

**Georgia Institute of Technology  
Graduate Curriculum Committee**

**Minutes  
February 7, 2013**

**Present:** Jagoda (AE), Breedveld (ChBE, Storici (BIOL), Mazalek (LCC), Ladshaw (Student Rep), Foley (IC), Boldyreva (CoC), Ferri (ECE), Jayaraman (MSE), Singhal (CoB), Van Ittersum (CoB)

**Visitors:** Laros (REG), Merkousko (REG), Sharp (GEFA), Riley (ECE), Mark (GTPE), Milam (MSE), Morehouse (GTMI), Berthelot (VPPII), Zhou (ECE), Jacobs (CoE), Mitra (CoB), Marsolan (ChBE)

**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. A presentation was made by Dr. Leo Mark, Associate Dean, Academic Programs and Student Affairs concerning new Professional Master degrees. The proposals for the new degrees will be submitted to the Committee in the future. This presentation was intended to generate discussion and solicit input from the Committee on the general concept.

Georgia Tech currently offers one Professional Master's program, PMASE, with additional ones being evaluated for future requests such as:

- Sustainable Electrical Energy
- Software Engineering/Embedded Software
- Manufacturing Leadership
- Robotics
- Radar Technology
- Big Data

A Professional Master's is a terminal degree, with a target student population, and with faculty governance. The faculty owns the content and has quality oversight:

- Approve program contents
- Approve delivery format
- Have the option to teach
- Approve faculty hiring
- Make final admissions decisions
- Continued oversight of operation

Discussion of the program operation included:

- Admission criteria
- Instruction
- Course maintenance
- Enrollment for credit/Registrar functions
- Accounting/finance
- Licensing review/accounting
- IT support needed
- Faculty support
- Export control for class enrollments
- Quality assurance
- Reporting (USG, SACS, etc.) on semester/annual basis
- Student support (petitions, complaints, student services – degree is more than a collection of courses)
- Alumni communications/activities
- Public relations/communication/marketing
- Management activities of courses and partner

2. A motion was made to approve a request from the School Materials Science and Engineering and the School of Biomedical Engineering for a new cross-listed course. The motion was seconded and approved.

**New Courses – Approved:**

BMED 6730: Materials Science of Cellular Components 3-0-3

MSE 6730: Materials Science of Cellular Components 3-0-3

The course was formerly taught as MSE 6407 - Biological Properties. This course will be brought to the GCC to be deactivated at a later date. The new courses are created to update the title related to the course material and to establish a cross-list number for the course.

3. A motion was made to approve a request from the School of Electrical and Computer Engineering for a change of location for a degree program from Shanghai, China to Shenzhen, China. The motion was seconded and approved.

**Degree Modification for change of location – Approved:**

Master of Science in Electrical and Computer Engineering

We propose to offer the existing MSECE program, as is, in Shenzhen, China. The proposed program curriculum will be identical to the existing MSECE curriculum at GT-Atlanta. The proposed GT-Shenzhen MSECE program is not a new degree program, and is not a dual degree program as the current Shanghai program is. Admission requirements, degree requirements and methods of instruction are the same as for GT-Atlanta. Courses will be

taught in English by GT-Atlanta faculty on rotational assignment to Shenzhen. Some video courses (<50% of the total course offerings in Shenzhen) will be used to expand the course options for the students.

GT courses will be taught in Shenzhen in the spring, summer, and fall terms. Each term consists of 11 weeks of instruction plus the final exams period. The start of the Shenzhen term synchronizes with that of the Atlanta campus. Each 3-credit hour has 2,250 contact minutes, the same as at GT-Atlanta. Shenzhen students will register for courses and complete course evaluations online the same way they do in Atlanta.

After completing at least 18 credit hours of GT coursework in Shenzhen, and if there is space available on the GT-Atlanta campus, a Shenzhen student can apply to switch campus to GT-Atlanta to complete the last 12 credit hours of the GT MSECE degree requirements.

The program intends to attract students who have Bachelor degrees from related disciplines from all top universities in China, from the USA, as well as from other countries.

The proposed program curriculum will be identical to the existing MSECE curriculum at GT-Atlanta. The proposed GT-Shenzhen MSECE program is not a new degree program, and is not a dual degree program.

4. A motion was made to approve a request from the College of Business for degree modifications and new courses. The motion was seconded and approved.

