

**Georgia Institute of Technology**  
**Graduate Curriculum Committee**  
Minutes  
**June 6, 2013**

**Present:** Flowers (ARCH), Pikowsky (REG), Jagoda (AE), Neitzel (ME), Breedveld (ChBE), Storici (BIOL), Dickson (CHEM), Ferri (ECE), Jayaraman (MSE), Singhal (MGT), Sharp (Grad Studies)

**Visitors:** Laros (REG), Merkousko (REG), Westbrook (PSYC), White (CoC), Parker (BC), Jacobs (CoE), Haymaker (BC), Pishdad (BC), Castro (BC), Ume (ME), Webster (CEE), Berthelot (VPPII), Couvillion (Grad Adms), Ramirez (Grad Adms)

**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.

**Academic Matters**

1. Assistant Dean David White, College of Computing, attended the meeting to update the Committee on implementation of the online MS in Computer Science. The Committee will schedule a special meeting shortly to discuss how similar proposals will be handled in the future and to raise outstanding and significant questions it has about this particular program, especially in regard to faculty oversight and issues relating to how assessment of performance in the courses will be handled.
2. A motion was made to approve a request from the School of Psychology for a new course. The motion was seconded and approved.

**New Course: Approved**

PSYC 6000: Responsible Conduct of Research 1-0-1

**Note:** This class will be listed at Catalog level as pass/fail only grading mode.

3. 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**

BC 6285: Management of Pre-Design Phase as Owner	3-0-3
BC 6385: Management of Design Phase as Owner	3-0-3
BC 6585: Management of Construction as Owner	3-0-3
BC 6685: Leadership & Communication in Design & Construction	3-0-3

**Note:** BC 6285, 6385, and 6585 will have a prerequisite with concurrency of BC 6185.

- A motion was made to approve a request from the School of Biology and the School of Civil and Environmental Engineering for new cross-listed course. The motion was seconded and approved.

**New Courses: Approved**

CEE 6720: Environmental Microbial Genomics	3-0-3
BIOL 6720: Environmental Microbial Genomics	3-0-3

**Note:** This class will be listed at the catalog level with all grading modes allowed.

- A motion was made to approve a request from the Scheller College of Business for new courses and for course deactivations. The motion was seconded and approved to table one course and approve two others and approve the deactivations.

**New Courses: Approved**

MGT 6082: Fundamentals of Real Estate Development	3-0-3
MGT 6083: Real Estate Practicum	3-0-3

**New Courses: Tabled**

MGT 6663: Technology Strategy	3-0-3
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**Note:** This course was tabled until a decision was made about whether MGT 3663 should be listed as equivalent. MGT has verified that the equivalency should not be on the course and this item will be put back on the next agenda.

**Course Deactivations: Approved**

Course	Credit	Last Offered	Background
MGT 6050 Mgt Information Systems	3.0	Fall 2002	Replaced by MGT 6123
MGT 6085 Entrepreneurial Finance	3.0	Fall 2006	Replaced by MGT 6086
MGT 6109 Mgt Aspects-Adv Mfg Tech	3.0	Winter 1999	
MGT 6120 Financial Accounting	1.5	Fall 2010	Replaced by MGT 6000
MGT 6121 Managerial Accounting	1.5	Fall 2010	Replaced by MGT 6000
MGT 6122 Analytical Tools for Mgt	4.0	Fall 2006	Replaced by MGT 6600
MGT 6131 Macroecon Environ of Bus	1.5	Summer 2011	Replaced by MGT 6134
MGT 6132 Financial Rpt&Analy Tech	1.5	Never	
MGT 6133 Business Law and Ethics	3.0	Fall 2010	
MGT 6184 Export-Import & Trade	3.0	Spring 1999	
MGT 6195 Strategic Management	3.0	Fall 2004	Replaced by MGT 6125
MGT 6318 Marketing Technology	3.0	Spring 2004	
MGT 6340 EC Marketing	3.0	Fall 2002	
MGT 6358 Quality Control	3.0	Fall 2002	
MGT 6362 Supply Chain Mod & Rev Mgt	3.0	Spring 2009	
Replaced by MGT 6400 & MGT 6401			

