



USF TAMPA

New Accelerated Program Development Form

Bachelor's to Master's

Accelerated Programs allow academically qualified students to complete an undergraduate Bachelor's degree and a graduate master's degree on an accelerated timeline, graduating sooner than in traditional programs.

Development Process:

- 1) Review the Accelerated Program Guidelines
- 2) Contact the Undergraduate Studies office or Graduate School for consultation
- 3) Complete this form and create the Catalog Copy
- 4) Submit through internal college processes for approval
- 5) Submit to Undergraduate Council for review and approval
- 6) Submit to Graduate School for Graduate Council approval

For questions, contact either Undergraduate Studies cynthiab@usf.edu or the Graduate School at cdh@usf.edu

APPROVALS	Approval of the Accelerated Degree Program: B.S.I.T. /M.S.I.T. in the program (Major) of Information Technology/Information Technology <i>(e.g. BS/MS in Biology)</i>			
	Name (Printed)	Signature	Action	Date
Faculty Name and Email	Miguel Labrador		Email: mlabrador@usf.edu	
Dept. Chair	Sudeep Sarkar		<input type="checkbox"/> Approve <input type="checkbox"/> Disapprove	
School Committee Chair or other required approval (if applicable)			<input type="checkbox"/> Approve <input type="checkbox"/> Disapprove	
College Committee Chair			<input type="checkbox"/> Approve <input type="checkbox"/> Disapprove	
College Dean/designee	Sanjukta Bhanja		<input type="checkbox"/> Approve <input type="checkbox"/> Disapprove	
Undergraduate Council (UGC) Chair/designee			<input type="checkbox"/> Approve <input type="checkbox"/> Disapprove	
Undergraduate Studies Dean/designee		UGC approved 8/28/17	<input type="checkbox"/> Approve <input type="checkbox"/> Disapprove	
Graduate Council (GC) Chair/designee			<input type="checkbox"/> Approve <input type="checkbox"/> Disapprove	
Graduate School Dean/designee			<input type="checkbox"/> Approve <input type="checkbox"/> Disapprove	

ACCELERATED PROGRAM INFORMATION	UNDERGRADUATE	GRADUATE
Degrees (e.g. B.A., B.S., M.A., M.S., M.U.R.P., etc.)	BS	MS
Program Names (a.k.a. "Major") (e.g. Biology, Math, etc.)	Information Technology	Information Technology
College(s)	Engineering	Engineering
Department(s) (if applicable)		
Proposed Effective Date for first admissions	Spring 2018	
Program Description (provide a brief description of the program. Do not include requirements, just what the program is about, highlights, etc.)	Students pursuing a B.S. in Information Technology will earn an M.S. in Information Technology in an accelerated manner by sharing 2 graduate courses (6 credit hours) taken as upper-level departmental (Technical) electives as part of B.S. program. The B.S.I.T. requires a total of 120 hours and the M.S.I.T. requires 30 hours. By sharing 6 credit hours, the total credit hours earned will be 144 hours.	
Is this a single pathway option (e.g. thesis only) or a multi-path option (e.g. thesis and non-thesis, etc.)?		Single-path as the M.S. degree is non-thesis only

<i>Curriculum Requirements</i>	
<p>GPA Requirements Programs must establish a minimum undergraduate GPA requirement of at least 3.33 overall and a minimum GPA requirement of 3.50 in the major, having taken a minimum of 15 hours in the undergraduate major, for students to be admitted to an accelerated program. Note what your Program requirements will be (may be more restrictive, but not less than what's noted above)</p> <p>Students must have a minimum of a "B" (3.00) in each graduate course. Consequences for not obtaining at least a "B" in each graduate course must be noted in the Departmental Accelerated Program requirements. Note what the Program's policy will be for students who earn less than a "B" in a graduate course (University Policy allows for courses with "C" or higher count toward graduate degree requirements, with an overall and program GPA requirement of 3.00)</p>	<p>GPA Requirements</p> <p>3.33 overall and 3.5 in the major</p> <p>Policy for where a student earns less than a "B" in a graduate Course:</p> <p><i>Students must maintain an overall and program requirement of 3.0 in the two graduate electives taken as part of accelerated program. In the case a grade lower than a "B" is obtained, the student must take another approved graduate elective and obtain a grade of "B" or higher.</i></p>
<p>List courses to be shared Typically, up to twelve (12) hours of graduate credit may be shared between the graduate and undergraduate degree. Although, with Graduate Council and Graduate School approval, programs may offer accelerated programs</p>	<p>B.S. in Information Technology (CIP 11.0103) requires 120 hours (a) total includes 24 credit hours of upper-level departmental (technical) electives, including up to 3 credits of internship.</p> <p>(b) student enters B.S. in major after completing the state mandated common core prerequisites - typically</p>