#### Rationale

We are proposing changes to the MBA in Global Business (MBAGB) and MBA in Management of Technology (MBAMT) curricula to (a) integrate the two programs so that they share a common MBA core, (b) reflect the strengths of the Scheller College of Business and Georgia Tech in the specialization courses within the two programs, and (c) provide more hands-on experiential learning opportunities for students through expanded capstone projects.

Please also note the following.

- There are no changes to the total number of credit hours in the two programs.
- There are no changes to the names of the degrees granted.
- There are no substantive changes in program content.

The curricula changes are mainly through modified credits for existing courses to accommodate a common core.

#### **Degree Modifications - Approved:**

Master of Business Administration in Management of Technology  
Master of Business Administration - Global Business

## SUMMARY OF CURRICULUM CHANGES

The following tables describe the current curricula in the two programs.

- The current curriculum for the MBA – MOT program is shown in Table I.
- The current curriculum for the MBA – GB program is shown in Table II.

The following three tables describe the revised curricula.

- The revised common core curriculum is shown in Table III. The core curriculum will be the same across both programs (MBA – MOT and MBA – GB).
- The revised specialization curricula for MBA - MOT and MBA – GB programs are shown in Tables IV and V. A few courses in the specialization curricula are the same in both programs.

For easy reference, the following tables show the complete new curriculum of each program (MBA-GB and MBA-MOT)

- The complete curriculum for the MBA – MOT program is shown in Table VI.
- The complete curriculum for the MBA – GB program is shown in Table VII.

### *A. Adjustments to Create a Common MBA Core*

The current MBA core curricula in the two programs are shown in Tables I and II. While there are a few differences in the title of the classes, the broad set of core topics are very similar, except for two differences.

- There is no course on *Business Regulations* in the MBA - MOT curriculum, while the MBA - GB curriculum (which has been more recently revised) has a course on *Business Regulations* (IMBA 6160).
- While both programs are 50 credits, the MBA – GB curriculum has 29 credits in core MBA courses with 21 credits in specialization courses, while the MBA - MOT curriculum has 22 credits in core MBA courses and 28 credits in specialization courses.

The proposed MBA core curricula for both programs (see Table III) has 28 credits in the MBA core implemented through the following changes:

- The *Business Regulations* course is retained as part of the common MBA core.
- All core MBA classes are retained as 2 credits (similar to the current MBA – MOT program), with the following exceptions:
  - The core MBA course in Finance (*IMBA6071 Financial Management*) has 3 credits.
  - The core MBA course in Accounting (*IMBA 6050 Financial and Managerial Accounting*) has 3 credits

- The core MBA course on Marketing (*IMBA 6090 Marketing and Consumer Behavior*) has 3 credits
- The core MBA course (*IMBA 6040 World Economics*) has 3 credits
- A one-credit course on Bargaining and Negotiations is retained as part of the common MBA core (*IMBA 6230 International Business Negotiations*)

### ***B. Adjustments to the Specialization Courses to Accommodate the Common Core***

The specialization courses, international residencies and capstone projects must account for 22 credits in both programs. The structure and format of the specialization courses also need to be consistent across both programs. This is achieved through the following changes:

- *Capstone Project Courses:* Both programs will have the same number of credits (6 credits in total spread over 3 semesters) for the capstone project courses. This is a reduction in capstone project credits for the MBA-MOT program and an increase in capstone project credits for the MBA-GB program.
- *Specialization Courses:* There are six 2 credit specialization courses in each program. These courses remain the same in both programs with few modifications. A new course on ‘Sustainable Business Strategies’ (*IMBA 6430*) is introduced in both programs, modified from *IMBA 6170 Quality, Sustainable Technology & Competitiveness*).
- *International Residency:* Both programs will include an international residency course (*IMBA 6311 Analysis of Global Environments*) which is 4 credits.

### **NEW AND MODIFIED COURSES ADDED**

#### **The following modified courses are added to the programs**

##### **A. Modified Common Courses for both programs (new course proposals included)**

- *IMBA 6031 Leadership and Organizational Behavior (2 credits)* modified from *IMBA 6030 Organizational Behavior and Theory (3 credits)*
- *IMBA 6071 Financial Management (3 credits)* modified from *IMBA 6070 World Finance (4 credits)*
- *IMBA 6430 Sustainable Business Strategies (2 credits)* modified from *IMBA 6170 Quality, Sustainable Technology & Competitiveness (1 credit)*.
- *IMBA 6311 Analysis of Global Environments (4 credits)* modified from *IMBA 6310 Analysis of Global Environments II (3 credits)*

