### Graduate Curriculum Committee November 26, 2008 11:30 a.m., MH 243

#### **Agenda**

- 1. Welcome and call to order
- 2. Approval of minutes from November 12 meeting
- 3. Addition of a twining agreement with Portugal, RCHM (tabled at last meeting)
- 4. Revisions to the MS in Accounting, CBA
- 5. Revisions to the MS in Taxation, CBA
- 6. Addition of a new track to the MS in Electrical Engineering/MS in Engineering track, CECS
- 7. Equipment Fee Requests
- 8. Courses and special topics
- 9. Adjournment

#### **Informational item**

10. Cohort groups for the Industrial Engineering MS program, CECS

#### **Members of the Graduate Curriculum Committee:**

David Boote, COE
Deborah Breiter, RCHM
Raj Echambadi, CBA
Robert Ford, CBA
Ronnie Korosec, COHPA
Ram Mohapatra, COS -- Chair
Tison Pugh, CAH
Martin Richardson, COP
James Turkson, COM
Art Weeks, CECS
Diane Wink, CON
TBA, GSA Student
Patricia Bishop, GS
Max Poole, GS

# ACADEMIC TWINNING AGREEMENT by and between

#### UNIVERSITY OF CENTRAL FLORIDA Orlando, Florida, USA

#### and the

#### Instituto Superior de Ciências do Trabalho e da Empresa, Lisbon, Portugal

The University of Central Florida, Orlando, Florida (hereafter referred to as "UCF"), on behalf of its Board of Trustees, and the Instituto Superior de Ciências do Trabalho e da Empresa, Lisbon, Portugal (hereafter referred to as "ISCTE"), agree to establish an academic agreement program known as the ISCTE-UCF Twinning Program. The purpose of this agreement is to provide students at or graduating from ISCTE the opportunity to pursue graduate education at UCF. Students pursuing a master's degree under this agreement will be able to receive a UCF master's degree at UCF and at ISCTE by completing the academic requirements for each institution for the master's degree, while performing part of their course work at ISCTE and part at UCF, consistent with both universities academic and accreditation requirements.

The agreement is based on the following stipulations:

#### A. General

- 1. A student will be awarded the degree of Master of Science in Hospitality and Tourism Management from UCF and a Master of Business Administration from ISCTE after successful completion of all the requirements stipulated by UCF and ISCTE, as listed in Schedule 1.
- 2. English will be the language of instructions in all courses offered by UCF. ISCTE students must demonstrate proficiency in English by submitting a minimum TOEFL computer-based score of 220 or 80 on the internet-based TOEFL (or equivalent score on the paper-based test) or a 6.5 on the IELTS test of English proficiency.
- 3. Both UCF and ISCTE are free to make reference to the arrangements for this program in published details of courses and programs of study. Any use of a university's corporate signature must be approved by the other university who shall respond within five (5) working days for the material to be published. Any material or copy intended for publication, which refers in any way to one university, must be agreed to in writing by the other university in advance of publication. The university officers authorized for this purpose at each university are listed in Schedule 2.

#### B. Program Admission

1. ISCTE Faculty will select candidates for participation in the ISCTE-UCF Twinning Program based on the following criteria:

- a. A score of 220 or better on the computer-based TOEFL (Or equivalent score for other acceptable English proficiency tests outlined in A.2). The selection committee for the Hospitality and Tourism Management program at UCF may allow a student with a score below 220 on the TOEFL to participate in the program if the student is considered a strong candidate, but the admission would be conditioned on the student's taking an Intensive English course at UCF.
- b. An official, competitive score on the combined verbal-quantitative portions of the GRE or combined score on the GMAT.
- c. An earned bachelor's degree or equivalent from a regionally accredited US institution or its equivalent from a foreign institution. A course-by-course evaluation of the student's official undergraduate transcript showing that the student has a 3.0 GPA or better equivalent on a 4.0 scale for the particular program is required if the degree is from a non-US institution. The evaluation must be performed by a transcript translation service recommended by UCF and the score must be received by Graduate Studies when the application is submitted.
- 2. The Selection Committee of the particular program at UCF will admit students from the group of candidates selected by ISCTE based on the following criteria:
  - a. Student has proof of a degree from an accredited institution compatible with the requirements of the particular degree and program being sought at UCF;
  - b. Student has shown proficiency in English by presenting a score of 220 on the TOEFL exam or by taking an Intensive English course at UCF; and
  - c. A GPA of 3.0 or better for admission to graduate work. ISCTE's grade scale is from 1 to 20. For the purposes of this Agreement, a 13.5 grade at ISCTE will be considered equivalent to a B (or 3.0 on a 4.0 scale) grade at UCF.
- 3. Program participants who will be coming to UCF must abide by the application deadlines that can be found at (<a href="http://www.graduate.ucf.edu/currentGradCatalog/content/AppDeadlines/">http://www.graduate.ucf.edu/currentGradCatalog/content/AppDeadlines/</a>) and the international student immigration requirements listed at <a href="https://www.intl.ucf.edu">www.intl.ucf.edu</a>.

#### C. Credit Transfer

- 1. Students participating in the ISCTE-UCF Twinning program will be able to transfer up to 18 credits for graduate courses taken by the student at ISCTE (15 credits for Thesis track; 18 credits for Non-Thesis track) before starting at UCF. In all instances, a majority of the coursework towards the UCF degree will be taken at UCF to comply with accreditation standards.
- 2. Only courses with grades of B or better can be transferred to the UCF program of study.
- 3. UCF reserves the right to reject graduate course transfer credits not meeting its academic requirements.

#### D. Program coursework

- 1. Students must enroll in the Hospitality and Tourism Management program and meet all the requirements for graduation listed in the current Graduate Catalog (<a href="http://www.graduate.ucf.edu/currentGradCatalog/">http://www.graduate.ucf.edu/currentGradCatalog/</a>) for that program.
- 2. ISCTE students officially admitted and enrolled in the ISCTE-UCF Program may elect to take some of UCF courses at ISCTE in Lisbon, Portugal, through UCF's distance-learning offerings. All distance learning courses will be taught by UCF faculty. In these courses, all files and class notes remain the property of UCF and cannot be copied without the corresponding professor's express authorization.
- 3. Students selecting the thesis track must perform the investigation work at UCF, unless the research itself requires the student to work elsewhere and it is approved by the student's research advisor. Regardless of where the research is conducted, students will be required to enroll continuously in thesis hours at UCF throughout the research, until completion of the degree. The thesis defense must be conducted in English and physically at UCF.
- 4. UCF will provide each graduate program participant with a computer account that allows electronic mail and access to the Internet, WebCT, and UCF's Library's online facilities.
- 5. All distance-learning courses offered by UCF at ISCTE will abide by the corresponding UCF regulations.

#### E. Cost and Financial Information

Tuition rates at UCF are subject to change without notice. The rates for ISCTE students will depend on the student's financial situation, as follows:

- 1. Full-time graduate students in good standing who receive a stipend paid by their sponsoring institution, foundation, or country in amount equal to or greater than other students in the program and who have their in-state tuition paid by their sponsoring institution, foundation, country or where UCF faculty pay the instate tuition out of contracts & grants (C&G) for each term will be classified as university graduate fellows and they will be in-state for tuition purposes starting in Fall 2009. The financial arrangement is outlined in Schedule 4.
- 2. Students who lose their financial support from their sponsoring institution, foundation, country, or instate tuition funding through UCF contracts & grants (C&G) will also lose the out-of-state tuition remission from UCF.
- 3. Students not receiving financial support as outlined in 'E.l' will pay normal graduate tuition fees. A schedule of fees is found at <a href="https://www.iroffice.ucf.edu/character/current\_tuition.html">www.iroffice.ucf.edu/character/current\_tuition.html</a>.

#### F. Program Administration

1. ISCTE will provide UCF with all the appropriate documents related to the student selection process, the awarding of fellowships, and courses that have been submitted for transfer to the student's program of study, as applicable.

- 2. A faculty member in the appropriate academic unit at UCF and a faculty member in ISCTE's IBS Business School will serve as Program Coordinators and will oversee the execution of the program at UCF and ISCTE, respectively.
- 3. The responsibilities of the Coordinator at UCF are to:
  - a. Interact with the Coordinator at ISCTE for the admission of students into this program.
  - b. Serve as UCF's Graduate Advisor of all students under this program.
  - c. Verify that ISCTE courses presented for transfer into a student's Program of Study correspond to equivalent UCF courses or can be accepted in the student's selected program.
  - d. If applicable, find a Research Advisor at UCF for each student, in consultation with the student and the faculty from ISCTE.
  - e. Keep track of the research projects done by the students under this program.
  - f. Oversee the implementation of the distance-learning program for those students who select this option.
- 4. The responsibilities of the Coordinator at ISCTE are to:
  - a. Interact with the Coordinator at UCF for all aspects of the program.
  - b. Serve as ISCTE's Graduate Advisor of all students under this program.
  - c. Provide documentation on all ISCTE courses presented for transfer into a student's Program of Study.
  - d. Oversee the implementation of the distance-learning program, ensuring that all UCF distance-learning courses offered at ISCTE abide by UCF's distance-learning regulations.
  - e. Oversee and provide documentation on all ISCTE university graduate fellows, and coordinate payments to UCF.
- 5. To enable distance-learning, ISCTE must provide adequate computer facilities and local Internet accounts for students.
- 6. Participants of the program who will be taking courses at the UCF campus will be responsible for their living expenses as well as the necessary immigration arrangements.