<p>with more shared credits.</p> <p>List the undergraduate courses that will be replaced by graduate courses</p> <p>Ex: BIO 2100, satisfied by BIO 6245 BIO 2200, satisfied by BIO 6600</p>	<p>the first semester of the second year.</p> <p>M.S. in Information Technology degree requires 30 hours. The total credit hours after sharing 2 courses (6 credit hours) is 144.</p> <p>Students can take 2 approved courses at the 6000-level that meet the upper-level Technical elective requirement.</p> <p>No required major or state mandated common core prerequisite undergraduate course are being replaced by any graduate courses.</p>
<p><i>Program of Study</i></p> <p>Programs must complete a Program of Study, develop a plan for academic advising, and tracking of students, including notation of potential financial aid impact.</p>	<p>Attach a representative example. Be certain it matches the degree requirements listed below.</p>

PROGRAM OF STUDY

An IT undergraduate major will pursue the normal semester plan sequence listed in the USF Undergraduate Catalog (included below), replacing six credit hours of upper-level departmental (technical) electives with six credit hours of graduate coursework.

Academic Advising: Once declared, a student interested in the Accelerated BSIT/MSIT Program will meet with an undergraduate IT Advisor and graduate IT Advisor. The student will complete the "Application Form" as provided by the Office of Graduate Studies.

At the time the application is completed, a plan of study template with shared courses will be completed and signed by both undergraduate and graduate advisors. With the help of the advisors, the student will identify two approved graduate courses to be shared that also meet the departmental (technical) upper-level elective requirement in the attached sample semester plan for the B.S.I.T. degree. Typically, these two electives will be taken in semesters 5 and 6.

Possible Impact on Financial Aid: The regular undergraduate financial aid is generally not affected. When the student is planning to graduate with the B.S., the financial aid can be affected after that. When completing the Application Form for the Accelerated Program, the applicant will be required to take their entire course/semester plan to the USF Financial Aid office and discuss the financial aid implications with them in detail.

Tracking of Students: During the B.S.I.T. program, accelerated student applicants will meet with both the undergraduate and graduate advisors each semester to ensure successful completion of the accelerated program requirements. When applying for their B.S.I.T. graduation, students will complete the USF Accelerated Program Progression Form, and enter the IT Master's Program and be advised by the graduate advisor for the remaining degree requirements (see attached).

The accelerated program will be a motivating bridge for high performing students. First, the sharing of two courses (six credit hours) will mean that a student can potentially finish the MSIT degree in one academic year, decreasing the time to degree. Second, the program will reduce tuition dollars for the student. Third, the program will increase the number of local and US students into the MSIT program, including minorities and students from under-represented groups in Computer Science and Engineering, a critical aspect to maintain the lead of the nation in productivity and innovation. Finally, the quality of the graduate program will be enhanced by attracting high performing students only.

Undergraduate Degree Requirements:

B.S. Information Technology / M.S. Information Technology

Students pursuing a B.S. in Information Technology will earn an M.S. in Information Technology in an accelerated manner by sharing two graduate courses (six credit hours) taken as upper-level Technical electives as part of B.S. program. The B.S. requires a total of 120 hours and the M.S. requires 30 hours. By sharing six credit hours, the total credit hours earned will be 144 hours.

Target Students and Expected Outcomes

Academically high achieving undergraduate students in the B.S.I.T. program with high overall and major GPA will be targeted for the accelerated program. Expected outcomes are the increase in MSIT degrees granted, increase in graduate SCH, decrease time to graduation, decrease tuition dollars for the student, increase in the number of US students receiving MSIT degrees, including minorities and students from under-represented groups in Computer Science and Engineering, close the national gap of IT graduates needed to satisfy the market demand and enhance of the quality of the graduate program by addition of academically accomplished students.

Description and Requirements

For admission to the program a student must:

1. Have completed 15 hours in the undergraduate major
2. Have a minimum 3.33 GPA overall; and
3. Have a minimum undergraduate 3.50 GPA in the major.

Undergraduate Degree Requirements for the B.S. Information Technology (120 Credit Hours)

All Information Technology major students will complete the following:

- All State Mandated Common Course Prerequisites
- All Entrance Requirements for the Information Technology Program
- Departmental Policies
- GPA Requirements
- Residency Requirement
- Summer Enrollment Requirement
- Foundations of Knowledge and Learning (FKL) Core Curriculum (General Education) Coursework 36 credit hours of FKL coursework, to include meeting the State's General Education Core Requirement
- FKL Capstone Learning Experience
- ENC 3246 Communication for Engineers (Writing Intensive Course)

Information Technology (ITC)

Degree: Bachelor of Science in Information Technology | Total Hours: 120 | CIP Code: 11.0103

(Track 1 of 4)

Recommended Semester Plan:

