

3. A motion was made to deny request by the School of Mechanical Engineering and the School of Biomedical Engineering for a new cross-listed course. The motion was seconded and approved.

New Courses:

ME 6745: Applied Optics	3-0-3
BMED 6745: Applied Optics	3-0-3

The primary concern stated by Committee members was that this course has not been taught in Special Topics format enough times to ascertain that the content and format are stable and ready for a permanent number. Unless a new course proposal is tied to a new program, a significantly modified program, is being requested to address an accreditation issue, or was taught previously by the professor at another institution and has already been validated, the Committee typically likes to see more than one instance of it in the Special Topics format. The Committee suggested that this course be taught for one or two more times as a Special Topics course and then resubmitted for review.

4. A motion was made to approve a request by the College of Computing for a Degree Modification and for new courses. The motion was seconded and approved.

New Courses:

CS 7545: Theoretical Foundations of Machine Learning
CS 6998: HCI Masters Project

Degree Modification: Masters of Science in Information Security

(This modification is for both on campus and distance learning versions)

The proposed changes include:

- “Concentrations” renamed to “specializations”. Rationale: This reflects similar language used in the MS CS degree program.
Note: The Registrar’s Office and the nomenclature within the student information system is “concentration”. This term should be used in this case as well since the intent is for us to build them in the Concentration Management system in Banner. The MSCS did use the term specialization, but that was the first MS program to ask us to record the “concentrations” for transcripts and we did not correct the terminology during the approval process. In retrospect, we should have done so in order to be sure that the languages reflected on student academic records matches that used in the description of the curriculum. We are leaving the text below originally requested in regards to use of the terms concentrations *versus* specializations. The Registrar’s Office will work with the College of Computing on these terminology issues.
- “Technology” concentration renamed to “Systems” specialization. Rationale: The word “systems” carries more intuitive meaning in CS programs.
- Deletion of courses no longer offered from systems and policy specializations. Rationale: The existing list of courses was set when the degree was originally created in 1998. Many of these courses have expired, and in fact, the policy specialization cannot currently be completed as listed in the catalog due to expired courses.

- Inclusion of existing courses to the systems and policy specializations. Rationale: The list of courses is greatly expanded to hopefully avoid all the substitution requests from students every semester. Increases student flexibility in selecting courses and setting schedules. Improves our flexibility in scheduling courses for distance learning.
- Addition of a new “Users and Usability” specialization. Rationale: Potentially increases the stature of the MS INFS program, and potentially appeals to domestic students that we sometimes have trouble attracting. This specialization is also a candidate for a second distance learning specialization, as all the courses are within the College of Computing, which eases DL scheduling. School of Interactive Computing faculty already offer these courses regularly, so there is no increased instructional staffing workload.
- A shift of CS 6725 (Information Security Strategies and Policies) out of the required core courses and into the Policy specialization. Rationale: Recommendation of the course instructor. The format of the course does not scale to larger enrollments and inhibits our ability to grow the INFS program.
- The addition of a 3-unit elective course. Rationale: Replaces the 3 credits lost by the shift of CS 6725 out of the core requirements. Provides student flexibility, as it allows a bit of mixing of specializations if they so desire.
- A requirement of a B or better in core courses. Rationale: This better aligns expected performance with other graduate degrees, including our MSCS, and prevents MS INFS from appearing to be an easier degree to complete than MSCS.
- Specialization course listings on a program website, rather than in the official language of the degree in the catalog. Rationale: Allows for future revisions to be made to specialization courses without requiring a formal program modification. Note: In order to protect and preserve information related to the official decisions made by the Curriculum Committee, we will no longer allow links in the on-line *Catalog* to an active web site. The *Catalog* is the official statement by Georgia Tech of its curriculum and reflects the historical record that is necessary for internal reasons and to ensure that accrediting agencies have one point of access to this information. All curricular changes are to be reported to the Curriculum Committee. Adding or subtracting courses from an approved list would like be an information item, not requiring a vote, but would have to be acknowledged by the Committee and entered into the Minutes. Curriculum Committee Minutes that are used to update the *Catalog* are the official records for Tech.
- Some basic rewriting of language throughout.

The key differences between the current program and the proposed program include:

- Reduction of core credit hours by 3.
- Addition of a new elective course for 3 credit hours.
- Addition of a new specialization.

Currently Approved vs. Proposed Program Curriculum

The currently approved program includes core courses and selection of a concentration, totaling 32 credit hours. The core is 23 credit hours of fixed courses taken by all MS INFS students. Two concentrations are available: “Technology” and “Policy”. Students either take

9 credit hours of Technology courses or 9 credit hours of Policy courses. Students must have a cumulative GPA of 3.0 to graduate, and no grade below C will count towards graduation.

REVISED DEGREE PROGRAM

Master of Science in Information Security

The Master of Science in Information Security (MS INFS) program is a terminal degree program that provides specialized advanced technical training in computer and information security. The program offers background and insight into general knowledge issues and a specialization in a depth area of information security. The program addresses issues surrounding the impact of information security on our lives, private citizens' concern for privacy, information security risks to business and government, and the impact of laws and public policy. It is a technically rigorous program operated by the School of Computer Science suitable for students able to perform at a graduate level in Computer Sciences.

