

USF Polytechnic

UNIVERSITY OF SOUTH FLORIDA - 2009/2010 UNDERGRADUATE CATALOG

USF Polytechnic is the western entry to the Florida High Tech Corridor

Located 30 miles east of Tampa and 40 miles west of Orlando, just 10 miles south of the intersection of I-4 and Polk Parkway, the USF Polytechnic anchors the western entry to the emerging Florida High Tech Corridor (FHTC). FHTC is attracting high tech industry in Information Technology, Medical Technologies, Microelectronics, Modeling, Simulation and Training, and Optics and Photonics. USF Polytechnic, a leader in the field of Information Technology, brings to the FHTC and you, the benefits of business partnerships, internships, research, and leadership in economic and workforce development.

USF Polytechnic offers upper division (junior and senior) undergraduate and Master's degree programs and post-baccalaureate certificate programs. With a focus on the needs of a 21st century workforce, USF Polytechnic embraces opportunities to develop new academic and certificate programs responsive to the needs of the emerging Florida High Tech Corridor and area hospitals, businesses, and community agencies. Full and part-time students have opportunities for daytime, evening, and weekend classes delivered in on-campus, off-campus, and online learning environments.

Established in 1986, USF Polytechnic serves more than 3,000 students annually. USF Polytechnic is dedicated to Excellence, Innovation, and Collaboration. Our faculty are nationally recognized scholars and practitioners who provide an active, engaging, and learner-centered academic environment. Our programs integrate research, inquiry, new technologies, and interdisciplinary perspectives to advance knowledge, promote creative enterprise, and develop highly skilled and globally competitive graduates. Our partnerships with communities, community agencies, schools, businesses, and industry enhance the welfare, vitality, and quality of living in the region and state.

Education within your reach

USF Polytechnic partners with local community colleges including Polk Community College (PCC), South Florida Community College (SFCC), Valencia Community College - Osceola (VCC-Osceola), and Hillsborough Community College - Plant City (HCC-Plant City) to provide a 2+2 educational opportunity allowing you to obtain your first two years (A.A. or A.S.) from the local community college and then complete your baccalaureate degree through USF Polytechnic.

USF Polytechnic also collaborates with school districts, businesses and industry, and community agencies to provide degree programs and post-baccalaureate certificates in on-site settings.

USF Polytechnic is expanding its facilities. The PCC/USF Joint Use Facility provides 125,000 square feet of state-of-the-art teaching, research, and service facilities. Nearly 50,000 square feet are dedicated for use by USF Polytechnic for high-tech classrooms, technology and research labs, faculty and staff offices, student services, and student study areas.

A Master Plan for a new primary campus site has been approved. The new USF Polytechnic campus will be built at the junction of I-4 and the Polk Parkway and will have the potential at full build-out for providing services to 12,000 students on a 4-year and Master's degree campus.

List of Majors and Programs

Undergraduate Programs

Bachelor of Science in Applied Science A.S. to B.S.A.S.

- General Business
- Criminal Justice
- Early Childhood Development
- Industrial Operations
- Information Technology

Bachelor of General Studies (B.G.S.)

- Aging Studies
- Business
- Information Technology
- Women's Studies

Criminology (B.A.)

Elementary Education (B.S.)

General Business Administration (B.S.)

Information Technology (B.S.I.T.)

Interdisciplinary Social Science (B.A.)

Marketing (B.S.)

Psychology (B.A.)

Graduate Degrees

Business Administration (M.B.A.)
 Counselor Education (M.A.)
 Educational Leadership (M.Ed.)
 Reading Education (M.A.)

Undergraduate Academic Minor

Communication
 Criminology
 Gerontology
 Information Technology Technical
 Information Technology General
 Professional and Technical Writing
 Sociology
 Women's Studies

Certificate Programs

Information Technology Management (15 credit hours) - post-baccalaureate certificate
 Information Technology Professional (30 credit hours) - post-baccalaureate certificate
 Information Technology Information Security - undergraduate certificate
 Information Technology Web Development and Design - undergraduate certificate

Engineering Programs, Junior-Level Core courses

Campus Characteristics

2007-2008 Enrollment (Unduplicated/Funding Campus)
 3,448 students

Student-Faculty Ratio

22:1

Average Age

30.5 years

Gender

Female 64.6%
 Male 35.4%

Full-Time vs. Part-Time

Full-time 36.2%
 Part-time 63.8%

Geographic Diversity

Students come from Polk, Highlands, Hardee, Eastern Hillsborough counties and other surrounding counties within a 100 mile radius of USF Lakeland.

Points of Pride

- Faculty who are nationally recognized scholars and practitioners
- Programs that integrate research, inquiry, new technologies, and interdisciplinary perspectives
- Innovative A.S. to B.S.A.S. programs
- Department of Information Technology
- Community partnerships
- New PCC/USF Joint-Use Technology Center
- New I-4 and Polk Parkway campus plan
- Alfred Rath Senior Education Center

• BACHELOR OF GENERAL STUDIES DEGREE (BGS)

USF's Bachelor of General Studies Degree (BGS) is a customized, interdisciplinary degree that provides students with options to choose an appropriate academic program that fits their educational and professional goals. The BGS program will provide mid-career adult students with the opportunity to integrate completion of the baccalaureate degree into their established lifestyle.