#### G. Faculty

- 1. Faculty participation in the program:
  - a. At ISCTE's request and previous approval by the corresponding UCF academic unit, faculty members in ISCTE's IBS Business School may be visiting scholars at UCF to participate in collaborative research. UCF shall not be responsible to assist or to pay for any assistance to bring the faculty to the USA or UCF, or to assist or pay for living expenses in the USA. The visiting scholar may participate in the thesis or dissertation committees of

ISCTE students in this program, consistent with UCF policies. The IBS Business School at ISCTE will pay for the expenses of the visiting scholar. UCF shall not be responsible or obligated in any way to compensate or to pay any expenses of the ISCTE visiting scholar. Participation of the visiting scholar in research will provide an opportunity to develop a collaborative research program between the two universities.

- b. At ISCTE's invitation and expense, whenever there are three or more students registered through distance-learning courses, a UCF instructor may travel to ISCTE for a one-week visit at the end of the semester to meet ISCTE's faculty, provide guidance, and meet with the remote students. ISCTE will reimburse the visiting instructor's airfare round-trip expenses between Orlando, Florida, and Lisbon,, Portugal. In Country, ISCTE shall be responsible for the visiting professor's lodging and living expenses plus a mutually agreed stipend to be payable directly to the visiting professor.
- c. Implementation of the UCF-ISCTE program will comply with the export control restrictions, as listed in the US Department of State's International Traffic in Arms Regulations (ITAR) and the US Department of Commerce's Export Administration Regulations (EAR), as applicable.

This agreement will come into effect with the appropriate signatures below, at the date of last signature and shall remain in effect for the period of three years. It may be renewed or amended at any time before the actual expiration date by a written agreement signed by authorized representatives of both parties. This agreement may be terminated by the appropriate authority of either party given twelve months written notice to the other party.

UNIVERSITY OF CENTRAL FLORIDA	Instituto Superior de Ciências do Trabalho e da Empresa	
Orlando, Florida, USA	Lisbon, Portugal	
John C. Hitt, President	Luis Antero Reto, President	
Date	Date	
Legal content approved by:		
UCF General Counsel's Office		

# Schedule 1 Requirements for the UCF and ISCTE Degrees

All UCF degrees awarded must have the majority of credit hours taken at UCF, consistent with accreditation standards. All distance learning courses will be taught by regular faculty members at UCF and meet all accreditation requirements.

This joint program offers a unique opportunity for participants to be exposed to a blend of cultures, business environments, and perspectives through an international collaboration between a European business school and a North American hospitality and tourism college. Both the MBA In Hospitality & Tourism Management (HTM) from ISCTE and M.S. in Hospitality Management from UCF Rosen College have a central core of courses, and offer thesis and non-thesis tracks. A total of 36 credit hours and 39 credit hours are required for the thesis and non-thesis tracks respectively.

Master's candidates apply to and are accepted by each institution, and must meet the respective admission requirements of each. Students essentially spend the first year of the joint program in Portugal, and their second year in Orlando.

Of the 36 hours required for the thesis track in the joint program, both ISCTE and UCF students accepted into the program will:

- 1. Complete 15 hours of preapproved coursework in Portugal in year one, and
- 2. Complete 21 hours in Orlando in year two, including 6 thesis hours.

Of the 39 hours required for the non-thesis track in the joint program, both ISCTE and UCF students accepted into the program will:

- 1. Complete 18 hours of preapproved coursework in Portugal in year one, and
- 2. Complete 21 hours in Orlando in year two.

### Plan of Study 2009 - 2010

Thesis & Non-Thesis Core	Course Number	Course Title
	HFT 6245	UCF Managing Hospitality and Guest Services Organizations or
		ISCTE Guest Services Management
	HFT 6251	UCF The Management of Lodging Operations
	HFT 6710	UCF International Tourism Management or
		ISCTE International Tourism Management
	FSS 6365	UCF Management of Food Service Operations
	HFT 6477	UCF Financial Analysis of Hospitality Enterprises or
		ISCTE Financial Analysis of Hospitality Enterprises
	HFT 6596	UCF Strategic Marketing in Hospitality and Tourism or
		ISCTE Strategic Marketing in Hospitality & Tourism
	HFT 6228	Critical Issues in Hospitality Human Resources or
		ISCTE Critical Issues in Hospitality Human Resources
	HFT 6586	UCF Research Methods in Hospitality and Tourism
	HFT 6296	UCF Hospitality/Tourism Strategic Issues
Thesis	HFT 6971	Thesis (6 hours)
Restricted	HFT xxxx	UCF/ISCTE Approved elective (3 total hours), may include
Electives		ISCTE Electronic Commerce in Hospitality & Tourism
Non-Thesis	HFT xxxx	UCF/ISCTE Approved electives (12 total hours), may include
Restricted Electives		ISCTE Electronic Commerce in Hospitality & Tourism

#### Schedule 2 Authorized Persons/Officers

The following persons/officers will be responsible for the arrangements regarding references to the UCF corporate signature and/or publication rights:

- 1. Dr. Patricia Bishop, Vice-Provost and Dean of the College of Graduate Studies
- 2. Program Coordinator at ISCTE: Dr. Paulo Rita, Professor; Chair in Marketing, Scientific Coordinator of the Management Research Center, Coordinator of PhD Programs Department of Management Studies
- 3. Program Coordinator at UCF: Dr. Paul D. Rompf, Associate Professor; Rosen College Graduate Programs Director

# Schedule 3 Costs Estimates

- 1. At UCF, a full time graduate student must take at least nine credit hours per semester in the fall and spring terms and at least six (6) credit hours in the summer. A student may require more time for completing the Intensive English Language course or thesis requirements.
- 2. UCF's current tuition and fees and other pertinent financial information can be found at <a href="http://pegasus.cc.ucf.edu/~irps/character/current\_tuition.html">http://pegasus.cc.ucf.edu/~irps/character/current\_tuition.html</a>.
- 3. Information about schedules and costs for the intensive English program provided by the Center for Multilingual Multicultural Studies (CMMS) can be found at <a href="http://www.cmms.ucf.edu/news.php">http://www.cmms.ucf.edu/news.php</a>
- 4. The estimated living expenses for UCF can be found at http://finaid.ucf.edu/wwwtext/budget01.htm

#### Schedule 4 Funding for the Program

All fees related to an ISCTE student's tuition and stipend will be fully covered by outside sponsors and coordinated by ISCTE or paid by the student. Tuition rates at UCF are subject to change without notice. The rates for ISCTE university graduate fellows are as follows:

- 1. Full-time graduate students in good standing who receive a stipend through ISCTE in an amount equal to or greater than other students in the program and who have their in-state tuition paid through ISCTE will be classified as university graduate fellows and they will be in-state for tuition purposes starting in Fall 2009.
- 2. Students who lose their financial support from ISCTE will also lose the out-of-state tuition remission from UCF.



# **Program Recommendation Form**

College of Business Administra			Fall 2009			
College/Unit(s) Submitting Pr	oposal		Proposed Effective	e Term/Year		
Kenneth G. Dixon School of A	Accounting		Master of Science	in Accounting		
Unit(s) Housing Program			Name of Program			
Brief Statement of Program attach on a separate sheet th in and students enrolled in the duplication of programs or co	e rationale for this e program, track o	action, includer certificate.	ding statement of he Please note the unit	ow this action in	mpacts faculty	teaching
Please check one: this action	affects a:	program	☐ track	certificate		
Please check one: this action	n is a(n):	addition	suspension	deletion	⊠ revisi	on
					Recommend (please chec	
Rew 12lis	2	-2	11/3/02	5		☐ No
Department Chair Ma	ish Sos	hm	11-8-08	<u> </u>	Yes	☐ No
College Curriculum Committe	e Chair		11/5/08		Yes	□No
College Dean or Unit Head			/ Date		Yes	□No
Chair, UPCC or GSC			Date		□Yes	□No
Dean, Undergraduate Studies	or Graduate Stu	dies	Date			
Approval:					□Yes	□No
Provost			Date		□ res	☐ 1NO
	,					
This form is to be used to	evise, add, sus	pend, or dele	ete degree progra	ms, tracks, o	r certificate p	rograms.
Distribution: After approval i	s received from th	ne Provost, dis	stribution will be to:			
☐ Department(s)	☐ College		Registrar	☐ Associate R	Registrar	
☐ Institutional Research	☐ Academic Se	ervices	Faculty Senate	☐ Information,	Analysis & A	ssessment

Strike-thru = catalog deletions

Underline = catalog additions

#### PROGRAM DESCRIPTION

The Master of Science in Accounting is designed to prepare students with a greater breadth and depth in accounting from the baccalaureate program.

Read More TA

#### CURRICULUM

The Master of Science in Accounting (MSA) degree is awarded upon satisfactory completion of a minimum of 30 credit hours. In the total program of study a minimum of 18 credit hours of the course work, including a minimum of 12 credit hours of accounting/tax course work must be at the 6000 level. Students, with the assistance and approval of the program adviser, may select courses that reflect their interests.