MGT	6775	MOT Seminar	1.0	Fall 1998	
MGT	6777	Analysis-Emerging Tech	3.0	Winter 1999	
MGT	6788	Legal Issues Biomed Engr	3.0	Summer 2002	
MGT	6811	Integrative Mgt Analysis	3.0	Fall 2004	Replaced by MGT 6126
MGT	6814	Law, Mgt and Economics	3.0	Summer 2002	
MGT	6820	Unstructured Mgr Problem	3.0	Never	
MGT	7351	Operation Strategy II	3.0	Fall 2006	
MGT	8821	Special Topics	1.5	Never	
MGT	8850	Research Topics-Finance	3.0	Never	
MGT	8855	Research Topic-Oper Mgt	3.0	Never	
MGT	8863	Special Topics-Finance	3.0	Never	
MGT	8883	Special Topics-Oper Mgt	3.0	Never	

6. A motion was made to approve a request from the Schools of Interactive Computing; Industrial Design; Psychology; and Literature, Media, and Communication for new courses and a degree modification. The motion was seconded and approved.

**Degree Modification: Approved**

Master of Science in Human-Computer Interaction

This is to reflect the addition of ID to the MSHCI program as previously approved.

Summary:

- Change core course requirements from 11 to 9 by deleting PSYC 6031 Engineering Psychology Analysis Techniques (2 credit hours)
- Insert recently-approved Industrial Design Changes (so there is a single document reflecting all changes)
- Deleted old ID seminar courses from electives and specialization course lists and replaced them with new ID course numbers
- Deleted Architecture from electives; all courses are now ID
- Changed wording on DM (LMC) Specialization course requirements to state that LCC 6550 project studio can be taken up to three times.
- Increased project hours on interactive computing and psychology tracks to 6 credits, decreased required credits elsewhere to maintain 36 credits

Specializations	Fixed Core Credit Hours	Specialization Credit Hours	Elective Credit Hours	Project Credit Hours
<i>Interactive Computing</i>	<del>11</del> 9	9	12	<del>4</del> 6
<b>Digital Media</b>	<del>11</del> 9	<del>10</del> 12	9	6
<b>Industrial Design</b>	<del>11</del> 9	12	<del>7</del> 9	6

Psychology	11	9	11	10	6
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### **Fixed Core (11-9 Credit hours)**

CS/PSYC 6750, Human-Computer Interaction (must be taken during the first semester)

PSYC 6023 Psychology Research Methods for HCI (4 credit hours with lab)

~~PSYC 6031 Engineering Psychology Analysis Techniques (2 credit hours)~~

CS/ID/LCC/PSYC6753 Human-Computer Interaction – Professional Preparation and Practice (1 hour credit Fall of first year and 1 credit hour Fall of second year)

### **Specializations**

#### **INTERACTIVE COMPUTING SPECIALIZATION (9 credit hours)**

Software (3 credit hours):

CS 6300, Software Development Process

CS 6452, Prototyping Interactive Systems

CS 6456, Principles of User Interface Software

*CS 6457, Video Game Design*

CS 7470, Ubiquitous Computing

*CS 7497, Virtual Environments*

CS 8803-MAS, Special Topics: Mobile Apps and Services

Design, Evaluation, and Cognitive Modeling (6 credit hours):

