Graduate Curriculum Approval Form
Changes to Degree Programs

Degree *(i.e. M.A., Ph.D., etc.):*	M.S. I.T.
Name of Program *(e.g. Biology)*	Information Technology
Program CIP Code	11.0103
Name of Concentration(s) *(e.g. Botany)*	None
Proposed Effective Term *(e.g. Spring 2015)*	Spring 2017
Faculty Contact	Miguel A. Labrador
Email	mlabrador@usf.edu

APPROVALS	Name	Signature	Action	Date
Dept. Chair	Kenneth Christensen		☑ Approve ☐ Not approved ☐ Comments attached	10/18/16
School Committee Chair (if applicable)	Miguel A. Labrador		☒ Approve ☐ Not approved ☐ Comments attached	10/18/16
College Committee Chair	JOSE ZAYAS-CASTRO		☑ Approve ☐ Not approved ☐ Comments attached	10/27/16
College Dean/ Associate Dean			☐ Approve ☐ Not approved ☐ Comments attached	
Concurrence*	Dept: Chair:		☐ Not Applicable ☐ Concurs ☐ Doesn't concur ☐ Comments attached	
Grad Council	☐ Approve ☐ Not approved ☐ Tabled ☐ Comments	**Graduate Studies**	☐ Approve ☐ Disapprove	

1. **Summary of Changes – Select all that apply:**

   ☐ Change Admission Deadlines *(no other changes)*
   ☐ Change Admissions to "fall admissions only" *(no other changes)*
   ☐ Change from Regular to Direct Receipt Admissions *(no other changes)*
   ☐ Change from Direct Receipt to Regular Admission *(no other changes)*
   ☒ Change Admission Requirements
   ☒ Change Degree Program Requirements (including Concentration requirements)
   ☐ Update Course Numbers in Program Listing (i.e. from Selected Topics to Permanent Numbers) *(no other changes)*
   ☒ Other – please specify: Update courses and admission deadlines

2. Briefly - Why are these changes necessary or desired? All these changes are made to 1) align this MS program better to the other existing MS programs in the department; 2) improve the program in terms of offerings and options for the students; 3) Improve the program by aligning it better with the IT discipline, as per the Association of Computer Machinery (ACM) guidelines; 4) Make the program available to international students

3. **Attach the current Catalog Copy, with the requested revisions shown using Track Changes.** If the only change is to the Admission Deadline revised Catalog Copy is not required– just specify the change below. All other changes require Catalog Copy.

Once College has approved, scan and email this Approval Form, and the revised Catalog Copy in Word to Graduate Studies by the deadline posted online http://www.grad.usf.edu/graduate-council.php . For questions, contact cdh@usf.edu

INFORMATION TECHNOLOGY PROGRAM

Master of Science in Information Technology (M.S.I.T.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Domestic Applications:

Fall Semester:	February 15
Spring Semester:	October 15
Summer:	No admit

~~**International Students in the US:**~~

~~**Fall:**~~	~~February 15~~
~~**Spring:**~~	~~October 15~~
~~**Summer:**~~	~~No admit~~

International Students ~~outside the US~~:

Fall:	January 15
Spring:	September 15
Summer:	No admit

Minimum Total Hours:	30 (non-thesis)
Program Level:	Masters
CIP Code:	11.0103
Dept Code:	EIT
Program (Major/College):	ITC / EN
Approved:	Spring 2014

CONTACT INFORMATION

College:	Engineering
Department:	Computer Science and Engineering
Contact Information:	www.grad.usf.edu

PROGRAM INFORMATION

Program Description

The Department of Computer Science and Engineering offers a non-thesis option for the degree of Master of Science in Information Technology (M.S.I.T). The MSIT graduate will demonstrate strong information technology skills as well as problem solving skills needed for the deployment of technology solutions to achieve business and organizational goals. The degree is available in ~~an online~~ hybrid mode (online and face to face)~~mode~~, and provides students with a broad and integrative understanding of both technology and operational and strategic business and organizational applications. There is considerable freedom in the choice of the courses.

The breadth of subjects which are part of information technology together with the immense diversity of its applications, make it imperative that students in the Master's program maintain close contact with the Graduate Program Director, in order to achieve a coherent plan of study directed towards a specific goal. In particular, election of courses should only be made with prior consultation and approval of the Major Professor or the Graduate Program Director.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSIONS INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- The GRE is required for all MSIT applicants. For GRE tests taken after August 1, 2011, we require a minimum of 161 on the Quantitative portion (81 percentile) and a minimum of 150 (44 percentile) on the Verbal. The GRE will be waived for M.S. degree applicants with an undergraduate degree from an ABET-accredited United States university.
- Minimum grade point average (GPA) of "B" (or equivalent) for all coursework completed during the last two years of undergraduate program.
- Submission of TOEFL scores with an Internet-based score of 79 or higher for applicants from non-English speaking countries. If consideration of an assistantship is desired, the speaking score component of the TOEFL must be 26 or above. The TOEFL requirements for admission may be waived if the applicant meets one of the following conditions:
  - Has scored 500 or higher on the GRE Verbal Test, (Old Scores) or 153 with the New GRE scoring.
  - Has earned a college degree at a U.S. institution of higher learning.
  - Has earned a college degree from an institution whose language of instruction is English, (must be noted on the transcript).
  - Has scored 6.5 on International English Language Testing System, (IELTS).
- Three letters of recommendation.
- Statement of purpose.
- Bachelor' Degree in Information Technology, Computer Science, or a closely related field; or a bachelor's degree in another field, plus satisfactory completion of the courses listed below under "Undergraduate Prerequisites." For these applicants, the GRE will be waived if they show a minimum of 3 years of relevant and recent full-time professional experience in the U.S.
- Evidence of completion of a defined subset of the required core courses found in the University of South Florida's Bachelor of Science in Information Technology degree program or their equivalent (see "Undergraduate Prerequisites" below).