Semester 1		Credit Hours
<input type="checkbox"/>	EGN 3000 Foundations of Engineering	0
<input type="checkbox"/>	ENC 1101 Composition I	3
<input type="checkbox"/>	CAGC FKL/Gen Ed Human and Cultural Diversity in a Global Context	3
<input type="checkbox"/>	CGS 1540 Introduction to Databases for Information Technology	3
<input type="checkbox"/>	MAC 1147 Precalculus Algebra and Trigonometry	4
		Semester Hours: 13
Semester 2		Credit Hours
<input type="checkbox"/>	MAD 2104 Discrete Mathematics	3
<input type="checkbox"/>	ENC 1102 Composition II	3
<input type="checkbox"/>	PHY 2020 Conceptual Physics	3
<input type="checkbox"/>	COP 2512 Programming Fundamentals for Information Technology	3
<input type="checkbox"/>	EGN 3000L Foundations of Engineering Lab	1
		Semester Hours: 13
Summer		Credit Hours
Semester 3		Credit Hours
<input type="checkbox"/>	STA 2023 Introductory Statistics I	3
<input type="checkbox"/>	CAFA FKL/Gen Ed Fine Arts	3

Semester 3		Credit Hours
<input type="checkbox"/>	COP 2513 Object Oriented Programming for Information Technology	3
<input type="checkbox"/>	ECO 2013 Economic Principles (Macroeconomics)	3
<input type="checkbox"/>	CGS 3303 IT Concepts	3
		Semester Hours: 15

Semester 4		Credit Hours
<input type="checkbox"/>	CIS 3213 Foundations of Cyber Security	3
<input type="checkbox"/>	PSY 2012 Introduction to Psychological Science	3
<input type="checkbox"/>	INR 3033 International Political Cultures	3
<input type="checkbox"/>	SGEH General Education Core Humanities	3
		Semester Hours: 12

Summer		Credit Hours
<input type="checkbox"/>	COP 3515 Program Design for Information Technology	3
<input type="checkbox"/>	CAHU FKL/Gen Ed Humanities (with HHCP)	3
<input type="checkbox"/>	General Elective	3
		Semester Hours: 9

Semester 5		Credit Hours
<input type="checkbox"/>	COP 4538 Data Structures and Algorithms for IT	3
<input type="checkbox"/>	CEN 3722 Human Computer Interfaces for Information Technology	3
<input type="checkbox"/>	CIS 3433 System Integration and Architecture for IT	3
<input type="checkbox"/>	General Elective	3
<input type="checkbox"/>	CANL FKL/Gen Ed Natural Sciences (Life Science)	3
		Semester Hours: 15

Semester 6		Credit Hours
<input type="checkbox"/>	CGS 3853 Web Systems for IT	3
<input type="checkbox"/>	CNT 4104 Computer Information Networks for Information Technology	3
<input type="checkbox"/>	CNT 4104L Information Networks Laboratory for Information Technology	1
<input type="checkbox"/>	ENC 3246 Communication for Engineers	3
<input type="checkbox"/>	IT Departmental Elective	3
<input type="checkbox"/>	IT Departmental Elective	3
		Semester Hours: 16

Summer		Credit Hours
<input type="checkbox"/>	Internship/Co-op Participation	0
		Semester Hours: 0

Semester 7 **Credit Hours**

Semester 7		Credit Hours
<input type="checkbox"/>	CIS 4083 Cloud Computing for IT	3
<input type="checkbox"/>	COP 4703 Database Systems for Information Technology	3
<input type="checkbox"/>	IT Departmental Elective	3
<input type="checkbox"/>	IT Departmental Elective	3
<input type="checkbox"/>	CNT 4603 System Admin and Maintenance for IT	3

Semester Hours: 15

Semester 8		Credit Hours
<input type="checkbox"/>	CIS 4253 Ethics for Information Technology	3
<input type="checkbox"/>	CIS 4935 Senior Project in Information Technology	3
<input type="checkbox"/>	IT Departmental Elective	3
<input type="checkbox"/>	IT Departmental Elective	3

Semester Hours: 12

Undergraduate Catalog Copy for the Major:

Total major hours: 102

Major Core (84 Hours)

Math and Science (16 credit hours)

- STA 2023 Introductory Statistics I
- MAC 1147 Precalculus Algebra and Trigonometry
- MAD 2104 Discrete Math
- PHY 2020 Conceptual Physics
- FKL Core Curriculum Natural Sciences Elective

Breadth (9 credit hours)

- PSY 2012 Introduction to Psychological Science
- ECO 2013 Economics Principles (Macroeconomics)
- INR 3033 International Political Cultures

Basic Engineering (1 credit hour)

- EGN 3000 Foundations of Engineering
- EGN 3000L Foundations of Engineering Lab

Specialization (49 credit hours)