To be eligible for admission to the BGS program, students must first be admitted to USF. After admission to USF, students must:

- Have completed at least 60 credit hours at a regionally accredited college or university
- Have been out of school for approximately three (3) or more years
- Complete a screened application process conducted by a program advisor
- Be in good standing with former educational institutions
- Demonstrate ability and desire to complete the degree (personal statement, letters of recommendation)

BGS applications include three (3) letters of recommendation, a Personal Goal Statement, Resume (1-2 pages). These documents should be sent directly to:

Bachelor of General Studies Program
Metro Initiatives/USF4YOU
University of South Florida
4202 E. Fowler Avenue, SVC 1072
Tampa, FL 33620

Upon acceptance to the BGS, students will complete the necessary coursework to reach 120 credit hours. The 120-hour requirement includes completing the following:

- USF General Education (GE) requirements or approved equivalents – unless GE credits were completed at another Florida institution
- USF residency requirements (at least 30 hours earned at USF)
- One or two disciplinary concentrations selected by the student and approved by the advisor
- All USF exit requirements
- All CLAST and foreign language requirements
- A minimum of 48 semester hours of upper-level work, (courses numbered 3000 and above)

BGS students will take an active role in creating their academic programs. Rather than choosing a traditional major, BGS students can choose from a number of established plans of study or can create their own individualized plan of study. BGS students complete 18-24 credits (core courses and electives) within selected concentrations:

Aging Studies
Business
Information Technology
Women's Studies

All BGS students complete a capstone experience identified by the home department of each concentration. Each department may develop specific capstone courses or prefer to enroll their students in a BGS capstone course developed by the faculty members on the BGS advisory committee.

• **BACHELOR OF SCIENCE IN APPLIED SCIENCE (APS)**

Workforce projections for the 21st century indicate that there will be an ongoing need for people with specific skills and abilities to fill Florida's growing number of specialized, scientific, industrial and technological positions. Florida's two-year colleges offer many exceptional programs that meet these demands through their Associate in Science (A.S.) degrees. Although these applied and technical degrees provide excellent preparation for students seeking jobs that require specific knowledge, skill and ability, they have not generally transferred very efficiently into four-year Bachelor's degree programs. The Bachelor of Science in Applied Science (**BSAS**) has been developed by USF under certain provisions of Florida legislation to remove constraints from the transfer process, recognize past course work as transferable credit to the university, and afford exciting new opportunities for A.S. degree holders to pursue and acquire a distinctive USF Bachelor's degree.

The BSAS program is a "capstone" degree offering A.S. degree holders an efficient pathway to a Bachelor's degree. It provides Florida A.S. transfer students with a broad educational experience and a unique academic area of concentration. The various concentrations allow students to somewhat tailor their degree to match their academic interests and career ambitions. To achieve this end, BSAS students will plan their program in ongoing consultation with an academic advisor who will help students design their individualized program of study.

Requirements for the Major in Bachelor of Science in Applied Science

Recommended Prerequisites (State Mandated Common Prerequisites)

This degree program is available ONLY to Associate in Science (A.S.) graduates from a Florida public community/junior college.

There are no State Mandated Common Prerequisites for this degree program.

Students wishing to transfer to USF must complete the A.S. degree with an overall “C” average in all college-level courses accepted for transfer credit to USF. Students are encouraged to complete at least 18 credit hours of the General Education Requirements as part of their A.S. degree, and it is highly recommended that students select Gordon Rule communication and computation courses to fulfill these requirements while at the community college.

The A.S. degree will transfer as a complete “60 credit hour package” to USF (applicable only to the BSAS program). Technical coursework will transfer as a 42 credit hour technical block. The remaining 18 credit hours of General Education coursework from the A.S. will be matched against USF requirements to determine which courses remain outstanding for fulfillment of the university’s 36 credit hour General Education Requirement.

Please be aware of the immunization, foreign language, and continuous enrollment policies of the university.

Community College Block Credit (Transferred from A.S.)	42
Community College General Education (Transferred from A.S.)	18
USF General Education	18
USF Exit Courses	6
USF Area of Concentration*	18
USF Electives**	<u>15</u>
Total BSAS Credit Hours	120

*Note that all BSAS Areas of Concentration are at least 18 credit hours (some require 21 credit hours).

** Elective credit hours may vary slightly, but will not require students to exceed a total of 120 credit hours for completion of the BSAS degree.

Within the 60 credit hours of USF/upper-level coursework beyond the A.S., BSAS students will complete:

- a minimum of 48 credit hours of upper-level (3000-4999) courses
- at least 30 hours of the last 60 credit hours at USF
- CLAST requirements
- foreign language requirement (can be satisfied by two years of high school foreign language credit or 8 college credit hours in a single foreign language)

Requirements for Areas of Concentration

BSAS – Criminal Justice Concentration (ACJ) consists of 18 credit hours:

Only available at Lakeland or Sarasota campus

CCJ 3610 Theories of Criminal Behavior	(3)
CCJ 4934 Seminar in Criminology (XMW)	(3)
PLUS FOUR OF THE FOLLOWING:	
CJL 3110 Substantive Criminal Law	(3)
CJE 4114 American Law Enforcement Systems	(3)
CCJ 4450 Criminal Justice Administration	(3)
CJC 4010 American Correctional Systems	(3)
CJE 4010 The Juvenile Justice System	(3)
CCJ 3621 Patterns of Criminal Behavior	(3)
CJC 4166 Alternatives to Incarceration	(3)
CJL 4410 Criminal Rights & Procedures	(3)
CJT 4100 Criminal Investigations	(3)
CCJ 4933 Selected Topics in Criminology	(3)
CCJ 4604 Abnormal Behavior & Criminality	(3)
CCJ 3701 Research Methods in Criminal Justice I	(3)

BSAS - General Business Concentration (ABU) consists of 18 credit hours:

ACG 3074 Managerial Accounting for Non-Business Majors	(3)
ECO 1000 Basic Economics	(3)
FIN 3403 Principles of Finance	(3)
MAN 3025 Principles of Management	(3)
MAN 4802 Entrepreneurship & Small Business Management	(3)