##### **B. Modified MBA in Global Business Courses (new course proposals included)**

- *IMBA 6401 Global Strategy Project I (2 credits)* modified from *IMBA 6400 GSP I (1 credit)*
- *IMBA 6411 Global Strategy Project II (2 credits)* modified from *IMBA 6410 GSP II (1 credit)*

- C. Modified MBA in Management of Technology Courses (new course proposals included)
- *MOT 6132 Management of Technology Project I (2 credits)* modified from MOT 6130 Management of Technology Project I (3 credits)
  - *MOT 6134 Management of Technology Project II (2 credits)* modified from MOT 6131 Management of Technology Project II (3 credits)

## **COURSES REMOVED**

**The following courses are deleted from the MBA – GB and MBA – MOT programs.**

- IMBA 6030 Organizational Behavior and Theory
- IMBA 6070 World Finance
- IMBA 6170 Quality, Sustainable Technology & Competitiveness
- IMBA 6240 Ethical Issues in Global Business
- IMBA 6400 Global Strategy Project I
- IMBA 6410 Global Strategy Project II
- IMBA 6300 Analysis of Global Environments I
- IMBA 6310 Analysis of Global Environments II
- MOT 6125 Creating Technology Ventures
- MOT 6130 Management of Technology Project I
- MOT 6131 Management of Technology Project II
- MOT 6124 Business & Leadership Skills Development
- MOT 6102 Economic Analysis for Managers
- MOT 6103 Financial and Managerial Accounting
- MOT 6104 Financial Management in an Environment of Tech Change
- MOT 6105 Analytical Tools for Decision Support
- MOT 6107 Technology Strategies in IS
- MOT 6109 Managing People in a Technical Environment
- MOT 6110 Operations and Supply Chain Management
- MOT 6112 Marketing in a Technological Environment
- MOT 6116 Strategy in the Management of Technology
- MOT 6114 Seminar in Management of Technology
- MOT 6127 Building Technology Ventures
- MOT 6126 International Issues in Management of Technology

These courses are not being deactivated at this time. CoB will request deactivations later for the ones no longer needed.

TABLE I: Existing Curriculum for the MBA-Global Business (MBA – GB) degree

	<b>Course No.</b>	<b>Course Name</b>	<b>Cr. Hours</b>
Core MBA courses	IMBA 6010	Cross Cultural Communications	2
	IMBA 6030	Organizational Behavior and Theory	3
	IMBA 6050	Financial and Managerial Accounting	3
	IMBA 6090	Marketing and Consumer Behavior	3
	IMBA 6021	Data Analysis for Business	2
	IMBA 6070	World Finance	4
	IMBA 6040	Global Economics	3
	IMBA 6081	Manufacturing and Service Management	2
	IMBA 6160	Business Regulations	2
	IMBA 6131	Strategic Management	2
	IMBA 6061	Information Systems	2
	IMBA 6240	Ethical Issues in Global Business	1
Specialization Courses	IMBA 6250	International Finance	2
	IMBA 6140	Comparative Systems	2
	IMBA 6121	Managing the Global Workforce	2
	IMBA 6260	Global Supply Chain and Electronic Commerce	2
	IMBA 6101	Product Strategies for Global Markets	2
	IMBA 6170	Quality, Sustainable Technology & Competitiveness	1
	IMBA 6230	International Business Negotiations	1
International Residencies	IMBA 6300	Analysis of Global Environments I	2
	IMBA 6310	Analysis of Global Environments II	3
Capstone Project	IMBA 6400	Global Strategy Project I	1
	IMBA 6410	Global Strategy Project II	1
	IMBA 6420	Global Strategy Project III	2
<b>TOTAL CREDIT HOURS</b>			<b>50</b>

TABLE II: Existing Curriculum for the MBA-Management of Technology (MBA – MOT) degree

	Course No.	Course Name	Cr. Hours
Core MBA courses	MOT 6124	Business & Leadership Skills Development	3
	MOT 6102	Economic Analysis for Managers	2
	MOT 6103	Financial and Managerial Accounting	2
	MOT 6104	Financial Management in an Environment of Tech Change	2
	MOT 6105	Analytical Tools for Decision Support	2
	MOT 6107	Technology Strategies in IS	2
	MOT 6109	Managing People in a Technical Environment	2
	MOT 6110	Operations and Supply Chain Management	2
	MOT 6112	Marketing in a Technological Environment	2
	MOT 6116	Strategy in the Management of Technology	2
	MOT 6133	Ethical Decision Making	1
Specialization Courses	MOT 6106	Processes of Technological Innovation	2
	MOT 6111	Change Management	2
	MOT 6114	Seminar in Management of Technology	2
	MOT 6115	Technology Forecasting & Analysis of Emerging Tech	2
	MOT 6125	Creating Technology Ventures	3
	MOT 6127	Building Technology Ventures	2
	MOT 6128	Venture Financing	2
	MOT 6129	International Business and Finance	2
International Residency	MOT 6126	International Issues in Management of Technology**	3
Capstone Project	MOT 6130	Management of Technology Project I	3
	MOT 6131	Management of Technology Project II	3
	MOT 6122	Management of Technology Project III	2
<b>TOTAL CREDIT HOURS</b>			<b>50</b>