#### Total Hours Required for MSA-30 Credit Hours Minimum

Faculty members in the Kenneth G. Dixon School of Accounting emphasize independent learning in various ways in all courses in the MSA program. Cases and research projects that involve independent work outside the classroom are incorporated into all course work. The cases and projects are both individual and team prepared. Students are asked to do research that requires they utilize library, internet and resources other than the material provided by the professor. The results of independent research activity are presented in either a written report or case analysis or oral presentation. Students work to develop and enhance skills and competencies that will support them professionally throughout their careers. The approaches used in our courses encourage students toward life-long learning. In addition, each student must pass a final oral examination that is administered by a committee of graduate faculty.

#### Accounting and Business Foundation Core

The courses included in the accounting and business foundation core are listed below. A recent UCF accounting undergraduate degree satisfies the core requirement. Other recent related business administration course work may partially or fully satisfy this requirement. Any deficiencies must be satisfied before advanced course work can be taken. Students with a nonbusiness undergraduate degree will probably need to take 12-45 additional semester hours of business to satisfy the requirements of the CPA examination.

#### **Prerequisite Courses**

Accounting Foundation Core-22 Credit Hours

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- ACG 3131 Financial Accounting Concepts and Analysis (3 credit hours)
- ACG 3141 Intermediate Financial Accounting (3 credit hours)
- ACG 3361 Intermediate Managerial Accounting (3 credit hours)
- ACG 4401 Accounting Information Systems (3 credit hours)
- ACG 4651 Auditing or ACG 4671 Internal Auditing (3 credit hours)
- BUL 3130 Legal and Ethical Environment of Business (4 credit hours)
- TAX 4001 Taxation of Business Entities and Transactions (3 credit hours)

#### Business Foundation Core-12 Credit Hours

- ACG 6065 Accounting Foundations (3 credit hours)\*
- ECO 6418 Economic Concepts with Math Applications (3 credit hours)\*
- ECO 6405 Business Statistical Concepts and Methods (3 credit hours)\*
- FIN 6404 Foundations of Finance (3 credit hours)\*
- \* Or equivalent undergraduate course taken as an undergraduate student. If the course was not part of the undergraduate program, it must be taken at the 6000 level.

#### Required Courses 6 Credit Hours

- ACG 6636 Advanced Auditing Topics (3 credit hours)
- ACG 5405 Advanced Accounting Information Systems (3 credit hours)

#### Restricted Electives 24 Credit Hours

Students must select eight elective courses for their programs of study. Five selections must be from the list below of restricted electives. At least three of these five selected courses must be accounting and/or taxation courses at the 6000 level.

#### **Accounting and Taxation Restricted Electives**

- ACG 5346 Advanced Managerial Accounting (3 credit hours)
- ACG 5517 Financial Accounting and Auditing for Governmental and Nonprofit Organizations (3 credit hours)\*
- ACG 6255 International and Multinational Accounting (3 credit hours)
- ACG 6519 Seminar in Governmental and Nonbusiness Accounting and Auditing (3 credit hours)
- ACG 6685 Seminar in Fraud Auditing (3 credit hours)
- ACG 6805 Seminar in Accounting Theory (3 credit hours)
- ACG 6835 Seminar in Ethics and Professionalism in Accounting and Auditing (3 credit hours)
- ACG 6946 Graduate Accounting Internship (3 credit hours)
- TAX 5015 Advanced Tax Topics (3 credit hours)\*\*
- TAX 6065 Tax Research (3 credit hours)
- TAX 6135 Taxation of Corporations and Shareholders (3 credit hours)
- TAX 6205 Partnership Taxation (3 credit hours)

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- TAX 6405 Taxation of Estates and Gifts (3 credit hours)
- TAX 6946 Graduate Tax Internship (3 credit hours)
- TAX 6845 Tax Planning and Consulting (3 credit hours)
- TAX 6505 International Taxation (3 credit hours)

#### Required Courses - 15 credit hours

- ACG 6636 Advanced Auditing (3 credit hours)
- ACG 6415 Advanced Accounting Information Systems (3 credit hours)
- ACG 6805 Accounting Theory (3 credit hours)
- ACG 6xxx Advanced Managerial Accounting (3 credit hours)
- TAX 5015 Advanced Tax Topics (3 credit hours)

#### Restricted Accounting Electives – 6 credit hours

- ACG 6255 International and Multinational Accounting (3 credit hours)
- ACG 6519 Governmental and Nonprofit Accounting (3 credit hours)
- ACG 6685 Fraud Auditing (3 credit hours)
- ACG 6835 Ethics and Professionalism in Accounting and Auditing (3 credit hours)
- ACG 6946: Graduate Accounting Internship (3 credit hours)

#### Restricted Electives - 9 credit hours

• The three additional elective courses may be chosen from the list of restricted electives (below), the restricted accounting electives (above), the required tax courses & the restricted tax electives (from the MST program). They may also be selected from other graduate courses offered in the College of B usiness Administration or from outside the college however these must be selected with the student's area of interest in mind and with approval of the program advisor. The university limits program of study courses outside the college to six semester hours.

#### **Business Restricted Electives**

- BUL 5332 Advanced Business Law Topics (3 credit hours)\*
- ECO 6115 Economic Analysis of the Firm (3 credit hours)
- FIN 6406 Strategic Financial Management (3 credit hours)
- FIN 6425 Asset Management and Financial Decisions (3 credit hours)
- FIN 6475 Business Valuation (3 credit hours)
- FIN 6515 Analysis of Investment Opportunities (3 credit hours)
- ISM 6227 Management of Telecommunications (3 credit hours)
- ISM 6305 Information Resources Management (3 credit hours)
- ISM 6367 Strategic Information Systems (1.5 hours)
- ISM 6407 Decision Support Systems (1.5 hours)
- ISM 6485 Electronic Commerce (3 credit hours)
- ISM 6537 Quantitative Models for Business Decisions (3 credit hours)

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- \* Students who have not completed ACG 3501 Financial Accounting for Governmental and Nonprofit Organizations, or the equivalent must complete ACG 5517 Financial Accounting and Auditing for Governmental and Nonprofit Organizations or ACG 6519 Seminar in Governmental and Nonbusiness Accounting and Auditing. Either may be selected as an elective in the graduate program of study courses.
- \* Students planning to take the CPA examination should include TAX 5015 Advanced Tax Topics and, if a second law course is needed, BUL 5332 Advanced Business Law Topics (if a second law course is needed) in their elective course selections.

#### Other Electives

Three additional elective courses may be chosen from the list of restricted electives above, including accounting, taxation, and other business electives. They may also be selected from other graduate courses offered in the College of Business Administration or from outside the college. Courses not on the restricted elective list should be selected with the student's area of interest in mind and with approval of the program adviser. The university limits program of study courses outside the college to six semester hours.

Students must show clear evidence of proficiency in oral and written communication and computer usage.

#### Comprehensive Examination

Satisfactory completion of an end-of-program comprehensive examination is required. The MSA program does not require a thesis.

# **Admissions**

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the <u>Admissions and Registration</u> section of the Graduate Catalog. Applicants must <u>apply online</u>. All requested materials must be submitted by the established deadline(s).

In addition to the general admission requirements, applicants to this program must provide:

- Official, competitive GRE or GMAT score taken within the last five years.
- 3.0 GPA or higher in last 60 hours of upper-division undergraduate study in accounting and tax courses.
- Résumé.
- A score of at least 233 (computer-based test or paper-based equivalent) on the Test of English as a Foreign Language (TOEFL) is required for applicants from countries where English is not the official language or applicants with degrees from a non-U.S. accredited institution.

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#### **Application Deadlines**

All application materials must be submitted by the appropriate deadline listed below.

Accounting MSA Fall Priority Fall Spring Summer
Domestic Applicants Jan 15 Jun 15 Dec 1 Mar 15
The Fall 2008 application deadline has been extended to July 15th.
International Applicants Jan 15 Jul 1 Nov 1
International Transfer Applicants Jan 15 Mar 1 Sep 1 Dec 15

### **FINANCIALS**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see <u>Financing Grad School</u>, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The <u>Financial Information</u> section of the Graduate Catalog is another key resource.

#### **Fellowships**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see <u>Financing Grad School</u>, which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

**Program Profile** 

**Student Profile** 

**Larry Chastang** 

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Read Profile +

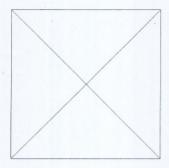
# Faculty Profile Vicky Arnold



Read Profile +

# **Program Stats**

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#### View more stats

# **Contact Info**

**Graduate Program** 

Charles Kelliher PhD

Associate Professor

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Business Administration 444

#### **Graduate Admissions**

#### Vanessa Blanco

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Telephone: 407-823-2766 ext. 252
Millican Hall 230
Online Application
Graduate Admissions

#### **Mailing Address**

UCF College of Graduate Studies Millican Hall 230 PO Box 160112 Orlando, FL 32816-0112

**Institution Codes** 

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GMAT: RZT-HT-58

TOEFL: 5233

#### **Graduate Fellowships**

**Sharon Preston** 

Telephone: 407-823-6497

Jennifer Parham

Telephone: 407-823-4337

Fax: 407-823-6442

gradfellowship@mail.ucf.edu

www.graduate.ucf.edu

#### Graduate Financial Aid

#### **UCF Student Financial Assistance**

Millican Hall 120

Telephone: 407-823-2827

Appointment Line: 407-823-5285

Fax: 407-823-5241 finaid@mail.ucf.edu http://finaid.ucf.edu

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Underline = catalog additions

### PROGRAM DESCRIPTION

The Master of Science in Taxation program is designed to prepare students for careers as tax professionals and tax consultants in public practice, government, and industry. The program, along with appropriate foundation work, satisfies the Florida requirements to qualify to take the Certified Public Accountant (CPA) examination.