OR

GEB 4890 Strategic Management & Decision Making(3)	
MAR 3023 Basic Marketing	(3)

BSAS – Early Childhood Development Concentration (AEC) consists of 18 credit hours:

Only available at Lakeland or Sarasota campus

EDF 4111 Child Growth & Learning	(3)
EDG 4909 Young Children w/ Special Needs	(3)
HSC 3301 Health, Safety, Nutrition & Motor Skills	(3)
EEC 4303 Creative & Affective Experiences	(3)
EEC 4408 Child, Family & Teacher Relations	(3)
PAD 4419 Personnel & Supervision	(3)

BSAS – Industrial Operations Concentration (AIO) consists of 18 credit hours:

Only available through Lakeland campus

PREREQUISITES - 9 HOURS:

MAC 1105 College Algebra	(3)
STA 2023 Introductory Statistics	(3)
COP 2510 Programming Concepts	(3)

REQUIRED COURSES:

ETG 3612 Operations Management	(3)
MAN 3025 Management Principles	(3)
ACG 3074 Accounting for Non-Business Majors	(3)
EIN 3241 Work Design and Ergonomics I	(3)
EIN 4242 Work Design and Ergonomics II	(3)
ETI 4116 Industrial Quality Control	(3)

*Please see academic advisor for required special topics course.

BSAS - Information Technology (ATC) consists of 18 credit hours:

Available at the Polytechnic, Sarasota-Manatee, and Tampa campuses.

The BSAS-IT concentration consists of 19 to 21 credit hours. Students will formulate a program of study for the concentration, which will be evaluated and approved by the department on the basis of how well it fits their stated educational and career goals. The concentration will typically consist of two required courses and four additional courses selected from those offered by the department or other departments.

Required Courses:

- CGS 3303 IT Concepts (3 credit hours)
- EEL 4782 & EEL 4782L IT Networks and Lab (4 credit hours)

Select four additional courses:

Students select four courses that support their educational or career goals. These could aim toward a specialization in IT (such as application development, web design, networking, information security, etc.) or a particular industry segment (health care, education, manufacturing, logistics, etc.).

Please note that selection of some courses may require that the student must fulfill additional prerequisite requirements.

- **CRIMINOLOGY (CCJ)**

The major in Criminology provides students with in-depth exposure to the total criminal justice system including law enforcement, detention, the judiciary, corrections, juvenile justice and probation and parole. The program concentrates on achieving balance in the above aspects of the system from the perspective of the criminal justice professional, the offender, and society. The program provides a solid background in the theory, issues and methodology comprising Criminology.

The objective of the undergraduate program in Criminology is to develop a sound educational basis either for graduate work or for professional training in one or more of the specialized areas comprising the modern urban criminal justice system.

Recommended Prerequisites (State Mandated Common Prerequisites):

Students wishing to transfer to USF should complete the A.A. degree at the community college. Some courses required for the major may also meet General Education Requirements thereby transferring maximum hours to the university. If students transfer with fewer than 60 semester hours of acceptable credit, the students must meet the university's entering freshman requirements including ACT or SAT test scores, GPA, and course requirements.

There are no State Mandated Common Prerequisites for this degree program.

Transfer students should be aware that by university regulation they are obligated to establish academic residency by completing the equivalent of one academic year (30 semester hours) in “on-campus” courses. All undergraduate transfer students electing Criminology as their major will be required, moreover, to take a minimum of 30 credit hours in major coursework at the University of South Florida. These residency requirements are designed to ensure that transfer students who subsequently receive their baccalaureate degree from the University of South Florida with a major in Criminology will have been exposed to the same body of knowledge in their major as those students who complete all or a major portion of their coursework at the University of South Florida. The transfer student should also be aware of the immunization, foreign language, and continuous enrollment policies of the university.

Requirements for the Major in Criminology

A minimum of 36 semester hours is required of all undergraduate majors in Criminology including:

1. Each of the following core courses:
 CCJ 3024 (3)* CCJ 3610 (3)*
 CCJ 3701 (3)** CCJ 4934 (3)
2. 24 semester hours of electives within the major.

*Students who plan to attend graduate school should also take CCJ 4700 as one of their electives within the major. Students must take CCJ 3610 prior to enrollment in CCJ 3701.

**Students who plan to continue on to graduate school should also take CCJ 4700 as one of their electives within the major.

NOTE: No more than six (6) hours of CCJ 4900, CCJ 4910 or any combination of the two will be accepted toward the minimum number of hours in the major. A student may take an unlimited amount of CCJ 4933 or 4934 as long as they vary in title.

Any student who receives a grade of “D” or lower in more than one USF CCJ course will be automatically barred from continuing as a Criminology major.

• **ELEMENTARY EDUCATION**

Requirements for the B.S. Degree (BEE): In addition to the courses listed below, students must complete “Preliminary Requirements for Students entering Teacher Education Programs.”

Prerequisites (State Mandated Common Prerequisites): These prerequisites must be met by transfer students as well as USF students. A grade of “C-” is the minimum acceptable grade.

- EDF X005 Introduction to Education (3)
- EDF X085/EDGX071* Teaching Diverse Populations (3)
- EME X040 Introduction to Educational Technology (3)

*In addition to EDF X085/EDG X071, a minimum of 6 semester hours with an international or diversity focus is required. Eligible courses will be determined by the community college or university where the student is currently earning the Associate in Arts or baccalaureate degree. Foreign language courses may be used to meet this requirement.

Completion of General Education requirements: General education courses will be determined by the community college or university where the student currently is earning the Associate in Arts or baccalaureate degree, and will be published in the institution’s existing catalog or in the Community College Counseling Manual. (For USF, see “Academic Policies and Procedures – General Education Requirements” section of the catalog.)