\*\* Note that MOT 6126 was listed as a 3 credit class in the documents submitted to the Institute Graduate Committee for converting the MS in Management of Technology to an MBA in Management of Technology in 2007, and the program was approved with that understanding. However, there was a typographical error in the new course proposal form attached where the credits for MOT 6126 was incorrectly stated as 4 credits.



Table III : Proposed Common Core Curriculum for the MBA – GB and MBA – MOT programs

	<b>Course No.</b>	<b>Course Name</b>	<b>Cr. Hours</b>	<b>Legend</b>	
Core MBA courses common to both MBA-MOT and MBA – GB programs	IMBA 6010	Cross Cultural Communications	2	Existing Course	
	IMBA 6031	Leadership and Organizational Behavior	2	Reduced credits from IMBA 6030	
	IMBA 6050	Financial and Managerial Accounting	3	Existing course	
	IMBA 6090	Marketing and Consumer Behavior	3	Existing course	
	IMBA 6021	Data Analysis for Business	2	Existing course	
	IMBA 6071	Financial Management	3	Reduced credits from IMBA 6070	
	IMBA 6040	Global Economics	3	Existing course	
	IMBA 6081	Manufacturing and Service Management	2	Existing course	
	IMBA 6160	Business Regulations	2	Existing course	
	IMBA 6131	Strategic Management	2	Existing course	
	IMBA 6061	Information Systems	2	Existing course	
	MOT 6133	Ethical Decision Making	1	Existing course	
	IMBA 6230	International Business Negotiations	1	Existing course	
			<b>TOTAL</b>	<b>28</b>	

TABLE IV: Specialization Courses for MBA – Management of Technology Program

	<b>Course No.</b>	<b>Course Name</b>	<b>Cr. Hours</b>	<b>Legend</b>
Specialization Courses	MOT 6106	Processes of Technological Innovation	2	Existing course
	MOT 6111	Change Management	2	Existing course
	MOT 6115	Technology Forecasting & Analysis of Emerging Technology	2	Existing course
	MOT 6128	Venture Financing	2	Existing course
	MOT 6129	International Business and Finance	2	Existing course
	IMBA 6430	Sustainable Business Strategies	2	Modified from IMBA 6170
International Residency	IMBA 6311	Analysis of Global Environments	4	Modified from IMBA 6310
Capstone Project	MOT 6132	Management of Technology Project I	2	Modified from MOT 6130
	MOT 6134	Management of Technology Project II	2	Modified from MOT 6131
	MOT 6122	Management of Technology Project III	2	Existing course
		<b>TOTAL</b>	<b>22</b>	

TABLE V: Specialization Courses for MBA – Global Business Program

	Course No.	Course Name	Cr. Hours	Legend
Specialization Courses	IMBA 6250	International Finance	2	Existing course
	IMBA 6140	Comparative Systems	2	Existing course
	IMBA 6121	Managing the Global Workforce	2	Existing course
	IMBA 6260	Global Supply Chain and E-Commerce	2	Existing course
	IMBA 6101	Product Strategies for Global Markets	2	Existing course
	IMBA 6430	Sustainable Business Strategies	2	Modified from IMBA 6170
International Residencies	IMBA 6311	Analysis of Global Environments	4	Modified from IMBA 6310
Capstone Project	IMBA 6401	Global Strategy Project I	2	Modified from IMBA 6400
	IMBA 6411	Global Strategy Project II	2	Modified from IMBA 6410
	IMBA 6420	Global Strategy Project III	2	Existing course
		TOTAL	22	