Read More \*\*

### **CURRICULUM**

The Master of Science in Taxation degree is awarded upon completion of a minimum 30 credit hours, which includes 18 credit hours minimum must be at the 6000 level. The program offers Tax Professional and Tax Consultant specializations from which available electives may be taken. If business prerequisites are satisfied, students will be required to take an additional 15-18 business credit hours to meet the requirements to take the CPA examination.

# Total Required Hours for MST—30 Credit Hours Minimum beyond the Bachelor's Degree.

Case analyses and research projects are incorporated into course work that requires students to successfully obtain and demonstrate their ability to learn independently. The research study and final report will focus on reviewing and analyzing contemporary research in a student's particular specialization within the accounting profession in order to help students acquire knowledge and skills pertaining to research based best practices in that specialization area.

Faculty members in the Kenneth G. Dixon School of Accounting emphasize independent learning in various ways in all courses in the MST program. Cases and research projects that involve independent work outside the classroom are incorporated into all course work. The cases and projects are both individual and team prepared. Students are asked to do research that requires they utilize library, internet and resources other than the material provided by the professor. The results of independent research activity are presented in either a written report or case analysis or oral presentation. Students work to develop and enhance skills and competencies that will support them professionally throughout their careers. The approaches used in our courses encourage students toward life-long learning. In addition, each student must pass a final examination that is administered by a committee of graduate faculty.

#### Prerequisite Accounting and Business Foundation Core—34 Credit Hours

The courses included in the prerequisite foundation core are listed under the Master of Science in Accounting degree requirements. The requirements must be fulfilled by students completing

MST catalog copy Page 1 of 5 either the Professional or Consulting Specialization. A recent UCF accounting undergraduate degree satisfies the foundation core requirement. Other recent related business course work may partially or fully satisfy this requirement. Any deficiencies must be satisfied before advanced course work can be taken.

The courses included in the prerequisite foundation core are listed under the Masters of Science in Accounting degree requirements. A recent UCF accounting undergraduate degree will satisfy most of the core requirements. Other recent related business administration course work may partially or fully satisfy this requirement. Any deficiencies must be satisfied before advanced course work can be taken. If the business prerequisites are satisfied by taking the business foundation core of 6000 level courses, it will be necessary for you to take 15-18 additional business credit hours to meet the education requirements to take the CPA examination.

#### Required Course 3 Credit Hours

- TAX 6065 Tax Research (3 credit hours)
- TAX 5015 Advanced Tax Topics (3 credit hours)
- TAX 6135 Taxation of Corporations and Shareholders (3 credit hours)
- TAX 6205 Partnership Taxation (3 credit hours)
- TAX 6405 Taxation of Estates and Gifts (3 credit hours)
- TAX 6845 Tax Planning and Consulting (3 credit hours)
- TAX 6505 International Taxation (3 credit hours)
- TAX 6946 Tax Internship (3 credit hours)
- TAX 6909 Research Report (3 credit hours)

#### Elective Courses 15 Credit Hours

Electives may be selected from the tax electives listed above, from the courses included in the consulting specialization listed below, and from courses available in the Master of Science in Accounting degree program. Other courses require approval. ACG 6636 Advanced Auditing Topics and BUL 5332 Advanced Business Law Topics are recommended for candidates planning to sit for the CPA examination.

- TAX 6845 Tax Planning and Consulting (3 credit hours)
- FIN 6406 Strategic Financial Management (3 credit hours)
- TAX 5015 Advanced Tax Topics (3 credit hours)
- TAX 6135 Taxation of Corporations and Shareholders (3 credit hours)
- TAX 6205 Partnership Taxation (3 credit hours)
- TAX 6405 Taxation of Estates and Gifts (3 credit hours)
- TAX 6946 Tax Internship (3 credit hours)
- TAX 6909 Research Report (3 credit hours)
- TAX 6505 International Taxation (3 credit hours)
- ECO 6115 Economic Analysis of the Firm (3 credit hours)
- FIN 6425 Asset Management and Financial Decisions (3 credit hours)
- FIN 6475 Valuation of Small Businesses (3 credit hours)

- FIN 6515 Analysis of Investment Opportunities (3 credit hours)
- ISM 6537 Quantitative Models for Business Decisions (3 credit hours)
- MAR 6845 Services Marketing (3 credit hours)

#### Required Courses - 15 credit hours

- ACG 6636 Advanced Auditing (3 credit hours)
- ACG 6805 Accounting Theory (3 credit hours)
- TAX 5015 Advanced Tax Topics (3 credit hours)
- TAX 6065 Tax Research (3 credit hours)
- TAX 6845 Tax Planning and Consulting (3 credit hours)

#### Restricted Tax Electives - 6 credit hours

- TAX 6xxx Taxation of Flow-thru Entities (3 credit hours)
- TAX 6yyy Contemporary Tax Topics (3 credit hours)
- TAX 6zzz Mult-jurisdictional Taxation (3 credit hours)
- TAX 6946 Graduate Tax Internship (3 credit hours)

#### Restricted Electives - 9 credit hours

The three additional elective courses may be chosen from the list of restricted electives (below), the restricted tax electives (above), the required accounting courses & the restricted accounting electives (from the MSA program). They may also be selected from other graduate courses offered in the College of B usiness Administration or from outside the college however these must be selected with the student's area of interest in mind and with approval of the program advisor. The university limits program of study courses outside the college to six semester hours.

#### **Business Restricted Electives**

- BUL 5332 Advanced Business Law Topics (3 credit hours)
- ECO 6115 Economic Analysis of the Firm (3 credit hours)
- FIN 6406 Strategic Financial Management (3 credit hours)
- FIN 6425 Asset Management and Financial Decisions (3 credit hours)
- FIN 6475 Valuation of Small Businesses (3 credit hours)
- FIN 6515 Analysis of Investment Opportunities (3 credit hours)
- ISM 6227 Management of Telecommunications (3 credit hours)
- ISM 6305 Information Resources Management (3 credit hours)
- ISM 6367 Strategic Information Systems (3 credit hours)
- ISM 6485 Electronic Commerce (3 credit hours)
- ISM 6537 Quantitative Models for Business Decisions (3 credit hours)

Students must show clear evidence of proficiency in oral and written communication and computer usage.

Other courses require approval. ACG 6636, Advanced Auditing Topics, and BUL 5332, Advanced Business Law Topics is are recommended for candidates students planning to sit for the CPA examination.

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#### Comprehensive Examination

Satisfactory completion of an end-of-program comprehensive examination is required. The MST program does not require a thesis.

#### **Examination or Research Report**

Satisfactory completion of either the end-of-program oral comprehensive examination or a Research Report (TAX 6909) is required.

#### Admissions

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the <u>Admissions and Registration</u> section of the Graduate Catalog. Applicants must <u>apply online</u>. All requested materials must be submitted by the established deadline(s).

In addition to the general admission requirements, applicants to this program need the following:

- Official, competitive GRE or GMAT score taken within the last five years.
- 3.0 GPA in upper division accounting and tax courses.
- · Résumé.
- A score of at least 233 (computer-based test or paper-based equivalent) on the Test of English as a Foreign Language (TOEFL) is required for applicants from countries where English is not the official language or applicants with degrees from a non-U.S. accredited institution.

#### **Application Deadlines**

All application materials must be submitted by the appropriate deadline listed below.

Fall Priorit	y Fall Sprin	g Summer
Jan 15	Jun 15 Dec 1	Mar 15
has been exte	nded to July 15	th.
Jan 15	Jan 15 Jul 1	Nov 1
ts Jan 15	Mar 1 Sep 1	Dec 15
	Jan 15 has been exte	has been extended to July 15 Jan 15 Jan 15 Jul 1

# **FINANCIALS**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see <u>Financing Grad School</u>, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The <u>Financial Information</u> section of the Graduate Catalog is another key resource.

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### **Fellowships**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see <a href="Financing Grad School">Financing Grad School</a>, which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

### Master of Science in Engineering Track for Working Engineering Professionals School of Electrical Engineering and Computer Science University of Central Florida

The School of Electrical Engineering and Computer Science (EECS) is proposing to establish a track located under Electrical Engineering and Computer Engineering Master's programs, entitled the *MS in Engineering* track. The track is focused to fulfilling the professional development needs of working engineering professionals employed in industry and government organizations in Florida. The purpose of this program will be to provide engineering professionals the opportunity to advance their education and obtain a graduate degree while working full time and thus advancing their career path.

The proposed program is a joint effort between the EECS and the College of Business Administration (CBA). The total required credit hours for this degree would be 30 hours beyond the Bachelor's degree, out of which 18 credit hours consists of course work from EECS, 9 credit hours of courses are from CBA and 3 credit hours (one course) may be taken either from EECS or CBA.