CS 6010, Principles of Design

CS 6150, Computing for Good

CS 6451, Introduction to Human-Centered Computing

CS 6455, User Interface Design and Evaluation

*CS 6457, Video Game Design*

CS 6460, Educational Technology: Conceptual Foundations

CS 6465 Computational Journalism

CS 6470, Design of Online Communities

~~CS 6470, CS 6770, Mixed Reality Experience Design~~

*CS 6753, Design of Environments*

CS 6795, Introduction to Cognitive Science

CS 7450, Information Visualization

CS 7460, Collaborative Computing

*CS 7465, Educational Technology Design and Evaluation*

*CS 7633, Human-Robot Interaction*

CS/PSYC 7790, Cognitive Modeling

CS 8803-DG, Special Topics: Design Games

*CS 8803-GAI Special Topics: Game AI*

CS 8803-HEF, Special Topics: Healthcare Informatics

CS 8803-HAR, Special Topics: Handheld Augmented Reality Game Studio

~~CS 8803-HRI, Special Topics Human-Robot Interaction~~

CS 8803-IBI, Special Topics: Introduction to Bio Informatics

~~CS 8803-VG, Special Topics: Video Game Design~~

CS 8803-SOC, Social Computing

CS 8903, Special Problems (variable hours)

A maximum of 3 hours of CS 8903 may count toward the *Interactive* Computing specialization. The master's degree requirements for students in the College of Computing supplement those of the Institute. Students must achieve a grade point average of at least 3.0 to graduate, and no course grade below C will count toward graduation.

### **DIGITAL MEDIA (DM) SPECIALIZATION (~~10~~ 12 credit hours)**

#### Required

One of the following *four courses*, preferably in the first year of study:

LCC 6310, The Computer as an Expressive Medium

LCC 6313, Principles of Interactive Design

LCC 6399, Discovery and Invention in Digital Media

LCC 8903, Special Problems in HCI

and

LCC 6650, Project Studio (enrollment by permission of instructor) (*must be taken at least once, may be taken up to three times for degree credit*)

#### Optional

Students may fulfill the rest of the required 12 credits ~~hours~~ with any other LCC 6000 or 8000 level course.

A maximum of 3 hours of LCC 8903 *Special Problems in HCI* may count toward the Digital Media specialization.

### **INDUSTRIAL DESIGN SPECIALIZATION (12 credit hours)**

#### Required (9 credit hours)

ID 6100, Intro to ID Grad Studies

ID 6101, Human-Centered Design

ID 6401, Visualizing Interaction

#### One of the following courses (3 credit hours)

ID 6214 Strategic Design Language

ID 6215 Service Design

ID 6271 Healthcare Design of the Future

ID 6509 Computing, Creativity and Design Cognition

ID 6510 Design for Interaction

ID 6515 Interface Prototyping

ID 6763 Design of Interactive Environments

ID 6800 Universal Design

ID 6820 Web Design Accessibility

### **PSYCHOLOGY SPECIALIZATION (11 credit hours)**

#### Required (8 credit hours):

PSYC 6022, Psychological Statistics for HCI (4 credit hours including lab, Fall or Spring)

PSYC 6032, Engineering Psychology Stressors (1 credit hour minicourse, Fall)

PSYC 6033, Engineering Psychology Cognitive Ergonomics (1 credit hour minicourse, Spring)

PSYC 6034, Engineering Psychology Displays (1 credit hour minicourse, Spring)

PSYC 6035, Engineering Psychology Controls & Workspaces (1 credit hour minicourse, Spring)

#### One of the following courses (3 credit hours)

PSYC 6011, Cognitive Psychology (3 credit hours)

PSYC 6012, Social Psychology (3 credit hours)

PSYC 6014, Sensation and Perception (3 credit hours)  
PSYC 6041, Topics in Cognitive Aging (3 credit hours)

### **Elective Courses**

- 12 credit hours for *Interactive Computing*
- 9 credit hours for Digital Media
- 7 9 credit hours for Industrial Design
- 10 credit hours for Psychology

All Specialization courses may also be taken as part of the Elective courses *in each of the four areas of specialization*. However, for the *interactive computing* and *psychology* tracks, at least 9 credit hours of the Elective must be taken outside your specialization. For the *Digital Media and Industrial Design* tracks, at least 6 credit hours must be taken outside your specialization. A maximum of 3 credit hours of Special Problems in HCI (CS/ID/LCC/PSYC 8903) may count toward the Elective Courses.