Students are advised that the Elementary Education specialization will require an enrollment of more than the traditional four semesters of the junior and senior years in order to complete the program specialization courses and the required sequence of internship.

The order in which these courses are to be taken is designated in the program of study.

Professional Education (32-33 credit hours):

EDF 3122 Learning and the Developing Child	3
EDF 3604 Social Foundations of Education (Exit)	3
EDF 4430 Measurement for Teachers	3
EEX 4070 Integrating Exceptional Students in the Regular Classroom	2-3
TSL 4080 Curriculum and Pedagogy of ESOL	3
TSL 4081 Literacy Development in English Language Learners	3

TSL 4251 Applying Linguistics to ESOL Teaching and Testing	3
EDE 4940 Internship	10-12

Specialization (41 credit hours):

EDE 4301 Classroom Management, School Safety, Ethics, Law, and Elementary Methods	3
EDE 4941 Childhood Education Internship Level I	3
HLP 4722 Health and Physical Education for the Child	2
EDE 4942 Childhood Education Internship Level II	6
LAE 4314 Teaching Writing in the Elementary School	3
LAE 4414 Teaching Literature in the Elementary Schools (Exit)	3
MAE 4310 Teaching Elementary School Mathematics I	3
MAE 4326 Teaching Elementary School Mathematics II	3
RED 4310 Reading and Learning to Read	3
RED 4511 Linking Literacy Assessment to Instruction	3
SCE 4310 Teaching Elementary School Science	3
SSE 4313 Teaching Elementary (K-6) Social Studies	3
EDE 4223 Creative Experiences for the Child	3

- **GENERAL BUSINESS (GBA)**

The General Business major provides students with substantial preparation in two functional areas of business and prepares them for positions in a business world that is increasingly interdisciplinary and values cross-functional abilities.

Requirements for the B.A./B.S. Degree: Within the 120-semester-hours program as listed in the General Requirement section, students must complete two minors from the following business disciplines: accounting, finance, management, or marketing. A minimum of 24 hours of upper-level course work must be earned with a GPA of at least 2.0 in each minor. The requirements for each minor are listed with the description of the major.* Minors applied to the General Business major will be referred to as concentrations. Concentrations used as part of the General Business Major will not also be subsequently listed as independent minors on the transcript.

***One exception:** A minor/concentration in economics must consist of four upper level economics courses, excluding QMB 3200.

Please note: Courses used to satisfy a major in accounting, economics, finance, information systems management or marketing may not be used to satisfy either minor or economics concentration requirement for the GBA major. Courses used in the minors or concentrations for the GBA major cannot be used for a major.

Bachelor of Science in Information Technology

The Mission of the Information Technology Program is to provide high quality educational opportunities for students interested in pursuing careers in the broad range of fields that support our computer/information-based society and economy. Additionally to utilize the resources of the program to provide service to society; and to emphasize to students the need for lifelong learning, ethical conduct and an understanding of the diverse social context in which Information Technology is practiced. The program is offered at the Polytechnic, Sarasota-Manatee, and Tampa Campuses.

Specifically the program aspires to:

1. Lead to the advancement of Information Technology through nationally recognized education at the undergraduate level, as well as technology transfer to regional industries and businesses;
2. Prepare students for full and ethical participation in a diverse society and encourage lifelong learning;
3. Educate undergraduates in the best practices of the field as well as integrate the latest research and practices into the curriculum;
4. Emphasize the development of problem solving and communication skills as an integral component of the educational process and the later practice of the discipline;
5. Provide quality learning experiences through highly interactive techniques of course delivery that will include the use of electronic support equipment as well as newly developing distance learning technologies.

Objectives

The Information Technology program graduates will:

1. Have the requisite education and skills to be immediately employable as professionals in our computer/information-based society
2. Be prepared to enter into graduate studies in a number of related graduate programs
3. Be ethical and responsible members of their profession and society as a whole
4. Be well founded in the variety of sub-disciplines that comprise Information Technology which include basic principles of computation, mathematics, science and engineering.

The Information Technology (IT) program is designed to bridge the gap between computer science and management information systems. The emphasis of the program is on knowledge-based computer and information technology, traditional computer science concepts, as well as more practical topics including programming, applications, and networking, systems administration and the management of a variety of computing environments (in an era of rapidly changing technology). IT students will take coursework in computer organization, human-computer interface, data structures, operating systems, networking, databases, and software engineering. Electives can include such application areas as: advanced database, advanced networking, web page design and administration, and e-commerce as well as a variety of other related areas. Through a broad based set of electives, IT students will be able to tailor their program to satisfy individual preferences and strengths.

Students completing the IT program will qualify for a broad range of positions in computer-intensive businesses and industry such as: programmer analyst, systems analyst, database administrator, network administrator, computer resource manager, systems development manager, and information technology management, to name a few.

In addition to the University's graduation requirements, the program has the following policies:

1. Mandatory academic advising of each student each term,
2. Exit interviews as a graduation requirement for all students, and
3. Only grades of C and above in IT courses can be used to fulfill graduation requirements.

Curriculum in Information Technology

Prerequisites (State Mandated Common Prerequisites) for Students Transferring from a Community College: If a student wishes to transfer without an A.A. degree and has fewer than 60 semester hours of acceptable credit, the student must meet the university's entering freshman requirements including ACT or SAT test scores, GPA, and course requirements.

Students should complete the following **prerequisite courses** listed below at the lower level prior to entering the University. If these courses are not taken at the community college, they must be completed before the degree is granted. Unless stated otherwise, a grade of "C" is the minimum acceptable grade.

Some courses required for the major may also meet General Education Requirements thereby transferring maximum hours to the university.