The focus of this program will be to provide breadth of knowledge in electrical and computer engineering fields, in areas such as signal and image processing, communications, artificial intelligence, computer networks, software engineering and microelectronics circuit design & technology in addition to business plans, entrepreneurship and technology ventures courses provided by the College of Business Administration.

The graduate courses will be taught by full time regular UCF faculty and offered during weekends with face-to-face instruction. Additional selected EECS graduate courses will also be available online through the UCF FEEDS system. This program will be of 20 months duration with two graduate courses per semester. This program will be revenue neutral and thus will not require any new resources from the university by charging students or their employers an increased tuition, and then paying the normal tuition for the students to the university.

The target audience for this track program are electrical and computer engineers and other engineers working in industries along the I-4 corridor. These would be engineers with 0-8 years of experience who wish to obtain an MS in Engineering degree to enhance their career options and advancement.

The program will commence in fall 2009, thus allowing enough time for marketing and administrative setup. The classes may be offered on UCF main campus, the downtown UCF campus or suitable industrial locations. It is expected that there would initially be 15 students enrolled in this program.

This track would be an initial and intermediate step towards a joint Executive MS-MBA (EMS-MBA) degree program, to be developed in close cooperation between the School of EECS and the CBA over the next several years. It is expected this new program would be available within three years with an enrollment of 20-30 students per year.

#### **Faculty Resources:**

Faculty supporting the MS in Engineering track program will be drawn from the regular tenured faculty from EECS and UCF. Initially we have identified the following faculty who will actively participate in delivering courses and administering the program. The program faculty together with the Director and Graduate Coordinator of the School of EECS will form the executive and curriculum committee for this program.

#### From the School of EECS

- 1. Dr. Mainak Chatterjee
- 2. Dr. Hassan Foroosh
- 3. Dr. Michael Georgiopoulos
- 4. Dr. Michael Haralambous
- 5. Dr. Linwood Jones
- 6. Dr. Kalpathy Sundaram
- 7. Dr. Parveen Wahid
- 8. Dr. David Workman
- 9. Dr. Jiann Yuan

#### From the School of Business

- 10. Dr. Cameron M. Ford
- 11. Dr. Bruce R. Barringer
- 12. Dr. Daniel Tzabbar
- 13. Dr. Michael McDonald

In addition, a few select graduate courses taught by the EECS faculty on FEEDS during regular semester hours will also be available. The following EECS faculty has given permission to list their courses for this program.

- 1. Dr. Issa Batarseh
- 2. Dr. Ronald DeMara
- 3. Dr. Avelino Gonzalez
- 4. Dr. Wasfy Mikhael

Additional EECS faculty participation will be sought and encouraged as part of FEEDS graduate courses.

#### **From Other Units of UCF**

The College of Business Administration has agreed to provide courses for this program to be taught by its regular faculty. Dr. Thomas L. Keon, Dean and Dr. Jaishankar Ganesh, Associate Dean, and Dr. Foard Jones, Chair of the Management Department, all from CBA have agreed to provide the courses for the program, as shown in the curriculum.

#### **Funding Model**

This program will request a premium funding model, where the tuition that is charged will be \$900 per credit hour (this is three times the tuition paid by a typical graduate student at UCF).

The net income from these funds will go into an EECS account and a portion of this net income will be transferred to CBA which contributes 3/10 of the effort towards this MS professional degree (7 of the 10 courses will be taught by EECS faculty and 3 out of the 10 courses will be taught by Business faculty). The EECS net income will be used to pay for some of the operating costs of the School of EECS (the largest portion of this net income will be used to pay for OPS expenses to cover the TAs that support the grading and lab instruction of EECS courses).

We expect that our target audience will pay more for this program because

- 1. They will have personalized attention by EECS and CBA faculty in the face-to-face delivery of these courses at a day that is convenient to engineering professionals. Most of the industry professionals are finishing their MS degree as a part time student by participating in classes through the FEEDS system, thus having very limited interaction with the instructor of the class.
- 2. They will have the guarantee that they will complete the program in 20 months, which normally half of the time that an engineering professional needs to finish their MS degree as a part-time student
- 3. They will be completing their MS degree within a cohort of students that have similar needs and professional constraints (learning community), thus operating in an environment that will facilitate their learning.

The Industrial Engineering (IE) Department at UCF is charging \$35k per student for their proposed professional degree program. This is a 30 credit hours degree and it is offered over a time period of 16 months. This program starts in January and February 2009 and they have already recruited a cohort of 40 students. The courses are offered on-line and there is an 8 hour face-to-face every other Friday.

Also the School of Business is charging \$44k for their Executive MBA program (EMBA), and \$35k for their Professional MBA program (PMBA). The EMBA program has been running successfully since 1992, while the PMBA program has been running successfully for 3 years now. We believe that our cost of \$27k for our proposed Master of Science in Engineering professional degree (resembles more the EMBA program) is in line with what other professional degrees at UCF are charging.

Our program charges \$27,000 for the entire degree, and it offers a 6 hour face-to-face instruction, over a 20 month period. As it is evident from the above discussion there are already three professional programs (two business and one engineering) that are offered at UCF with a premium tuition. All of these programs have recruited and are recruiting students and the business professional programs have been doing that consistently for a number of years. Furthermore, Professor Vic Kapoor who has initiated this effort has spoken with a number of representatives from a variety of industries in our Advisory Board (please see the list of industries and industry representatives at the end of this document) and they have all supported the idea of this professional engineering degree with a premium tuition. Hence, we are very confident that if this MS Professionals in Engineering track is launched it will be able to attract a good number of industry professionals on a consistent basis.

The extra income from this track, after the expenses of running it, and the typical tuition fee is paid to UCF will be deposited to a special EECS account, managed by the EECS accountant (Charles Peters) and audited in a similar fashion as the other EECS accounts. Part of the net net income from this account will be used by the School of EECS to market this track to interested professionals. The remaining funds will be used by the School of EECS to pay for some of its operational expenses (e.g., OPS salaries).

#### **Assessment**

As with all academic programs at UCF, quality is a top priority. The focus on quality for the proposed program will not be an exception. Courses taught in this program will be integrated into the existing EECS program assessment and improvement processes. This process uses assessment data captured from each course delivered, from our Industrial Survey and from our Alumni Survey. The quality of this program will be the key to its success over time. This program will be annually reviewed by the university for the first three years.

#### **FUNDING MODEL & TUITION (Year 1 and Year 2 of the Program)**

We expect that, starting in the Fall 2009, we will have 15 students from the industry who will pursue this MS Professional Engineering track. Hence, our 1<sup>st</sup> cohort will be 15 students, starting in Fall 2009, our second cohort will be 15 students starting in Fall 2010, our 3<sup>rd</sup> cohort will be 15 students starting in Fall 2011, and so forth.

Each one of the students in the cohort will take 2 courses per semester, as a cohort, in each of 5 semesters (10 courses or 30 credit hours in a 20-month time period). Hence, each of the students in the cohort will complete 18 credit hours in the first year of the program and 12 credit hours in the second year of the program.

We will charge three times the tuition rate for each credit hour (that is \$900 per credit hour instead of the typical tuition rate of \$300 per credit hour). Furthermore, for each one of the students in the cohort we will purchase the books, lecture notes, lunch and garage parking for the face-to-face instruction on Saturdays (all the courses will be delivered face-to-face on Saturdays).

Based on the aforementioned expected student registration in year 1 of the program we expect to collect tuition for 18x15 = 270 credit hours (Cohort 1). Based on the aforementioned expected student registration we expect in year 2 of the program to collect tuition of 12x15 (=180) credit hours from Cohort 1 and 18 X15 (= 270) credit hours from Cohort 2; that is, we expect to collect tuition, in the second year of the program, corresponding to 450 credit hours. If every year of this program we register 15 new students, we expect after year 2 of the program to be collecting tuition for 450 credit hours (e.g., in years 3, 4, 5, 6, etc).

#### A1. Income of Year 1(Based on 15 students in Year 1)

Fee/Tuition charged to students per credit hour	\$900.00
Total fees per student for 18 credit hours	\$16,200.00
Total income for 15 students	\$243,000.00

#### **B2.** Expenses of Year 1 (Based on 15 students in Year 1)

Compensation for one UCF Faculty \$12,000.00 (per one graduate course; 0.24 FTE of a \$100,000 9-month base salary)