### **Architecture**

~~COA 8823-ED Special Topics in Architecture and Behavior: Health Environment of the Future~~

~~COA 8823 Special Topics: Patient Room of the Future~~

~~COA 8843-ED Special Topics in Design Computing: Design Games~~

### **Computer Science**

#### **Software**

CS 6300, Software Development Process

CS 6452, Prototyping Interactive Systems

CS 6456, Principles of User Interface Software

CS 7470, Ubiquitous Computing

CS 8803-MAS, Special Topics: Mobile Apps and Services

CS 8803, Special Topics: Adaptive Personalized Information Environments  
Interaction (variable hours)

#### **Design, Evaluation, and Cognitive Modeling**

CS 6010, Principles of Design

CS 6150 - Computing for Good

CS 6451, Introduction to Human-Centered Computing

CS 6455, User Interface Design and Evaluation

CS 6460, Educational Technology: Conceptual Foundations

CS 6465 Computational Journalism

CS 6470, Design of Online Communities

CS 6795, Introduction to Cognitive Science

CS 7450, Information Visualization

CS 7460, Collaborative Computing

CS 7610, Modeling and Design

CS/PSYC 7790, Cognitive Modeling

CS 8803-DG Special Topics: Design Games

CS 8803-HEF Special Topics: Healthcare Informatics

CS 8803-HAR Special Topics: Handheld Augmented Reality Game Studio

CS 8803-HRI Special Topics Human-Robot Interaction

CS 8803-IBI Special Topics: Introduction to Bio Informatics

CS 8803-VG Special Topics: Video Game Design

CS 8803-SOC Social Computing  
CS 8903 Special Problems in Human-Computer Interaction

### **International Affairs**

INTA 8803, Special Topics: Computers, Communications, and International Development

### **Industrial Design**

ID 6100 Intro to Grad Studies

ID 6101 Human Centered Design

ID 6200 Graduate Studio II

*ID 6820 Web Design Usability and Accessibility*

*ID 6420 Advanced Sketching*

*ID 6510 Design for Interaction*

*ID 6214 Strategic Design Language*

*ID 6215 Service Design*

*ID 6401 Visualizing Interaction*

*ID 6515 Interface Prototyping*

*ID 6271 Healthcare Design of the Future*

*ID 6763 Design of Interactive Environments*

*ID 8903 Special Problems in Human-Computer Interaction*

~~ID 8900 Healthcare Environment of the Future~~

~~ID 8900 Web Design Accessibility~~

~~ID 8900 Advanced Sketching~~

~~ID 8900 Interactive Product Design for Home Health & Well Being~~

~~ID 8900 Service Design and Organizational Activation~~

~~ID 8900 Universal Design: Exploration & Investigation of Real World Applications~~

### **Industrial and Systems Engineering**

ISYE 6205 / AE 8803, Cognitive Engineering

ISYE 6215, Models in Human-Machine Systems

ISYE 6231, Design of Human-Integrated Systems

ISYE 6413, Design and Analysis of Experiments

ISYE 6414, Regression Analysis

ISYE 6739, Basic Statistical Methods

ISYE 6772, Managing the Resources of Technological Firms

ISYE 7210, Real-Time Interactive Simulations

### **Literature, Media and Communication (Digital Media)**

LCC 6215, Issues in Media Studies

LCC 6310, The Computer as an Expressive Medium

LCC 6311, Visual Culture and Design

LCC 6312, Design Technology and Representation

LCC 6313, Principles of Interactive Design

LCC 6314, Design of Networked Media

LCC 6315, Project Production

LCC 6316, Historical Approaches to Digital Media

LCC 6317, Interactive Fiction

LCC 6318, Experimental Media

LCC 6319, Intellectual Property Policy and Law

LCC 6325, Game Design and Analysis

LCC 6399, Discovery and Invention in Digital Media  
LCC 6650, Project Studio  
LCC 8000, Proseminar in Media Theory  
LCC 8001, Pro-Seminar in Digital Media Studies  
LCC 8903, Special Problems in Human-Computer Interaction

### **Management of Technology (MOT)**

MGT 6056, Electronic Commerce  
MGT 6326, Collaborative Product Development  
MGT 6772, (K, TSA) Managing Resources of the Technological Firm  
MGT 8803, Software Project Management