Course of Study

The Master of Science in Information Security program requires a total of 32 semester hours. Each student is required to take a set of core courses, elective courses from one depth specialization, and a free elective from any specialization. The core is composed of six courses and the specializations are three focused courses tailored to each student's interests. Students who successfully complete the degree will have their specialization listed on their official transcript.

Core Courses (20 Hours)

Take all of the following courses:

1. CS 6035 Introduction to Information Security
2. CS 6238 Secure Computer Systems
3. CS 6260 Applied Cryptography
4. CS 6262 Network Security
5. CS 6265 Information Security Laboratory
6. CS 6266 Information Security Practicum

Specialization Courses (9 hours)

Select one of the following depth areas:

1. Systems
2. Policy
3. Users and Usability

Take three courses from the depth area. Courses in each area are listed on the program web site.

Elective Course (3 hours)

Take one course from any of the specialization areas, or take 3 credits of CS 8903. Use of CS 8903 to satisfy the elective requirement requires prior approval of the MS INFS Program Coordinator to ensure that it is a security-related study.

Academic Performance

The School's master's degree requirements supplement the Institute's master's requirements listed in this catalog. No grade below B in a core course will count towards graduation. No grade below C in a specialization or elective course will count towards graduation. Students must achieve a cumulative grade point average of at least 3.0 to graduate. At most 3 credits of CS 8903 may be applied towards degree requirements.

For more information about the MS INFS program, including the lists of currently available specialization courses, visit <http://www.scs.gatech.edu/>.

Specialization courses:

A: Systems

CS	6210	Advanced Operating Systems
CS	6250	Computer Networks
CS	6255	Network Management
CS	6300	Software Development Process
CS	6310	Software Architecture and Design
CS	6340	Software Analysis & Testing
CS	6365	Introduction to Enterprise Computing
CS	6390	Programming Languages
CS	6400	Database Systems Concepts and Designs
CS	6675	Advanced Internet Computing
CS	7210	Distributed Computing
CS	7230	Software Design, Implementation, & Evaluation
CS	7260	Internetworking Architecture and Protocols
CS	7270	Networked Applications & Services
CS	7292	Reliable, Secure Computer Architectures
CS	8803	CNS Cellular and Mobile Network Security
CS	8803	IMS Mobile Applications and Services with IMS
CS	8803	MAL Mobile Applications and Services
CS	8803	SS Software Security
ECE	6612	Computer Network Security

B: Policy

CS	6150	Computing for Good
CS	6725	Information Security Strategies and Policies
CS	8803	CCI Computing, Communications, and International Development
CS	8803	CNS Cellular and Mobile Network Security
ECON	6150	Cost and Benefit Analysis
MGT	6123	Information Tech Mgt
PUBP	6501	Information Policy & Management
INTA	8803	G The Challenge of Terrorism
CIS	8080	Security and Privacy of Information and Information Systems
CIS	8630	Business Computer Forensics and Incident Response

C: Users and Usability

CS	6455	User Interface Dsgn&Eval
CS	6456	Principles-UI Software
CS	6470	Online Communities
CS	6750	Human-Computer Interact
CS	7460	Collaborative Computing
CS	7470	Mobile & Ubiquitous Computing

Revised Plan of Study for MSINFS

Year 1, Fall Semester: 12 hours

CS 6035: 3 hours
CS 6238 or 6260 or 6262: 3 hours
Specialization course 1 of 3: 3 hours
Elective course 1 of 1: 3 hours

Year 1, Spring Semester: 12 hours

CS 6238 or 6260 or 6262: 3 hours
CS 6238 or 6260 or 6262: 3 hours
Specialization course 2 of 3: 3 hours
Specialization course 3 of 3: 3 hours

Year 2, Fall Semester: 8 hours

CS 6265: 3 hours
CS 6266: 5 hours

Procedural Note:

Similar to the MSCS program, Concentration Management, the ability for students to self-select which concentration (specialization) they wish to pursue shall be disabled during registration periods.

Administrative Matters

1. Academic Program Review discussion was needed to inform the Committee as to the progress of completing outstanding reviews and to plan for the coming year. Susan Paraska provided some information and demonstrated the web site where the progress is tracked. Committee Chair Clarke will contact Dr. Babensee, last year's Chair, for an update on reviews that she has received thus far. Those will be forwarded on to Ms. Paraska so that the web site can be updated. The Committee will have to review the documents and approve them as soon as they are ready for the agenda. The Committee is encouraged to work on the program reviews as they are ready and to not approach this project in batch mode.

It will also be necessary for the Committee to assign the upcoming reviews and keep track of who is responsible for what and to give some sense of the necessary timeline for completion. An update will be provided at the next meeting.

Student Petitions

1. The Committee discussed a petition that was denied at the last meeting. The student wishes to transfer more than the 6 credits that are allowed under policy. After a long discussion, the decision was made to NOT overturn the previous decision. The Committee did ask the Registrar to follow up with the major school to ask specific questions about the courses intended and how they fit into the curriculum. Once this information is gathered, it will be sent via email to the Committee for further review. An email vote will be taken to determine if the appeal is to be approved or denied.

Adjourned,

Reta Pikowsky
Registrar