Cost for 6 UCF faculty in year 1 (= 6 faculty x \$12,000)	\$72,000.00
<b>Tuition/Fee</b> paid <b>to UCF</b> for 18 credit hours (\$300/credit hour for each one of the 15 students = \$300 x 18 x 15)	\$81,000.00
Marketing Costs:	\$15,000
<b>Other Costs:</b> Cost for books, class notes, lunch and parking etc. (approximately $$5,000$ per course offered = $6 \times $5,000$ )	\$30,000.00
<b>Total Expenses</b> (Faculty + Tuition Fee to UCF + Marketing/Other Costs)	198,000.00
C1. Summary of Income/Expenses of Year 1 (Based on 15 students in	
Total Income Total Expenses	\$243,000.00 \$198,000.00
Total Net Income in Year 1 (15 students in Year 1)	\$45,000.00
A2. Income of Year 2 (Based on 15 students of Year 1 and 15 Students	s of Year 2)
Fee/Tuition charged to students per credit hour Total fees per student of Year 1 (12 credit hours per student) Total fees per student of Year 2 (18 credit hours per student) Total income for 15 students of Year 1 and 15 students of Year 2	\$900.00 \$10,800.00 \$16,200.00 \$405,000.00
B2. Expenses of Year 2 (Based on 15 students of Year 1 and 15 Students)	nts of Year 2)
Compensation for one UCF Faculty (per one graduate course; 0.24 FTE of a \$100,000 9-month base salary)	\$12,000.00
<b>Cost</b> for 10 <b>UCF faculty</b> in year 2 (= 10 x \$12,000) (= 10 faculty x \$12,000)	\$120,000.00
<b>Tuition/Fee</b> paid to <b>UCF</b> for 30 credit hours (\$300/credit hour for each one of the 15 students = \$300 x 30 x 15)	\$135,000.00
Marketing Costs:	\$15,000
<b>Other Costs:</b> Cost for books, class notes, lunch and parking etc. $(\$5,000 \text{ per course offered} = 10 \text{ x } \$5,000)$	\$50,000.00
<b>Total Cost</b> (Faculty + UCF Tuition + Marketing/Other Costs)	\$320,000.00

Total Income	\$405,000.00
Total Expenses	\$320,000.00

#### **Total Net Income in Year 2**

\$85,0000.00

(15 students in Year 1 and 15 Students in Year 2)

**NOTE 1:** If this program recruits 15 new students every Fall of every year it will have an income/expense model as the one shown for year 2 above in years 3, 4, 5, etc. **NOTE 2:** The credit hours generated by UCF faculty will stay within their respective units (EECS or Business). **NOTE 3:** The net gain from the income will be used for the benefit of the School of EECS.

#### **INDUSTRIAL PARTNERSHIP**

This proposed program was informally discussed with the Industry Advisory Board of the School of Electrical Engineering and Computer Science. There is strong support for this program among industries in greater Orlando and along the I-4 corridors. It is expected that working engineering professionals, especially in Electrical and Computer Engineering fields will be candidates for this MS degree program. These companies are diverse in their engineering subfield and our degree program structure fits very well with their needs.

It was pointed out by our industry partners that availability of this program will allow them to attract new engineers to the Orlando area as an added benefit for their new employees. More and more working engineering professionals are seeking Master degrees that provide technology education together with business and entrepreneurship knowledge.

The names of interested companies and their respective contacts persons who are members of the Industry Advisory Board are listed below:

#### **ENGINEERING COMPANIES - Greater Orlando Area**

	Name of Company	Contact
1.	Advanced Power Electronics Corp. (APECOR)	Antoine (Tony) Khoury
2.	AT&T Solutions	Bryan Enochs
3.	Bell Technologies	Bill Drafts
4.	Boeing Company	Kevin Hoshstrasser
5.	Command and Control Technology	Rodney Davis
6.	Dynamics Research Corporation	William J. Gerber
7.	Harris Corporation	Gerald Becker
8.	Harris Corporation	Wes Covell
9.	Harris, GCSD	Griffith Gothard
10.	Honeywell	Matti Kert
11.	Honeywell Space System MS 831-1	Ronald M. Rasmussen

12.	Intersil Corp.	Paul Bernkopf
13.	Lockheed Martin	John Hubert
14.	Lockheed Martin	Tony Diberardino
15.	Lockheed Martin Information Systems	Dave E. Sutherland
16.	Lockheed Martin Information Systems	Tom Fusco
17.	Lockheed Martin Missiles and Fire Control	Abhijit Mahalanobis
18.	Lockheed Martin Missiles and Fire Control	Robert Muise
19.	Lockheed Marting Simulation Training Support	Chester N. Kennedy
20.	Motorola	Bob Barratt
21.	NASA-KSC	Robert Youngquist
22.	NASA-KSC	Christopher J. Iannello
23.	Northrop Grumman	Louis L. Fiore
24.	Oracle Corporation-Orlando	George Mezo
25.	Piezo Technology, Inc.	Paul Dechen
26.	Progress Energy Florida Inc.	Susan Mendez
27.	Raytheon E-Systems	Mo Khavarian
28.	Sawtec - A Division of Triquent	Ben Abbott
29.	Siemens Stromberg Carlson	Jeff McNiece
30.	Siemens Westinghouse Electric Power Systems	W.R. McCown
31.	SMP Electronics	Robert Gault
32.	Solar Technology, Inc.	Amy Henninger
33.	Texas Instruments, Inc.	Herb Gingold
34.	Xerox Corporation	Rick Okerholm

In addition, 42 people of various companies in the greater Orlando area have been contacted to seek their input on this proposed M.S. program. Overwhelmingly their response has been extremely positive. The companies would like to participate for this working Engineering Professionals degree program.

Continue to the next page.

#### ADMISSION AND CURRICULUM

MS in Engineering Track for Working Engineering Professional School of Electrical Engineering and Computer Science University of Central Florida

#### I. ADMISSIONS REQUIREMENTS

The admissions requirements for this program are as follows:

- 1. A bachelor's degree in Electrical or Computer Engineering or a related discipline with a minimum of 3.0 GPA overall or 3.0 GPA in the last 60 hours.
- 2. Two letters of recommendation including a letter from employer.
- 3. Resume
- 4. A limited number of students with an undergraduate GPA of less than 3.0 may be admitted on a provisional basis in some circumstances. Additional courses may be required to correct any course deficiencies.
- 5. Meet all the general admission requirements of the College of Graduate Studies

#### II. CURRICULUM - I

Total required hours for an MS in Engineering track is 30 credit hours minimum beyond the Bachelor's degree. Students must have an advisor appointed and an official programof study submitted before completing 12 credit hours of study.

The 30 credit hours requirement are as follows:

- 1. Eighteen (18) credit hours of graduate courses required from the MS in Engineering Degree program courses of the School of EECS.
- 2. Nine (9) credit hours of required graduate courses from the MS in Engineering Degree program courses of the College of Business Administration (CBA).
- 3. Three credit hours of an elective graduate course required from the School of EECS or from CBA or an Industrial project (EEL 6946: Practicum) under the direction of a designated graduate advisor.
- 4. Students are required to pass an appropriate culminating experience( portfolio requirements ) approved by the faculty advisor as currently applied to regular MS students in EECS.

#### III. LISTING OF GRADUATE COURSES FROM EECS AND CBA

1. Required 6 out of 9 courses from the following list. In addition one elective course may be taken from the following list. Two courses will be offered every semester with face to face instruction during the weekends (Saturday). These courses will also be available on line.

EEL 5513	Digital Signal Processing
EEL 5820	Image Processing/Computer Vision (CAP 5419)
EEL 6590	Advanced Topics in Communications
EEL 6876	Current Topics in Artificial Intelligence in Engineering Systems
EEL 6785	Computer Network Design
EEL 6887	Software Engineering Life-Cycle Control
EEE 5378	CMOS Analog and Digital Circuit Design
EEE 6338	Advanced Topics in Microelectronics
ECM 5135	Engineering Math Analysis I

2. Required graduate courses from College of Business Administration. The courses will be offered during the weekends (Saturday) for this program.

GEB 5xxx	Technological Entrepreneurship
GEB 6116	<b>Business Plan Formation</b>
MAN 6286	Strategic Innovation

3. The GPA graduation requirement would be the same as the existing graduate school of UCF. Students must meet all the course's prerequisites or obtain the instructor's consent before they can register for these courses.

#### SAMPLE PROGRAM OF STUDY

(20 Month Program) 5 Semesters – 10 Graduate Courses

#### #1 – FALL SEMESTER

- 1. ECM 5135 Engineering Math Analysis I --- Prof. Sundaram
- 2. GEB 5xxx Technological Entrepreneurship--- Prof. Ford or Barringer

#### #2 – SPRING SEMESTER

3. EEL 5513	Digital Signal Processing –Prof. Haralambous
4. EEL 6887	Software Engineering Life-Cycle Control Prof. Workman
	OR
	EEL 6785 Computer Network DesignProf. Chatterjee

#### #3 – SUMMER SEMESTER

5. GEB 6116	Business Plan FormationProf. Barringer or Tzabbar
6. EEE 6338	Advanced Topics in Microelectronics –Prof. Sundaram
	OR
	EEE 5378 CMOS Analog and Digital Circuit Design Prof. Yuan

#### #4 – FALL SEMESTER

7.	EEL 6590	Advanced Topics in CommunicationsProf. Jones
8.	EEL 5820	Image ProcessingProf. Foroosh

#### #5 – SPRING SEMESTER

9. EEL 6876	Current Topics in Artificial Intelligence Prof. Georgiopoulos
10. MAN 6286	Strategic Innovation Prof. M. McDonald

All courses offered during the weekend with fact to face instruction as well as on line using the FEEDS system.



# Department of Industrial Engineering and Management Systems

November 21, 2008

To:

Dr. Patricia Bishop, College of Graduate Studies

From:

Chuck Reilly, IEMS

Subj:

Administrative Tracks for Engineering Management Cohorts

IEMS will begin offering our MS Track in Engineering Management in a new integrated, lockstep manner for cohorts of engineering and technical professionals beginning next semester. The traditional offering of the program will continue on campus and through FEEDS as well. The requirements for admission and for graduation are identical for the new offering and for the traditional offering of the Engineering Management Track. However, applicants for the new program offering must also have at least 5 years of full-time experience in engineering or technical positions.