### **Music**

MUSI 6001, Music Perception and Cognition  
MUSI 6003, Music Technology History and Repertoire  
MUSI 6104, Integrating Music in Multimedia  
MUSI 6301, Music Interface Design  
MUSI 6303, Network Music  
MUSI 7100, Music Technology Research Lab

### **Psychology**

PSYC 6011, Cognitive Psychology (3 credit hours)  
PSYC 6012, Social Psychology (3 credit hours)  
PSYC 6014, Sensation and Perception (3 credit hours)  
PSYC 6022, Psychological Statistics for HCI (4 credit hours including lab, Fall or Spring)  
PSYC 6032, Engineering Psychology Stressors (1 credit hour minicourse, Fall)  
PSYC 6033, Engineering Psychology Cognitive Ergonomics (1 credit hour minicourse, Spring)  
PSYC 6034, Engineering Psychology Displays (1 credit hour minicourse, Spring)  
PSYC 6035, Engineering Psychology Controls & Workspaces (1 credit hour minicourse, Spring)  
PSYC 6041, Topics in Cognitive Aging (3 credit hours)  
PSYC 7104, Psychomotor and Cognitive Skills  
PSYC 8040, Seminar in Engineering Psychology: Assistive Technologies  
~~PSYC 8040, Seminar in Engineering Psychology: The Psychology of HCI~~  
PSYC 8903, Special Problems in Human-Computer Interaction

### **Public Policy**

PUBP 6111, Special Topics: The Internet and Public Policy  
PUBP 6401, Science, Technology, and Public Policy

### **Non-credit seminars**

Various seminars can be used as one way to fill out your schedule if you are required to carry a full course load (12 credits), but they cannot be used as credit toward your degree. Some of the available seminars include:

CS 8001-AHS, Aware Home Seminar  
CS 8001-ELC, Electronic Learning Communities Seminar  
CS 8001-GVU, GVU Brown Bag  
~~CS 8001-INF, Information Security Seminar~~  
~~CS 8001-RIM, Robotics and Intelligent Machines Seminar~~  
~~CS 8001-SYS, Center for Experimental Research in Computing Systems (CERCS) Seminar~~



***Project (4-credit hours; 6 credit hours for students in the DM specialization)***

Each student completes this requirement, under the supervision of a faculty member, normally during the last two semesters of their program. Students must submit a project proposal and final report and present their work to the ~~three~~ *three* school faculty coordinators and other MS-HCI students late during the semester of graduation (as described in the MS-HCI Project Requirements document).

CS 6998, MS-HCI Project (repeatable; variable semester hours), or  
ID 6998, MS-HCI Project (repeatable; variable semester hours), or  
LCC 6998, MS-HCI Project (repeatable; variable semester hours), or  
PSYC 6998, MS-HCI Project (repeatable; variable semester hours)  
~~ID 6400 Master's Project (repeatable, variable credit hours)~~

***Seminar (2 credit hours as part of Fixed Core)***

The HCI MS professional preparation and practice course aims to prepare students for success in their studies and careers. It includes presentations by leading HCI practitioners concerning career choices and preparation and new developments, visits to corporate HCI labs in the Atlanta area, research presentations, skills tutorials, discussion of potential MS projects and “how to succeed” in graduate school and as a professional. Students take this seminar in the fall semester of their first and second years of study.

Quite a few students work as graduate research assistants or as corporate interns as part of their master’s project; all students are expected to do a summer internship between their second and third semesters.