PSY XXXX	Any Psychology Course
STA X023	Statistics
ECO X013	Economics (Macroeconomics)
CGS XXXX	Any Database Course
COP 2XXX	Programming Concepts Course
COP 2XXX	Any Object-Oriented Computer Programming Course
MAC XXXX	Pre-Calculus Course
PHY XXXX	Any Physics Course
M** XXXX	Discrete Mathematics Course

Please be aware of the immunization, foreign language, continuous enrollment policies of the university, and qualitative standards required.

- **INTERDISCIPLINARY SOCIAL SCIENCES (ISS)**

The ISS program is designed to provide an interdisciplinary integration of the social sciences for students who are interested in a broad educational experience. ISS offers a wide choice of courses, and an opportunity to design a quality program geared toward individual needs and interests. Students plan their program in ongoing consultation with the advisor who approves each individual curriculum contract.

Specific requirements for a B.A. degree in Interdisciplinary Social Sciences (ISS) are outlined below:

Recommended Prerequisites (State Mandated Common Prerequisites)

Students wishing to transfer to USF should complete the A.A. degree at the community college. Some courses required for the major may also meet General Education Requirements thereby transferring maximum hours to the university. If students transfer with fewer than 60 semester hours of acceptable credit, the students must meet the university's entering freshman requirements including ACT or SAT test scores, GPA, and course requirements.

Please be aware of the immunization, foreign language, and continuous enrollment policies of the university.

There are no State Mandated Common Prerequisites for the ISS degree program.

Community college courses may be counted toward the ISS degree. These could include General Education credits, Gordon Rule classes, and courses such as the examples listed below. A grade of "C" is the minimum acceptable grade.

AFA 2000 Introduction to the Black Experience [In Africa and Its Diaspora]	(3)
AMH 2010 American History I	(3)
AMH 2020 American History II	(3)
ANT 2000 Introduction to Anthropology	(3)
ECO 2013 Economic Principles (Macroeconomics)	(3)
ECO 2023 Economic Principles (Microeconomics)	(3)
GEA 2000 World Regional Geography	(4)
POS 2041 American National Government	(3)
POS 2112 State and Local Government	(3)
SYG 2000 Introduction to Sociology	(3)
WST X015 Introduction to Women's Studies	(3)

Interdisciplinary Core Courses

Two of these courses, an introductory course (3010) and the senior seminar (4935), introduce and employ the interdisciplinary social science perspective. These courses involve students in the study of human life and experience; the various concepts, theories and methods used in the social sciences; and apply them to contemporary issues and questions. Social Science Statistics (STA 2122) is the third core course required for majors in Interdisciplinary Social Sciences.

Coursework required for Interdisciplinary Social Sciences Majors

- Required core courses for the major are:

ISS 3010 Introduction to Social Sciences	(3)
ISS 4935 Seminar in the Social Sciences - <i>MW</i>	(3)
STA 2122 Social Sciences Statistics - <i>6A QM</i>	(3)
- The ISS student chooses between two cognate areas and completes twelve hours in each. In addition, three special electives emphasize cultural diversity.
- Students should work out a program of study at the onset of their junior year, particularly before too many courses are completed in the College of Arts and Sciences. **No student should assume that courses already completed will automatically count toward the ISS degree.**
- The completion of 42 approved hours of course work from the College of Arts and Sciences (CAS), with a minimum of 30 hours at the 3000 or above level.
- Students must maintain a minimum grade point average of 2.0 in ISS to graduate.
- ISS majors must satisfy two semesters of a foreign language in order to graduate.
- Other personal curricula may be tailored for those highly motivated students, with a minimum grade point average of 3.2, developed with the approval of the advisor. This course of study will be directed toward the special educational interests of these students. An in-depth Honors Research Paper will be required of students taking this option.

No transfer courses with grades of "D" are acceptable for credit in the ISS major.

COGNATE AREAS - Students select two areas and take 12 hours in each. Cognates must be selected from the areas of study listed below:

Africana Studies, American Studies, Anthropology, Communication, Communication Sciences and Disorders, Criminology, Economics, Environmental Science and Policy, Gerontology, Geography, History, Humanities, International Studies, Interpreter Training, Latin American Studies, Library and Information Science, Multidisciplinary Behavioral Healthcare, Political Science, Psychology, Public Administration, Religious Studies, Social Work, Sociology, Woman's Studies.

• PSYCHOLOGY (PSY)

Psychology involves the scientific study of behavior and mental processes. Because of this focus, psychology is relevant to many other areas of study both inside and outside of the social and behavioral sciences. The undergraduate program in Psychology offers the student a well-rounded liberal arts education. In addition, the program provides excellent training for qualified students who wish to pursue graduate work in such disciplines as Clinical, Cognitive and Neural Sciences or Industrial Psychology, Education, Gerontology, Counseling, Management, Medicine, Law, and other human service programs. The undergraduate major emphasizes the breadth of psychology while allowing the student some electives to pursue in depth a particular aspect of the field. Interested undergraduate majors may apply for admission to the Honors Program. The graduate faculty of the Psychology Department are divided into three broad program areas: (a) Clinical, (b) Cognition, Neuroscience and Social and (c) Industrial/Organizational. Each of these program areas offers Ph.D.-level training as well as instruction at the undergraduate level.

Requirements for the Major in Psychology

Prerequisites (State Mandated Common Prerequisites)

Students wishing to transfer to USF should complete the A.A. degree at the community college. Some courses required for the major may also meet General Education Requirements thereby transferring maximum hours to the university. If students transfer without an A.A. degree and have fewer than 60 semester hours of acceptable credit, the students must meet the university's entering freshman requirements including ACT or SAT test scores, GPA, and course requirements.