Undergraduate Prerequisites

To be successful in this program, an applicant should have certain base knowledge in the discipline demonstrated from undergraduate-level pre-requisite courses including:

COP2224/2931	Object-Oriented Programming
COP2510/2930	Programming Concepts
COP 3515	IT Program Design
CEN 4031	IT Software Engineering
COP 4703	IT Database Systems`
EEL 4854	IT Data Structures & Algorithms

The student should have taken these courses or their equivalent prior to beginning graduate coursework. All prerequisite courses are available online. ~~In some cases, applicants lacking some of the prerequisites may be conditionally admitted to the MSIT program; such students will be required to complete missing prerequisites within the first year of graduate study.~~

Professional experience in information technology is typically focused on specific projects or systems, and is not as broad as the treatment of a topic one receives in a course. Therefore, except in unusual circumstances, professional experience cannot substitute for any of the above prerequisite courses.

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours: **30 hours**

Core Requirements – ~~12~~ 9 hours

Successful completion of three core graduate-level courses is required. Students must make a grade of "B" or higher in these core courses:

~~CNT 6008 3Network Programming for IT~~
CIS 6930 3 Ethical Hacking for IT
ISM 6218 3 Advanced Database Administration
CEN6084~~GS 6425~~ 3 Advance~~d~~s in Object Oriented Programming
~~CAP 6940 3 IT Graduate Practicum~~

Elective Courses – ~~18~~21 hours

Select ~~six~~seven of the following courses, or other graduate course as approved by the Graduate Program Director:

CIS6930 3 Human Computer Interaction
CTS6716 3 Network Programming
CAP 6033 3 Information Security Architecture for IT
CIS6930 3 Practical Cybersecurity
CIS6930 3 Networks II
CIS6930 3 Introduction to Hadoop and Big Data
CIS6930 3 Software Development for Mobile Devices
~~CAP 6011 3 Multimedia & E-Commerce for IT~~
~~ENG 6025 3 RFID and NFC Technologies for IT~~
~~CAP 6033 3 Information Security Architecture for IT~~
ISM 6136 3 Data Mining
ISM 6137 3 Statistical Data Mining
ISM 6145 3 Seminar on Software Testing
ISM 6155 3 Enterprise Information Systems Management
ISM 6266 3 Software Architecture
CAP 6663 3 IT Robotics Applications
~~CAP 6671 3 IT Intelligent Agens~~
CGS 6842 3 IT & Systems for E-Business
CIS 6900 1-19 Independent Study
CIS 6946 0-3 Internships/Practicums/Clinical Practice

Note: ISM prefix courses are offered by the Department of Information Systems / Decision Sciences (College of Business).

Comprehensive Exam
The requirement for a comprehensive exam is satisfied by the successful completion of the ~~IT Graduate Practicum (CAP6940)~~ core courses as described below.

Thesis / Non-Thesis
~~This is a non-thesis program. However, the required three semester hour IT Graduate Practicum (CAP 6940) serves asa comprehensive measure of student competency in the discipline. This practicum, to be taken over one or two semesters, requires satisfactory completion, as determined by a faculty panel consisting of faculty members and/or industrial supervisor, of a major development effort on a real-world scenario, capped by a formal presentation for faculty and other students. Upon completion of the practicum project, the student will submit a formal project report, including all written deliverables. A formal oral presentation will be made to a panel of faculty members and the industrial supervisor, if applicable, who will provide their evaluation of the presentation and project report to the student's IT Graduate Practicum Faculty Advisor.~~

This is a non-thesis program that requires 30 credit hours, with 9 credit hours of core courses and 21 hours of electives. The successful completion of the core courses with a grade of "B" or higher serves as a comprehensive measure of student competency in the discipline. With prior permission from the Graduate Program Director, students can take a maximum of 3 hours of Independent Study or Internship, and up to twelve credit hours outside of the program, as follows: three credit hours from the MSCS/MSCE programs; three credit hours outside of the department (e.g., EE, IE, Math); three credit hours on business practice, project management, leadership, entrepreneurship, or similar; three credit hours on big data, data analytics, data mining, or similar.

Graduation Requirements:

Students must obtain a letter "B" or better in the core graduate courses and have a GPA of 3.00 or better. No grade below "C" will be accepted in a graduate program. If a student's average falls below 3.00, the student will be placed on probation.

COURSE DESCRIPTIONS

See http://ugs.usf.edu/course-inventory