- CEN 3722 Human Computer Interfaces for Information Technology
- CGS 1540 Introduction to Databases for Information Technology
- CGS 3303 Information Technology Concepts
- CGS 3853 Web Systems for Information Technology
- CIS 3213 Foundations of Cyber Security
- CIS 3433 System Architecture and Integration for Information Technology
- CIS 4083 Cloud Computer for Information Technology
- CIS 4253 Ethics for Information Technology
- CIS 4935 Senior Project in Information Technology (CPST)
- CNT 4104 Computer Information Networks for Information Technology
- CNT 4104L Computer Information Networks Laboratory for Information Technology
- CNT 4603 System Administration and Maintenance for Information Technology
- COP 2512 Programming Fundamentals for Information Technology
- COP 2513 Object Oriented Programming for Information Technology
- COP 3515 Advanced Program Design for Information Technology
- COP 4538 Data Structures and Algorithms for Information Technology
- COP 4703 Advanced Database Systems for Information Technology

Composition and Technical Writing (9 credit hours)

- ENC 1101 Composition I
- ENC 1102 Composition II

- ENC 3246 Communication for Engineers (WRIN)

Major Electives (18 Hours)

Students choose 18 credit hours of approved IT departmental electives from the following list:

- CEN 4360 Mobile Applications Development for IT
- CGS 3845 Electronic Commerce
- CIS 4204 Ethical Hacking
- CIS 4361 Information Assurance and Security Management for IT
- CIS 4412 Resource Management for IT
- CNT 4403 Network Security and Firewalls
- COP 3353 User-level introduction to Linux for IT
- COP 4564 Application Maintenance and Debugging for IT
- COP 4883 Java Programming for IT
- COP 4947 Industry Internship for IT
- CTS 4337 Linux Workstations System Administration for IT

Shared B.S./M.S. Requirements

The shared courses are listed below:

- Two (2) approved courses at the 6000-level to replace six credit hours of the undergraduate upper-level departmental (technical) electives, including Industry Internship.

Graduate Degree Requirements for Accelerated M.S. in Information Technology

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 or for those applicants who show a minimum of 3 years of relevant and recent full-time professional experience in the U.S.
- 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."
- 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).

Graduate Degree Requirements:

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours: 30 hours

Core Requirements – 9 hours

CIS 6930	3	Selected Topics: Ethical Hacking for IT
ISM 6218	3	Advanced Database Administration
CEN 6084	3	Advances in Object Oriented Programming for Information Technology

Elective Courses – 21 hours

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

CIS 6930	3	Selected Topics: Human Computer Interaction
CTS 6716	3	Network Programming for Information Technology
CIS 6930	3	Selected Topics: Cloud Computing for Information Technology
CIS 6930	3	Selected Topics: Practical Cybersecurity
CIS 6930	3	Selected Topics: Networks II
CIS 6930	3	Selected Topics: Introduction to Hadoop and Big Data
CIS 6930	3	Selected Topics: Software Development for Mobile Devices
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
CGS 6842	3	IT & Systems for E-Business
CIS 6900	1-19	Independent Study
CIS 6946	0-3	Internships/Practicums/Clinical Practice

With prior permission from the Graduate Director, students can take a maximum of 3 hours of Independent Study or Internship and up to twelve credit hours outside of the major, as follows: three credit hours from the MSCS/MSCE majors; 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.

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 core courses with a grade of "B" or higher.

Thesis / Non-Thesis

This is a non-thesis program.

Graduation Requirements

Students must obtain a letter "B" or better in the core graduate courses, have a GPA of 3.00 or better, and pass the comprehensive exam. 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.

Timeline and benchmarks:

- To be considered for acceptance into the Accelerated B.S.I.T./M.S.I.T. program, students must have completed a minimum of 15 credit hours in the Information Technology undergraduate major.
- Students must have a minimum undergraduate GPA of 3.33 overall, and a minimum GPA of 3.50 in the major.
- Following completion of a minimum of 15 hours in the undergraduate major, students may be considered for acceptance into the accelerated program through faculty nomination or student self-nomination, via submission of an *Accelerated Program Application Form*. Both B.S.I.T. and M.S.I.T. majors will review the applications and approve the nominations. All applications require the approval of USF's Office of Graduate Studies, the College of Engineering's Graduate Program, and the Department of Computer Science and Engineering Programs.
- To be promoted to graduate status, students must meet all admission requirements of the M.S.I.T. program.
- Students must earn a minimum of a "B" (3.00) in all shared graduate courses. Failure to earn at least a "B" in a shared graduate course will result in academic review by the graduate program. Failure to maintain good standing as a graduate student will result in academic probation, according to the procedures of the USF Office of Graduate Studies.
- A comprehensive plan of study to complete the accelerated B.S.I.T./M.S.I.T. program will be developed with the guidance of undergraduate and graduate advisors.