The response from industry to the new program format has been strong and positive. Applications have been received from employees at Siemens, NASA, Boeing, ASRC, and CNL. Applications are forthcoming from employees at Disney and Lockheed Martin. Harris has requested that our program be offered on-site in Melbourne for a cohort of Harris employees only.

The very favorable response from industry has brought new administrative challenges that were not fully anticipated. We now find ourselves juggling applications from two cohorts (one on campus and one off-campus, both with distinct timetables) and our traditional students.

Since we expect the demand for both formats of the Engineering Management Track will continue to expand, I wish to propose that five administrative tracks be established for the Industrial Engineering MS Program entitled:

- Executive Engr Mgt Track A
- Executive Engr Mgt Track B
- Executive Engr Mgt Track C
- Executive Engr Mgt Track D
- Executive Engr Mgt Track E

so that cohorts of students in our professional program may be better identified, served, and monitored. Students in the traditional program offering would continue to be tracked as they are now. The new administrative tracks would facilitate better management, communication, and assessment for each cohort.

Each cohort will be active in our program for 15-16 months. We anticipate that there could be as many as three cohorts active at different stages of the program at any time. In addition, we could be processing applications for two more planned cohorts at any time. Once one cohort, say, Cohort EEMT-A, completes the program, EEMT-A could then be used for the next cohort that is recruited. We would simply continue to cycle through the five administrative tracks as needed. If the five administrative tracks are not sufficient due to high demand, we would be pleased to request more tracks through another proposal similar to this one.

All prospective applicants for the new program offering are advised to contact the IEMS Graduate Coordinator before submitting an application. Upon contact with IEMS, each prospective applicant who appears to meet the qualifications for the program will be advised as to which track to mark (e.g., Executive Engr Mgt Track C) on his/her application.

IEMS is excited about the new offering of our very successful Engineering Management Track. We are especially pleased with the favorable response from industry. We look forward to working with the College of Graduate Studies to insure that the quality of our programs contributes to the excellent reputation of our university.

# Graduate Curriculum Committee Course Agenda 11-26-08 REVISED

# College of Arts & Humanities Special Topics

EUH 5937 Sect 01 CAH-History 3(3,0)

**ST:Colloquium in French History:** PR: Graduate standing or C.I. readings in selected topics in French History. May be used in the degree program a maximum of 3 times only when course content is different.

30 character abbreviation: **ST:Colloq in French History** *AGENDA NOTES: Course Addition also being proposed.* 

### College of Medicine Special Topics

Tabled – requested clarification on description.

MCB 5937 Sect 01 COM-Molecular & Microbiology 1(1,0)

**ST: Industrial Perspectives Seminar:** PR: Biotechnology M.S. students. Learning concepts of basic research and drug development in the pharmaceutical industry and a technical presentation.

30 character abbreviation: **ST: Industrial Persp Seminar** *AGENDA NOTES: Course Addition also being proposed.* 

#### PCB 5937 Sect 01 COM-Molecular & Microbiology 3(3,0)

**ST: Stem Cell Biology:** PR: Graduate Standing. Introduction to embryonic and adult stem cells, procedures to isolate them, principles and applications of stem cells in animal and human diseases.

30 character abbreviation: ST: Stem Cell Biology

AGENDA NOTES: Course Addition also being proposed.

# Health & Public Affairs Special Topics

HSA 6938 Sect 01 HPA-Health Mangt & Informatic 3(3,0)

**ST:Healthcare Management, Professional Skills Seminar:** PR: Graduate Standing. This seminar serves as a bridge between MSHSA course work and the world of practice, with a focus on developing career planning and professional skills.

30 character abbreviation: **ST:HIthcare Mgmt Prof Skills S** *AGENDA NOTES: Course Addition also being proposed.* 

# College of Business Adm Course Action Additions

ACG 6XXX BA-Accounting 3(3,0)

**Advanced Managerial Accounting:** PR: Graduate standing and ACG 3361. Advanced and current techniques for generation and use of accounting information in managerial decision-making.

30 character abbreviation: Adv Managerial Accounting

### TAX 6XXX BA-Accounting 3(3,0)

**Contemporary Tax Topics:** PR: Graduate standing and TAX 5015. Advanced study of current tax issues affecting both business and individual taxpayers, including tax policy, pending tax legislation and tax reform.

30 character abbreviation: Contemporary Tax Topics

#### TAX 6YYY BA-Accounting 3(3,0)

**Taxation of Flow-thru Entities:** PR: Graduate standing and TAX 5015. Federal taxation relating to operations, formation, distribution, retirements and liquidations of flow-thru entities such as partnerships, limited liability companies and S corporations.

30 character abbreviation: Taxation of Flow-thru Entities

#### TAX 6ZZZ BA-Accounting 3(3,0)

**Multi-jurisdictional Taxation:** PR: Graduate standing and TAX 4001. Study of tax issues involved when business enterprises operate in multiple taxing jurisdictions. Principles of both multi-state and international income taxation.

30 character abbreviation: Multi-jurisdictional Taxation

### College of Arts & Humanities Course Action Additions

Tabled – clarification on why course can be repeated 5 times.

DIG 6XXX CAH-Digital Media 3(3,0)

**Theory & Application of Interactive Performance:** PR: SFDM MFA or MA, or C.I. Study of theory and application of concepts for interactive digital media design using scenario construction, character development, and technology. May be used in the degree program a maximum of 5 times only when course content is different.

30 character abbreviation: Theory & App Interact Perf\_\_\_\_\_

AGENDA NOTES: Special Topic also being proposed.

#### Tabled – requested clarification on why course is repeatable 6 times.

FIL 5XXX CAH-Film Program 3(3,0)

**Graduate Seminar:** PR: Admission to MFA Film & Digital Media/Entrepreneurial Digital Cinema track, or C.I. Strategies for a successful graduate experience, and forum for modes of inquiry, film technique, production and distribution issues; and thesis defense preparation. Graded S/U. May be used in the degree program a maximum of 6 times.

30 character abbreviation: Graduate Seminar

#### AFH 5XXX CAH-History 3(3,0)

**Colloquium in African History:** PR: Graduate standing or C.I. Readings on selected topics in African History. May be used in the degree program a maximum of 3 times.

30 character abbreviation: **Colloquium in African History** 

#### EUH 5XXX CAH-History 3(3,0)

**Colloquium in French History:** PR: Graduate standing or C.I. readings in selected topics in French History. May be used in the degree program a maximum of 3 times.

30 character abbreviation: **Collog in French History** 

AGENDA NOTES: Special Topic also being proposed.

# **College of Medicine Course Action Additions**

Tabled – requested clarification on description.

MCB 5XXX COM-Molecular & Microbiology 1(1,0)

**Industrial Perspectives Seminar:** PR: Biotechnology MS Students. Learning concepts of basic research and drug development in the pharmaceutical industry and technical presentation.

30 character abbreviation: Industrial Persp Seminar

AGENDA NOTES: Special Topic also being proposed.

#### PCB 5XXX COM-Molecular & Microbiology 3(3,0)

**Stem Cell Biology:** PR: Graduate Standing. Introduction to embryonic and adult stem cells, procedures to isolate them, principles and applications of stem cells in animal and human diseases.

30 character abbreviation: **Stem Cell Biology** 

AGENDA NOTES: Special Topic also being proposed.

### College of Sciences Course Action Additions

Tabled – requested additional information regarding split classes.

AST 5XXX COS-Physics 3(3,0)

**Advanced Observational Astronomy:** PR: Graduate standing in the Physics department or in another department with CI. Experimental design and experimental techniques in astrophysics; spherical astronomy; physics of telescopes and of common astronomical detectors; error analysis.

30 character abbreviation: Adv Observational Astronomy

#### AST 5XXX COS-Physics 3(3,0)

Extrasolar Planets and Brown Dwarfs: PR: Admission to Physics M.S. or Physics Ph.D., or C.I.

Substellar-mass objects, their formation, evolution, dynamics, detection, and environments.

30 character abbreviation: Extsolar Planets & Brown Dwarf

#### Tabled – departments want to change to a 5000 level.

PHY 6XXXC COS-Physics 3(2,2)

**Theory and Computations of Molecular Wavefunctions:** PR: Undergraduate Quantum Mechanics or Physical Chemistry or C.I. Approximate method of solving electronic Schrodinger equation for molecular systems: Hartree-Fock and semiempirical methods, basis sets, multireference wavefunction theory methods, potential surfaces, electronic transitions.

30 character abbreviation: **Molecular Wavefunction Theory** 

AGENDA NOTES: Special Topic also being proposed.

# **Engineering & Computer Science Course Action Additions**

Tabled

COP 6XXX ECS-Computer Science 3(3,0)

**Network Optimization:** PR: Graduate standing. Recent advances in theory and computational techniques for optimal design and analysis of large networks for computers communications, and transportation including Internet and WWW complex networks

30 character abbreviation: **Network Optimization** 

# **College of Education Course Action Additions**

EME 6XXX ED-Ed Research, Tech & Lead 3(3,0)

**Interactive Online and Virtual Teaching Environments:** PR: EME 6507. Explores issues and trends in educational and human to computer interactions theories as applied to virtual and online participatory learning environments.

