change the wording of the MOU related to GRE requirements*

Change 3 request is to reflect GRE requirement changes for final acceptance into the M.A.T. program. The original MOU refers to an 800 or higher GRE (combined Verbal and Quantitative), which is an out of date score scale. The score scale was revised by the Educational Testing Service (ETS) in 2011. Georgia State now requires a “submission of acceptable scores” as seen on the [BS/MAT collaboration website page for Georgia State](#).

**Note:** There was a concern expressed about the vague GRE requirement. The concern was that students might go along in the program and then not be admitted in the end because they could not meet the GRE threshold. Since the minimum requirement isn't stated, students would not really know the impact of the GRE score until the final point of the admission decision. It was noted that GSU does not wish to state a minimum GRE score because it prefers to evaluate the applicants holistically. Because the GRE requirement in question is wholly a matter of GSU policy, GT faculty have no jurisdiction over it nor does it affect GT requirements.

6. A motion was made to *approve* a request from the School of Materials Science and Engineering for a minor modification. The motion was seconded and approved.

## **Minor Modification - Approved**

### Minor in Material Science and Engineering

*Allow a maximum of 3 semester hours of Special Topics courses to be included in the minor program for Materials Science and Engineering. No Special Problems, Undergraduate Research, or Internship coursework may be used towards the MSE minor*

The MSE minor must comprise at least 15 semester hours, of which at least 12 semester hours are upper-division coursework (numbered 3000 or above).

~~A maximum of 6 semester hours of Special Topics courses may be included in a minor program or the student may complete 3 semester hours of Special Topics and 3 semester hours of either Special Problems or Undergraduate Research. Students may not use 6 semester hours of either Special Problems or Undergraduate Research for a minor.~~

- **A maximum of 3 semester hours of Special Topics courses may be included in the MSE minor.**
- **No Special Problems, Undergraduate Research or Internship coursework may be used towards the MSE minor.**

A maximum of 3 semester hours of transfer credit may be used to satisfy the course requirements for a minor. This includes courses taken at another institution or credit earned through the AP or IB program, assuming the scores meet Georgia Tech minimum standards.

All courses counting toward the minor must be taken on a letter-grade basis and all courses used to satisfy the course requirements for a minor must be completed with a grade of C (2.00) or better.

It is the **major advisor's responsibility** to verify that students are using only courses from the designated block(s) from the student's major field of study that are allowed to satisfy a minor program, that they are not using any Core Area A-E courses (including humanities and social sciences), and that they are not using any courses for more than one minor or certificate. Any free elective course used to satisfy the course requirements of the student's major degree program may also be used to satisfy the course requirements for a minor.

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

## **New Courses – Approved**

ARCH 4515: Collaborative Design	3-0-3
ARCH 4232: On Growth and Form	3-0-3

- ARCH 4310: How Do We Dwell 3-0-3  
 Note: There was a discussion about whether the Transcript title should be changed to: How Do We Dwell. This decision was left up to the instructor.
- ARCH 4630: Architecture Space and Culture 3-0-3  
 Note: The Committee requested a revised syllabus That would explain the difference between the UG and GRAD versions of this course.

**New Minor – Approved**

Minor in Architecture

**Note:** The vote was not unanimous. The vote was 8 to approve, 3 to deny, and 1 to abstain.

Establish a new minor with the degree inscription: Minor in Architecture. The School of Architecture will oversee the program providing advising, instruction, and assessment. Interested students will apply through the School of Architecture

*An architecture minor consists of 12 credits of required course and an additional 3 credit elective.*

**Required courses:**

ARCH 3115 *Modern Architecture and Art Workshop (new course)*

ARCH 2111 *History of Architecture I* **or**  
 ARCH 2112 *History of Architecture I*

ARCH 3231 *Environmental Systems and Design Integration I* **or**  
 ARCH 2211 *Construction Tech I*

ARCH 4515 *Collaborative Design Workshop (new course)*

**Elective courses:**

*Students must earn a grade of “C” or above in each course (no pass/fail options) for a minimum GPA of 2.0 overall within the minor.*

**Note:** The Committee suggested clarification that elective courses could be selected from any Architecture course as approved by an advisor. It was suggested that a list be provided at the start of each year.

**Note:** This was approved with the condition that learning outcomes be submitted prior to it going to the Academic Faculty Senate in October.



### **New Certificate – Tabled**

#### Certificate in Architecture and Society

**Note:** The proposer was asked to resubmit the packet with new NCPs to give the two Theory of Architecture courses new permanent numbers and to clearly distinguish undergraduate and graduate versions of courses. The Committee feels this proposal will be ready for approval with these changes. It was also noted that this new certificate would replace two that are now defunct. It would provide options for both majors and non-majors.

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

### **New Course – Approved**

CS 4476: Introduction to Computer Vision  
(renumbering and renaming of CS 4495)

3-0-3

**Note:** It was suggested that the syllabus be revised to state that, under assignments and exams, there will be 6-8 problem sets required and that the problem sets be listed as appropriate in the weekly assignments.

Adjourned,

Reta Pikowsky  
Registrar