CS 6753, Human-Computer Interaction - Professional Preparation and Practice  
(may be repeated for credit once), or  
ID 6753, Human-Computer Interaction - Professional Preparation and Practice  
(may be repeated for credit once), or  
LCC 6753, Human-Computer Interaction - Professional Preparation and Practice  
(may be repeated for credit once), or  
PSYC 6753, Human-Computer Interaction - Professional Preparation and Practice  
(may be repeated for credit once)

**New Courses: Approved**

ID 6753: HCI Professional Preparation & Practice Crosslisted with CS 6753/LCC 6753/PSYC 6753	1-0-1
ID 6998: HCI Master's Project Crosslisted with CS 6998/LCC 6998/PSYC6998	0 - 3 to 27 - 1 to 9
ID 8903: Special Problems in HCI	0 - 3 to 12 - 1 to 3

7. A motion was made to approve a request from the School of Mechanical Engineering for a new course, two new joint degrees, and one dual degree. The motion was seconded and approved

**New Course: Approved**

ME 6408: Advanced Mechatronics

1-6-3

Note: This course was previously tabled until clarification was made concerning a part of ME 6405 - Introduction to Mechatronics. The concern was how much this changes what ME 6405 actually is and does that course need to be renamed and renumbered. Mechanical Engineering prefers to keep ME 6405 and feels that moving the project portion of ME 6405 to ME 6408 does not change the course enough to warrant a having to create a new number. The information on ME's web site is inaccurate; they will update the syllabus and make sure it is clear about what ME 6405 covers in its current form.

**External Joint Degree: Approved**

Doctor of Philosophy with a major in Mechanical Engineering  
with Seoul National University

The proposed joint-Ph.D. degree is envisioned to be a nominally four-year program with time spent by students at each of the partner institutions. Students will apply to the program at the end of their first year of graduate study at their home institution; students with M.S. degrees may apply directly to the program. Admission decisions will be made by a joint committee with representation from both universities.

Students in the Woodruff School doctoral program are required to take 42 credit hours of course work beyond the bachelor's degree. Students who enter the program with a master's degree are given credit for up to 30 credit hours of course work, including up to nine hours of course credit for an M.S. thesis. The course work required of students in the joint degree program will be equivalent to that presently required of Woodruff School students. Courses taken by American students while in Korea will be taught in English, so no mastery of the Korean language is required of applicants to the program, although some familiarity prior to American students' departure for Seoul would be useful to facilitate daily life. Korean students in the program will be expected to attain the same standards on the verbal portion of the Graduate Record Examination (GRE) and on the Test of English as a Foreign Language (TOEFL) as present international applicants to the Woodruff School's graduate programs.

Associated with the doctoral program is a series of "qualifying examinations," normally taken by Woodruff School students entering the program with an undergraduate degree by the end of their second year in the graduate program, or for those entering with an M.S., by the end of the first year. It is proposed that students pass the qualifying examinations given by their home institutions, given that the bulk of their studies to that point will have taken place there. Following passage of these examinations, students will transition to spending the following year continuing with their course work and research at the host institution under the supervision of their co-advisor. Upon their

return to the home institution at the end of year three (or possibly year two for students entering with the M.S.), students will prepare and present a dissertation proposal to the joint committee outlining the research to be done that will culminate in a written dissertation. Upon completion of the dissertation and a public defense of it before the joint committee, the student will be awarded the joint Doctor of Philosophy degree.

### **External Joint Degree: Approved**

Master of Science in Mechanical Engineering  
with the University of Stuttgart

The proposed joint-MS degree is a two-year program with equal time spent by students at each of the partner institutions. Atlanta students will begin their course work and research at Georgia Tech and move at the end of the first year to Stuttgart, where they will complete their course work, finalize their theses and perform an internship with a German firm. Although the courses to be taken in Stuttgart are delivered in English, students entering the program will be expected to demonstrate proficiency in German at the equivalent of two years of undergraduate study before moving to Germany.

German students will likewise begin in Stuttgart, moving to Atlanta at the start of the second year to complete their courses and finalize their theses. Research that forms the basis of the M.S. thesis is usually not begun at the University of Stuttgart until six months prior to the completion of the degree. The research that German students will do upon first arriving at Georgia Tech will be accepted by the University of Stuttgart as satisfying the internship requirement of the degree. Likewise, research done by Georgia Tech students during their first year in the program in Atlanta will be accepted by the University of Stuttgart as satisfying some of their core requirements.