30 character abbreviation: Interact Online & Virtual Teac

#### EME 6XXX ED-Ed Research, Tech & Lead 3(3,0)

**Virtual Teaching and the Digital Educator:** PR: EME 6XXX Interactive Online Teaching. Explores practical applications of instructional theories related to virtual and online participatory learning environments.

30 character abbreviation: Virtual Teach & Dig Educator\_\_\_

### **Health & Public Affairs Course Action Additions**

HSA 6XXX HPA-Health Mangt & Informatic 3(3,0)

**Healthcare Management, Professional Skills Seminar:** This seminar serves as a bridge between MSHSA course work and the world of practice, with a focus on developing career planning and professional skills.

30 character abbreviation: HIthcare Mgmt Prof Skills Sem\_

AGENDA NOTES: Special Topic also being proposed.

#### SOW 6XXX HPA-Social Work 3(3,0)

Social Work Practice with Children from Birth to Age Five and their Families: PR: Graduate Standing. Social Work practice and treatment of children from birth to five years of age and their families.

30 character abbreviation: SW Pract w Children Birth to 5

# College of Business Adm Course Action Deletions

ACG 5206 BA-Accounting 3(3,0)

**Seminar in Financial Reporting:** PR: Acceptance for graduate study and all accounting foundation courses. An in-depth study of advanced financial reports.

#### **ACG 5346 BA-Accounting 3(3,0)**

**Advanced Managerial Accounting:** PR: Acceptance in the graduate program, or Accounting major or minor in term of graduation, and ACG 3361 with a grade of "C" or better and ECO 3411. Advanced and current techniques for generation and use of accounting information in managerial decision-making.

#### **ACG 5405 BA-Accounting 3(3,0)**

**Advanced Accounting Information Systems:** PR: Acceptance in the graduate program, or Accounting major or minor in term of graduation, and ACG 4401C. Design, analysis and evaluation of accounting information systems.

#### **ACG 5517 BA-Accounting** 3(3,0)

Financial Accounting and Auditing for Governmental and Nonprofit Organizations: PR: Acceptance in the graduate program, or Accounting major or minor in term of graduation, and ACG 3501 or consent of Graduate Program Advisor. Financial accounting and reporting for funds and

activities of governments and nonprofit organizations; financial audit of government and nonprofit organizations.

#### **ACG 5625 BA-Accounting 3(3,0)**

**Auditing and EDP:** PR: Acceptance for graduate study, ACG 4401C, and ACG 4651. An examination of auditing procedures followed when a company uses a computer to process financial records.

## **ACG 6356 BA-Accounting 3(3,0)**

**Seminar in Cost Accounting:** PR: ACG 5346, graduate standing, and all foundation courses for the accounting program or equivalents. A study of current selected topics in cost and management accounting.

#### **ACG** 6696 **BA-Accounting** 3(3,0)

**Seminar in Auditing:** PR: ACG 6636, graduate standing, and all foundation courses for the accounting program or equivalents. A study of current auditing topics.

### College of Business Adm Course Action Revisions

ACG 6415 Seminar in Accounting Information Systems 3(3,0)

#### **Advanced Accounting Information Systems**

PR: ACG 5405 PR: Graduate standing and ACG 6636. 4401C.

Study, audit, and control of enabling technologies affecting the accounting profession.

Evaluation of the overall risk to critical accounting and business processes posed by information technology.

30 character abbreviation: **Advanced AIS** 

# ACG 6519 Seminar in Governmental and Nonbusiness Accounting and Auditing 3(3,0) Governmental and Nonprofit Accounting

PR: Graduate standing and all foundation courses for the accounting program or equivalents. <u>ACG</u> 3501.

Examination of current issues and topics advanced topics in governmental and nonprofit accounting with emphasis on current and future developments. public policy issues and governmental budgeting 30 character abbreviation: **Govt and Nonprofit Accounting** 

# ACG 6636 Advanced Auditing Topics 3(3,0) Advanced Auditing

PR: Graduate standing and ACG 4651, 4651and STA 2023.

Special topics relative to the standards, practices, and procedures followed in the audit function. Includes statistical sampling, advanced computer systems, advanced applications, and reporting problems.

Advanced topics on independent, external auditing including internal control, evidence, reporting, and operational auditing

30 character abbreviation: **Advanced Auditing** 

# ACG 6685 Seminar in Fraud Auditing 3(3,0)

**Fraud Auditing** 

PR: PR: Gradutae standing and ACG 4651 and graudate standing. STA 2023.

Theory and techniques relating to fraud auditing and fraud examination

30 character abbreviation: Fraud Auditing

# ACG 6805 Seminar in Accounting Theory Accounting Theory 3(3,0)

PR: Graduate standing and all foundation courses for the accounting <del>program or equivalents.</del> <u>program.</u>

An examination of the evolution of contemporary accounting theory with emphasis on current and future developments.

30 character abbreviation: Accounting Theory

# ACG 6835 Seminar in Ethics and Professionalism in Accounting and Auditing 3(3,0) Ethics and Professionalism in Accounting and Auditing

PR: CBA Masters Program of Study Foundation Core Courses.

This course focuses on why and how theories of the professions and theories of individual ethical decision-making are applicable to the practice of accounting.

30 character abbreviation: Ethics & Prof in Acct & Audit

#### TAX 5015 Advanced Tax Topics

PR: Accounting major or minor, TAX 4001 or equivalent. PR: Graduate standing and TAX 4001.

Advanced tax issues affecting individuals and business entities, including business entities and their owners, with a primary focus on corporations and partnerships.

## **College of Sciences Course Action Revisions**

#### **PSY 6918** Directed Research

var

3(3,0)

PR: PSY 6217, EXP 6257, PSY 6935, ten additional graduate hours in PSY, PR: Graduate standing and C.I.

Directed Research involves supervised research activity in an agency setting. The student will devote 15 hours per week in the assigned setting to work on an applied research problem with joint supervision by faculty and agency staff. May be repeated for credit.

Directed Research. May be repeated for credit.

# **Engineering & Computer Science Course Action Revisions**

Tabled

**COP 5537 Network Optimization** 

3(3,0)

PR: Graduate Standing or C.I.

Recent advances in the theory and computational techniques for optimal design and analysis of large networks for computers, communications, transportation, web and other applications.

Techniques for modeling complex, interconnected systems as networks; optimization with graph theory; algorithms, data structures, and computational complexity; statistical methods for studying large, evolving networks.

# College of Education Course Action Revisions

EME 6507 Multimedia in the Classroom 3(3,0)

**Multimedia for Education and Training** 

#### PR: EME 6405 or C.I.

Emphasis on the elements and applications of multimedia programs for use by K-12 students and teachers. and technology in multiple instructional settings. Includes authoring, design, alternative delivery systems, hardware, software.

30 character abbreviation: Multimedia for Ed and Training

#### LAE 6366 Studies in Adolescent Literature 3(3,0)

#### **Advanced Studies in Adolescent Literature**

PR: LAE-4464 4463, LAE 5465, or C.I.

Analysis of major works in genre, examination of criticism, instructional strategies, and research in teaching adolescent literature.

# College of Optics & Photonics Course Action Revisions

Tabled – requested additional clarification regarding prerequisites on all Optics courses.

# OSE 5115 Interference and Diffraction 3(3,0) OSE 6115

PR: Graduate standing in Optics only, or senior standing, or C.I. C.I.

Interference of light, optical interferometry, Fraunhofer and Fresnel scalar diffraction, diffraction gratings, temporal coherence, spatial coherence, and partial coherence.

# OSE 6211 Fourier Optics 3(3,0)

PR: Graduate Standing and OSE 6115 or OSE 5041 or C.I.

Application of Fourier transform theory to optical systems design. Development of optical correlation techniques. Holographic techniques and applications

# OSE 6225 Radiation and Detection 3(3,0)

Radiometry and Detection

PR: C.I. PR: Graduate Standing and OSE 5203 or C.I.

Radiometry, Planck radiators, spectrometers, photon-counting statistics, detector noise analysis, detector mechanisms.

# OSE 5234 Applied Optics Laboratory 3(1,3) OSE 6234C

PR: Graduate Standing and OSE 5203 or C.I.

Laboratory Techniques for observing optical phenomena and quantitative experimental study of geometrical optics, optical interferometry, diffraction, and image processing.

# OSE 6347 Quantum Optics 3(3.0)

PR: PHY 5606, PHY 5346, OSE 5511. PR: Graduate standing and OSE 5312 or C.I.

Semiclassical treatment of light/matter interactions (quantized atomic states plus Maxwell's equations). Density matrix theory, coherent optical transients, pulse propagation.

# OSE 6457 Photonic Signal Processing 3(3,0)

PR: Graduate Standing and EEL 3470 or PHY 4324 or OSE 5041 or OSE 6111 or C.I.

Design, building and testing of photonic information processing systems using fiber-optics bulk polarization optics, acousto-optics, liquid crystals, micromirrors, and integrated optics.

# OSE 6536 Semiconductor Lasers 3(3,0)

PR: Optics Majors PR: Graduate standing and OSE 5312 or OSE 6525 or OSE 5414 or C.I. Light-matter interaction, thermal physics and solid state physics to understand, analyze, and engineer semiconductor lasers with different active region dimensionalities.