The transfer student should also be aware of the immunization, foreign language, and continuous enrollment policies of the university.

Students should complete the following state-approved **prerequisite courses** at the lower level prior to entering the university. If these courses are not taken at the community college, they must be completed before the degree is granted. Unless stated otherwise, a grade of "C" is the minimum acceptable grade. To be admitted to the major in Psychology, a student must complete all of the course prerequisites.

- PSY X012 Introduction to Psychological Science. **and** any other lower level Psychology course within the Psychology inventory
- STAXXXX Any level Statistics course (X000 - X099)
- BSCXXXX Any level General Biology course (**or** BSC X200-X209, **or** ZOO X010)

Once admitted to the major, continuation in the major requires successful completion of PSY 2012 Introduction to Psychological Science, PSY 3204 Psychological Statistics (or another approved Statistics course), and PSY 3213 Research Methods in Psychology, with at least a grade of C (not C-) and have a grade point average for those three courses of 2.5 or higher.

Majors must complete at least 34 semester hours in the field. A minimum grade of "C-" or better must be attained in each course in the major, except for PSY 3204 (or other qualifying statistics course) and PSY 3213, where a C or better is required. Although a C- is allowable for individual courses, a major GPA of 2.0 minimum is required for graduation. All majors must complete:

Requirements for Psychology Majors

1. 2000/3000 Level Requirement (6 semester hours)
 - PSY 2012 Introduction to Psychological Science (if not already taken at a community college)
 - PSY 3204 Psychological Statistics
2. Methods Course Requirement (7 semester hours)
 - PSY 3213 Research Methods in Psychology and one of the following:
 - CLP 4433 Tests and Measures
 - PSY 4205 Experimental Design and Analysis
 or another methods course approved by the undergraduate advisor in Psychology.
3. 4000 Level Requirement (21 semester hours)
 - Courses in categories 1 and 2 must be completed before any 4000 level courses are attempted. Successful completion of 7 additional Psychology courses numbered at the 4000 level selected as follows: At least two courses from each of the two groups below:
 - Group I*
 - EXP 4204C Perception
 - EXP 4404 Psychology of Learning
 - PSB 4004C Physiological Psychology
 - EXP 4304 Motivation
 - EXP 4680C Cognitive Psychology
 - Group II*
 - CLP 4143 Abnormal Psychology
 - INP 4004 Industrial Psychology
 - SOP 4004 Social Psychology
 - DEP 4053 Developmental Psychology
 - PPE 4003 Personality

and any 3 additional courses numbered at the upper-level.

Note: No more than a total of 3 hours of the following courses may count toward the major:

- PSY 4913 Directed Study
- PSY 4970 Honors Thesis.
- PSY 4932 may not count toward the major.

Statistics and Biological Science are required. Otherwise, students majoring in psychology are encouraged to complete a varied undergraduate program.

A prerequisite for all 4000-level courses is a grade of "C" or better in both PSY 3204 (or other qualifying statistics course) and PSY 3213, not "C-". For students minoring in Psychology, a grade of "C" or better in any college-level statistics course will substitute for PSY 3213.

For students majoring in Interdisciplinary Social Sciences, any college-level statistics course with a grade of "C" or better may serve as prerequisite for 4000 level courses in Psychology but does not substitute for the PSY 3213 requirement.

• MARKETING (MKT)

Marketing is a dynamic field with many dimensions, including product selection and planning, product distribution, pricing and promotion. Marketing poses many challenges and yields generous rewards for those who meet these challenges. Marketing operations are carried out domestically and internationally in virtually all business organizations that offer a product or service. Many marketing concepts are applicable to the operations of non-profit organizations such as governmental, educational, and health care institutions, as well as charitable and political campaigns.

Marketing operations provide the most visible links between the firm or institution and its many publics. Marketing deals with people who are constantly changing in their needs, wants, and desires; and coupled with these changing tastes is a fiercely competitive environment sustained by all the resources of a rapidly evolving technology. These forces lead to much of the challenge and to much of the dynamic nature of marketing.

The Marketing program at USF prepares students for initial entry and management positions in many areas of marketing with a curriculum that is concerned with:

1. Understanding how to attract and retain customers;
2. Having the ability to find and analyze information;
3. Being able to design, collect, and analyze marketing information to be used in managerial decision making;
4. Using electronic and traditional media to create satisfied loyal customers;
5. Having personal communication skills that businesses demand;
6. Being capable of writing a winning marketing plan;
7. Understanding and being able to apply the latest marketing concepts, including marketing automation.

Requirements for the B.A./B.S. Degree: Within the 120-semester-hour program listed in the General Requirements section, students must complete a minimum of 18 hours in marketing beyond MAR 3023. At least 12 hours must be taken in residence at USF-Polytechnic. A grade of "C" or higher (not C-) is required in all Marketing Classes including Basic Marketing (MAR 3023) plus a 2.0 GPA in all major course work at USF and an overall 2.0 GPA including transfer work.

Required Marketing Courses:

MAR 3823 Marketing Management	3
MAR 3613 Marketing Research	3
MAR 3400 Professional Selling	3
MAR 4333 Electronic/Promotion Management	3
MAR 4824 Marketing Management Problems	3
Additional upper-level marketing courses	<u>3-9</u>
Total	18-24

It is strongly recommended that marketing majors take an internship course as part of their plan of study. It is also recommended that courses in information technology, finance, management, and international business be included in the business electives.

Undergraduate students in the College of Business not majoring in Marketing can greatly enhance their attractiveness to employers by taking a minor in Marketing or taking selected courses from the Marketing curriculum to broaden their backgrounds. Marketing is particularly complementary for College of Business students majoring in Information Systems, Finance, and Management.