Admission to the joint-MS program will be determined by an admissions committee with membership from both institutions. This is to insure that students from both institutions will be paired with faculty advisors at their host institutions who will supervise the second portion of their research projects.

Appendix C – Study Plan  
Georgia Tech/Universität Stuttgart Joint M.S. with a major in ME

Year 1		Year 1		Year 2		Year 2	
Fall Semester		Spring Semester		Fall Semester		Spring Semester	
Georgia Tech Students at Georgia Tech	Stuttgart Students at Stuttgart	Georgia Tech Students at Georgia Tech	Stuttgart Students at Stuttgart	Georgia Tech Students at Stuttgart	Stuttgart Students at Georgia Tech	Georgia Tech Students at Stuttgart	Stuttgart Students at Georgia Tech
Major Course (3 sem hrs)	Compulsory Module Group 1 (E) Mandatory Course (3 sem hrs)	Minor Course (3 sem hrs)	Compulsory Module Group 2 (E) Mandatory Course (1.5 sem hrs)	Core/Supplementary Subject 1 Specialization Course (3 sem hrs)	Major/Minor Course (3 sem hrs)	Thesis Preparation** (15 sem hrs)	Thesis Preparation** (15 sem hrs)
Major Course (3 sem hrs)	Compulsory Module Group 2 (E) Mandatory Course (1.5 sem hrs)	Minor Course (3 sem hrs)	Compulsory Module Group 4 (E) Mandatory Course (3 sem hrs)	Core/Supplementary Subject 2 Specialization Course (3 sem hrs)	Major/Minor Course (3 sem hrs)		
Major Course (3 sem hrs)	Compulsory Module Group 3 (E) Mandatory Course (3 sem hrs)	Mathematics Course (3 sem hrs)	Practical Course (1.5 sem hrs)	Research (3 sem hrs)	Major/Minor Course (3 sem hrs)		
German Language Course (3 sem hrs)	Core/Supplementary Subject 1 Specialization Course (4.5 sem hrs)	German Language Course (3 sem hrs)	Practical Course (1.5 sem hrs)	Practical Internship (6 sem hrs)	Research* (12 sem hrs)		
Research (9 sem hrs)	Core/Supplementary Subject 2 Specialization Course (3 sem hrs)	Research (9 sem hrs)	Core/Supplementary Subject 2 Specialization Course (1.5 sem hrs)				
			Seminar Project (6 sem hrs)				

\* Research done by Stuttgart students while in the first semester at Georgia Tech will be counted by the University of Stuttgart as the equivalent of the practical internship requirement for German MS students.

\*\* Thesis preparation (research and writing) is restricted in the German system to the final semester of study.

**External Dual Degree: Approved**  
 Master of Science in Mechanical Engineering  
 with Sapienza – University of Rome (Italy)

DEGREE NAME: Double Master of Science in ME, Sapienza, Università di Roma						
DEGREE REQUIREMENTS for: August 2013						
<b>Review Notes:</b>						
1. Show Course Type. EX: Prerequisite (P), Core (C), Elective (E), Minor (M)						
2. Show Location the course will be taken/completed. EX: GT-ATL, GT-SAV, GT-L, name of other institution						
3. Show the Modality, i.e., classroom (C), video (V), distance learning (DL), etc.						
4. Add hyperlinks to Web sites to display course information--core, elective choices, etc.						
FIRST YEAR – SPRING	COURSE TYPE	COURSE HRS	LOCATION	MODALITY	TOTAL SEM HRS	
Courses taken at Sapienza for the Master degree	C		Sapienza	C	6	
transfer of 6 SCH Senior level classes toward the MSME						
					6	
FIRST YEAR – FALL	COURSE TYPE	COURSE HRS	LOCATION	MODALITY	TOTAL SEM HRS	
ME 6449 – Acoustic Transducers & signal Analysis	C	3	GT-L	C	3	
ME 6201 – Continuum Mechanics	C	3	GT-L	C	3	
ME 6204 – Micromechanics of Materials	C	3	GT-L	C	3	
ME 6203 – Inelastic Deformation of Solids	C	3	GT-L	C	3	
ECE 8002 – Graduate Seminar	E	1	GT-L	C	1	
					13	
SECOND YEAR – SPRING	COURSE TYPE	COURSE HRS	LOCATION	MODALITY	TOTAL SEM HRS	
ME 6768 – Polymer Structure, Physical Properties and Characterization	M	3	GT-ATL	C	3	
ME 7772 – Fracture Mechanics	M	3	GT-ATL	C	3	
ME 7792 – Advanced Mechanics of Composites	C	3	GT-ATL	C	3	
Math course requirement	C	3	GT-ATL	C	3	
					12	
				Subtotal	31	
Summer & Fall Semester	COURSE TYPE	COURSE HRS	LOCATION	MODALITY	TOTAL SEM HRS	
Research thesis at Sapienza as requirement of its Master degree	C		Sapienza	C		
					Total Summer Hours: 0	
International Work, Internship, or Research Experience						
International Work, Internship, or Research Experience						
					Total of Work Abroad, Internship, Research--credited to degree program:	
					Total of all Degree Program Hours 31	