TABLE VI: Complete Program Outline for MBA – Management of Technology Program

	Course No.	Course Name	Cr. Hours	Legend
Core MBA courses common to both MBA-MOT and MBA – GB programs	IMBA 6010	Cross Cultural Communications	2	Existing Course (MBA-GB)
	IMBA 6031	Leadership and Organizational Behavior	2	Modified from IMBA 6030
	IMBA 6050	Financial and Managerial Accounting	3	Existing Course (MBA-GB)
	IMBA 6090	Marketing and Consumer Behavior	3	Existing Course (MBA-GB)
	IMBA 6021	Data Analysis for Business	2	Existing Course (MBA-GB)
	IMBA 6071	Financial Management	3	Modified from IMBA 6070
	IMBA 6040	Global Economics	3	Existing Course (MBA-GB)
	IMBA 6081	Manufacturing and Service Management	2	Existing Course (MBA-GB)
	IMBA 6160	Business Regulations	2	Existing Course (MBA-GB)
	IMBA 6131	Strategic Management	2	Existing Course (MBA-GB)
	IMBA 6061	Information Systems	2	Existing Course (MBA-GB)
	MOT 6133	Ethical Decision Making	1	Existing course
IMBA 6230	International Business Negotiations	1	Existing Course (MBA-GB)	
Specialization Courses	MOT 6106	Processes of Technological Innovation	2	Existing Course
	MOT 6111	Change Management	2	Existing Course
	MOT 6115	Technology Forecasting & Analysis of Emerging Technologies	2	Existing Course
	MOT 6128	Venture Financing	2	Existing Course
	MOT 6129	International Business and Finance	2	Existing Course
	IMBA 6430	Sustainable Business Strategies	2	Modified from IMBA 6170
	IMBA 6311	Analysis of Global Environments	4	Modified from IMBA 6310
International Residency				
Capstone Project	MOT 6132	Management of Technology Project I	2	Modified from MOT 6130
	MOT 6134	Management of Technology Project II	2	Modified from MOT 6131
	MOT 6122	Management of Technology Project III	2	Existing Course
		TOTAL	50	

TABLE VII: Complete Program Outline for MBA – Global Business Program

	Course No.	Course Name	Cr. Hours	Legend
Core MBA courses common to both MBA-MOT and MBA – GB programs	IMBA 6010	Cross Cultural Communications	2	Existing Course
	IMBA 6031	Leadership and Organizational Behavior	2	Modified from IMBA 6030
	IMBA 6050	Financial and Managerial Accounting	3	Existing Course
	IMBA 6090	Marketing and Consumer Behavior	3	Existing Course
	IMBA 6021	Data Analysis for Business	2	Existing Course
	IMBA 6071	Financial Management	3	Modified from IMBA 6070
	IMBA 6040	Global Economics	3	Existing Course
	IMBA 6081	Manufacturing and Service Management	2	Existing Course
	IMBA 6160	Business Regulations	2	Existing Course
	IMBA 6131	Strategic Management	2	Existing Course
	IMBA 6061	Information Systems	2	Existing Course
	MOT 6133	Ethical Decision Making	1	Existing course (MBA-MOT)
	IMBA 6230	International Business Negotiations	1	Existing Course
Specialization Courses	IMBA 6250	International Finance	2	Existing course
	IMBA 6140	Comparative Systems	2	Existing course
	IMBA 6121	Managing the Global Workforce	2	Existing course
	IMBA 6260	Global Supply Chain and Elec Commerce	2	Existing course
	IMBA 6101	Product Strategies for Global Markets	2	Existing course
	IMBA 6430	Sustainable Business Strategies	2	Modified from IMBA 6170
International Residency	IMBA 6311	Analysis of Global Environments	4	Modified from IMBA 6310
	IMBA 6401	Global Strategy Project I	2	Modified from IMBA 6400
Capstone Project	IMBA 6411	Global Strategy Project II	2	Modified from IMBA 6410
	IMBA 6420	Global Strategy Project III	2	Existing course
		TOTAL	50	

**New Courses - Approved:**

IMBA 6031: Leadership and Organizational Behavior	2-0-2
IMBA 6071: Financial Management	3-0-3
IMBA 6311: Analysis of Global Environments	4-0-4
IMBA 6401: Global Strategy Project I	0-6-2
IMBA 6411: Global Strategy Project II	0-6-2
IMBA 6430: Business Strategies for Sustainability	3-0-3
MOT 6132: MOT Project I	0-6-2
MOT 6134: MOT Project II	0-6-2

Note: Course proposals that include an “unsupervised lab” as part of the credit distribution must explain how the activity is validated (document that the activity was completed). Following the meeting the proposers were asked to update and repost the NCP forms to address this concern.

Adjourned,

Ann Laros for  
Reta Pikowsky  
Registrar