ACADEMIC MINORS

Requirements for the Minor in Communication

The minor in Communication is available to students pursuing any other major at USF. The minor in Communication requires a minimum of 18 hours of departmental coursework, including:

SPC 2600 Public Speaking

COM 2000 Introduction to Communication

The other 12 hours may be selected from among departmental offerings and must include a minimum of 6 hours at the 3000-level or higher. A grade of "C-minus" is required for a departmental course to count toward a Communication minor. Courses may not be taken S/U where a grade option exists.

Requirements for the Minor in Criminology

A minimum of 18 hours is required of all Undergraduate minors in Criminology including:

1. The following two required courses:

CCJ 3024 (3) CCJ 3610 (3)

2. An additional 12 semester hours of electives within Criminology.

Please note! Because all courses are programmed for majors only, each semester students will be required to obtain approval for all criminology courses with the exception of CCJ 3024. This can be accomplished by emailing the USF student ID number and reference numbers to the advising office. Upon receipt of the email, students will be registered for courses. A minimum of 9 semester hours must be completed at USF. Students minoring in Criminology are subject to the Department's "2 D" Rule.

Requirements for the Minor in Gerontology

An undergraduate minor is available for students interested in pursuing gerontology careers in conjunction with any undergraduate major, but it should be particularly beneficial to persons majoring in such disciplines as anthropology, business, communication sciences and disorders, government and international affairs, nursing, psychology, health care, social work, and sociology. Requirements for the minor in Gerontology total 15 hours of the following courses:

Required:

GEY 2000 Introduction to Gerontology (3)

Required: Choose 2 of the following 3 courses

GEY 3601 Physical Changes and Aging (3)

GEY 3625 Sociocultural Aspects of Aging (3)

GEY 4612 Psychology of Aging (3)

Electives:

Six additional GEY credit hours

INFORMATION TECHNOLOGY (IT) MINOR PROGRAMS

There are two IT Minor options available.

The ***IT General Minor*** (15 semester hours) is aimed at providing a good understanding of the concepts underlying Information Technology while enabling the student to choose four elective topics in which to specialize. These elective encompass a wide spectrum of topics such as programming, networking and web design, Human Computer Interface and Security Management. The outcome of this program is to build a solid culture of IT technologies and disciplines from scratch.

The ***IT Technical Minor*** (24 semester hours) enforces basic scientific pre-requisites and requires interested students to attend three core IT courses meant to provide them with the conceptual and technical basis necessary to successfully dwell in more advanced topics. The elective part of the IT Technical Minor is composed of two electives to be chosen from a larger set of courses including Data Base Systems and Operating System. Successful students are expected to develop a conceptual understanding of the IT field while developing programming skills they may apply to strengthen their major.

IT GENERAL MINOR

Required Course:

CGS 3303 IT Concepts 3

Electives (choose four from list):

CDA 3101 Computer Organization for IT 3

CEN 3722 Human Computer Interfaces for IT 3

CIS 4361 IT Security Management 3

CIS 4412 IT Resource Management 3

COP 3515 Program Design for IT 3

EEL 4782 Computer Information Networks for IT 3

EEL 4782L Information Networks Laboratory for IT 1

EEL 4854 Data Structures and Algorithms for IT 3

ETG 4931 Special Topics in Technology I 1-5

ETG 4932 Special Topics in Technology II 1-5

IT TECHNICAL MINOR

Prerequisite Courses:

COP 2510 Programming Concepts 3

COT 3100 Introduction to Discrete Structures 3

PHY XXXX Physics 3

Required Courses:

CGS 3303 IT Concepts 3

COP 3515 Program Design for IT 3

EEL 4854 Data Structures and Algorithms for IT 3

Electives (choose four from list):

CDA 3101 Computer Organization for IT 3

CEN 3722 Human Computer Interfaces for IT 3

CEN 4031 Software Engineering Concepts for IT 3

CIS 4361 IT Security Management 3

CIS 4412 IT Resource Management	3
COP 4610 Operating Systems for IT	3
COP 4610L Operating Systems Lab for IT	1
COP 4703 Database Systems for IT	3
EEL 4782 Computer Information Networks for IT	3
EEL 4782L Information Networks Laboratory for IT	1
ETG 4931 Special Topics in Technology I	1-5
ETG 4932 Special Topics in Technology II	1-5

Requirements for the Minor in English

Professional and Technical Writing Minor (15 hours)

- ENC 2210 Technical Writing
ENC 4260 Advanced Technical Writing
Any two of the following courses:
ENC 3250 Professional Writing
ENC 3310 Expository Writing
ENC 4311 Advanced Composition
ENC 4931 Selected Topics in Professional and Technical Writing
- One AML or ENL course listed in OPTION I

Requirements for the Minor in Sociology

A minor in Sociology consists of a minimum of 18 credit hours in Sociology, at least 12 of which must be USF credits. Minors must take SYG 2000 Introduction to Sociology and SYA 3110 Classical Theory. No more than three hours of SYA 4910 "Individual Research" may count toward the 18 hour minimum. Only courses in which a grade of "C-" or better is attained will count toward the minimum hours.

While students do not declare a Sociology minor until application for graduation, they are encouraged to make an appointment with the Sociology Department Undergraduate Advisor if they wish to discuss which Sociology electives offered each semester would best meet their educational and career goals.

POST-BACCALAUREATE CERTIFICATE PROGRAMS IN INFORMATION TECHNOLOGY (IT)

There are two Post-Baccalaureate Information Technology (IT) Certificates available. Both Certificates are designed for students who hold bachelor's degrees in fields other than IT, but do not seek either a master's degree or a complete undergraduate degree in IT.