The GT MS-ME degree is a 30-hour program:

REQUIREMENT	HOURS	COMMENTS
Coherent Major Area	21	All course work in the Coherent Major and Minor Areas must be from the College of Computing, Science, and/or Engineering. The minor will not appear on transcripts or degree documentation.
Coherent Minor Area	6	
Mathematics	3	
Total hours required:	30	

Students enrolled in this dual-degree program must fulfill the requirements that have been approved by the governing faculty bodies of Georgia Tech and as stated in the GT General Catalog as well as the School of Mechanical Engineering (ME) information in order to receive academic credit for coursework completed at GT Atlanta and GT Lorraine.

The Sapienza – University of Rome standards apply with regard to the award of academic credit toward the award of the Laurea Magistrale or Master degree. The faculty curriculum coordinators of the ME Graduate Office review and verify coursework and Sapienza – University of Rome student transcripts when determining transfer of credit toward the GT MS-ME degree.

The curriculum study schedule for Sapienza – University of Rome students requires 20 months to complete as follows:

**Spring semester** Year N: Sapienza – University of Rome students are preselected and will apply to the program. They will also attend to courses and pick 2 to be transferred as ME Senior undergraduate courses. The courses considered are:

- Machine
- Mechanical & thermal Measurements
- Tecnologie Speciali
- 

**Fall Semester** Year N: Sapienza – University of Rome students admitted to the GT program attend courses at GT Lorraine (*Complete 12 GT MS-ME hours*). (*Six semester credit hours completed over the previous Spring semester at Sapienza will be considered for transfer of credit toward GT MS-ME degree.*).

The students pay the reduced non-resident tuition and the GT Lorraine fees.

**Spring Semester** Year N+1: Sapienza – University of Rome students study at the GT Atlanta campus as full-time students taking courses for the GT MS-ME program. (*Complete 12 GT MS-ME hours.*) They graduate with the MSME from the Georgia Institute of Technology. The students pay the non-resident tuition and fees.

**Summer – Fall** Year N+1: Sapienza – University of Rome students complete the research thesis required for award of the Laurea Magistrale.

### **Student Petitions**

Actions on student petitions were approved in a follow-up e-mail vote after the meeting.

1. A motion was made via email to approve Subcommittee recommendations on petitions in the following areas. The motion was seconded and approved.

3- Full graduate standing

1- Readmit after 1<sup>st</sup> drop for the Summer 2013 term

1- Return for the Summer 2013 term after withdrawing Spring 2013

1- Count Pass-Fail courses and CETL4001 toward degree

1- Register late for Summer 2013 term

1- Count six hours of pass-fail course toward degree

1- Use six hours of CHEM 9000 as CHEM 7000 for Master's Degree

1- Waiver of the 6-year rule

1- Award degree without GPA (student completed on research hours at Tech)

4- Selective withdrawal

Adjourned,

Reta Pikowsky  
Registrar