The **IT Management Certificate** (15 semester hours) is designed to provide the student an application-oriented managerial background in IT. The typical student pursuing this certificate is not looking to change careers, but rather looking to enhance their technical abilities in their existing job. A four year Bachelor's degree plus some prerequisites are required to enter the IT Management Certificate Program.

The **IT Professional Certificate** (30 semester hours) is designed to help students change careers, i.e. begin a new career as an IT Professional. All classes (15 hours) taken in the IT Management Certificate directly apply toward the IT Professional Certificate. Therefore, each student having completed the IT Management Certificate, will only need 15 additional hours to complete the IT Professional Certificate. However, certain additional prerequisites may be required of the student prior to taking the advanced technically oriented classes contained in the IT Professional Certificate.

Students wanting to enter one of the IT Certificate programs need to fill out an application to apply and have an official transcript sent from the College or University where they completed their undergraduate degree. The transcript is used to first verify that the student completed their undergraduate degree and second to identify if any additional prerequisite classes will be required.

IT MANAGEMENT CERTIFICATE

The prerequisites to enter the IT Management Certificate program are a four year undergraduate degree plus the following:

MAC xxx Pre-Calculus	3 hrs.
STA 2023 Intro. To Statistics	3 hrs.
Any Basic Computer Skills Course	3 hrs.

(Word Processing, Spreadsheets, Windows, etc.)

NOTE: The course numbers may be different depending on the university. IT advisors will make the determination whether or not the student has satisfied these requirements based on supportive material (such as catalog descriptions, official letters, etc.) supplied by the student.

After admission to the IT Management Certificate program, the student must complete 15 hours selected from the following:

CEN 3722 Human Computer Interfaces for IT	3
CGS 3823 IT Web Design	3
CGS 3845 Electronic Commerce	3

CIS 4361 IT Security Management	3
CIS 4412 IT Resource Management	3
CIS 4935 Senior Project in Information Technology	3
COP 4930 Information Technology Seminar	1-3
ENC 4260 Advanced Technical Writing	3
ETG 4931 Special Topics in Technology I	1-5
ETG 4932 Special Topics in Technology II	1-5
IT Current Topics	3
IT Approved Elective	3

IT PROFESSIONAL CERTIFICATE

The prerequisites to enter the IT Professional Certificate program are a four year undergraduate degree plus the following:

STA 2023 Intro. To Statistics	3 hrs.
CGS xxxx Any Data Base	3 hrs.
COP 2xxx Programming Concepts	3 hrs.
COP 2xxx Object-Oriented Programming	3 hrs.
MAC xxxx Pre-Calculus	3 hrs.
MAC xxxx Discrete Mathematics	3 hrs.

NOTE: The course numbers may be different depending on the university. IT advisors will make the determination whether or not the student has satisfied these requirements based on supportive material (such as catalog descriptions, official letters, etc.) supplied by the student.

After admission to the IT Professional Certificate program, the student must complete the following 30 hour program:

Required courses for the IT Professional Certificate (13 credit hours):

CDA 3101 Computer Organization for IT	3
COP 3515 IT Program Design	3
COP 4610 Operating Systems for IT	3
COP 4610L Operating Systems Laboratory for IT	1
EEL 4854 Data Structures and Algorithms for IT	3

Electives (17 credit hours):

CEN 3722 Human Computer Interfaces for IT	3
CEN 4031 Software Engineering Concepts for IT	3
CGS 3823 IT Web Design	3
CGS 3845 Electronic Commerce	3
CIS 4361 IT Security Management	3
CIS 4412 IT Resource Management	3
CIS 4703 Database Systems for IT	3
CIS 4935 Senior Project in IT	3-5
COP 4930 IT Seminar	1-3
EEL 4782 Computer Information Networks for IT	3
EEL 4782L Information Networks Laboratory for IT	1
ENC 4260 Advanced Technical Writing	3
ETG 4931 Special Topics in Technology I	1-5
IT Current Topics	3
IT Approved Elective	3

Total	30
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UNDERGRADUATE CERTIFICATE PROGRAMS IN INFORMATION TECHNOLOGY (IT)

There are two undergraduate specialization certificates available to BSIT or BSAS/BGS IT Concentration students. To earn either of these certificates, a student must complete a specified list of courses, earning in each course a minimum grade of B. All prerequisites for these courses must also be satisfied.

CERTIFICATE OF SPECIALIZATION IN INFORMATION SECURITY

The student must complete five courses (15 credit hours) in Information Security. The certificate will be issued when a student has earned and received no less than a grade of B in each of the five classes in their concentrated certificate program. The certificate can be completed in one full year if the student takes all courses available each semester.

The student must complete **15 hours** selected from the following:

CIS 3360 Principles of Information Security	3
CIS 3362 Cryptography and Information Security	3
CIS 3374 Architecting Operating Systems Security	3
CNT 3403 Network Security and Firewalls	3

CIS 4365 Computer Security Policies & Disaster Recovery	3
CIS 4361 Information Security Management	3
ETG 493x Special Topics in Information Security	<u>3</u>
Total	15

CERTIFICATE OF SPECIALIZATION IN WEB DEVELOPMENT

The student must complete five courses (15 credit hours) in Web Development. The certificate will be issued when a student has earned and received no less than a grade of B in each of the five classes in their concentrated certificate program. The certificate can be completed in one full year if the student takes all courses available each semester.

The student must complete 15 hours selected from the following:

CGS 3823 Web Page Design	3
COP 4703 Database Systems	3
COP 4834 Data-Driven Web Sites	3
CGS 4786 Web Development Tools	3
CTS 3801 e-Commerce	3
COP 4816 XML Applications	3
COP 4814 Web Services	3
ETG 493x Special Topics in Web Development	<u>3</u>
Total	15