

USF Lakeland

UNIVERSITY OF SOUTH FLORIDA - 2004/2005 UNDERGRADUATE CATALOG

USF Lakeland is the heart of Florida's High Tech Corridor

Located 30 miles east of Tampa and 40 miles west of Orlando just off the newly developed Polk Parkway, the University of South Florida Lakeland (USF Lakeland) is located at the heart of the emerging Florida High Tech Corridor (FHTC). FHTC is attracting high tech industry in five sectors to include Information Technology, Medical Technologies, Microelectronics, Modeling, Simulation and Training, and Optics and Photonics. USF Lakeland leads the entire University in the field of Information Technology and brings to the FHTC and you, benefits including business partnerships, internships, research endeavors, and growth in economic development by providing an educated workforce attracting new companies to the area.

Beyond the FHTC initiative, USF Lakeland leads Central Florida as an innovator in education. With a focus on the needs of the community and its citizens, USF Lakeland has embraced opportunities to develop new academic and certificate programs responsive to the needs of local hospitals, businesses, and agencies. Fast track programs have been designed to fit your needs and those of employers. New full degree programs are continuously offered for your convenience. Furthermore, USF Lakeland goes beyond the walls of the primary campus and provides many full degree programs at off campus sites.

Our reputation for quality education is a promise - it delivers a pledge of satisfaction and accomplishment. As future leaders, our students will face challenges that haven't been thought of. The ability to learn, communicate, think, create and innovate will determine success. Our commitment to integrity means we must prepare students for these challenges.

Education within your reach

According to the publication, "Top American Research Universities," the University of South Florida is ranked one of the top 100 Universities in the entire nation. As a Doctoral/Research extensive institution, the highest educational ranking available, USF Lakeland is dedicated to serving the citizens of Central Florida, in a regional setting. The Lakeland campus is a distinctive, locally available University with premier research and instructional status.

USF Lakeland, established in 1986, USF Lakeland serves over 1,800 students, offering over 20 complete undergraduate and graduate degrees through the colleges of Arts and Sciences, Business, Education, Engineering, Information Technology, and Nursing. The campus also supports a number of individual classes, electives, web-based courses, certificate programs and program partnerships with the main campus in Tampa.

USF Lakeland partners with the 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). Specifically, these partnerships provide a 2+2 educational opportunity by allowing you to obtain your first two years (A.A. or A.S.) from the local community college, then completing your baccalaureate and/or graduate degree through USF Lakeland. This collaboration allows you to obtain a 4-year degree, as well as a graduate degree, without leaving your community. In addition to the programs offered at USF Lakeland from a campus shared with PCC, USF Lakeland and SFCC have recently joined together to provide a complete undergraduate program in Elementary Education and a graduate program in Educational Leadership at the SFCC Avon Park campus. Plans are underway for additional courses and complete degree program offerings at various off-campus sites including HCC-Plant City.

List of Majors and Programs

Undergraduate Degrees

Criminology
Elementary Education
Engineering Information Systems
General Business Administration
Industrial Engineering
Information Technology
Interdisciplinary Social Science
Nursing, RN
Psychology
Special Education
Teacher Certification

Graduate Degrees

Business Administration, MBA
Civil and Environmental Engineering*
Counselor Education, M.A.
Educational Leadership, M.Ed., Ed.S., Ed.D.
(NEW! Fast Track Option)
Electrical Engineering*
Engineering Management*
Reading Education, M.A.
Social Work, MSW
Special Education, M.A.T.

Undergraduate Academic Minor

Leadership Studies

*FEEDS = Florida Engineering Education Delivery System, televised courses

Certificate Programs

Information Technology Management (15 credit hours)
Information Technology Professional (30 credit hours)

Type

Doctoral/Research Extensive, State University
Offering upper-level undergraduate, graduate, doctoral and certificate programs

Enrollment

1,800 students

Student-Faculty Ratio

13:1

Average Age

28

Full-Time vs. Part-Time

33% Full-time
67% Part-time

Location

At the heart of the emerging Florida High Tech Corridor

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

USF Lakeland's Master's in Educational Leadership is the most innovative program in the State of Florida. It provides fast-track options and alternative course delivery to counteract the affects of the state's Drop Retirement Program leaving districts with many Principal vacancies.

USF Lakeland's Information Technology Department is the only department of its kind for the University of South Florida, and is housed entirely on the Lakeland campus. In the University's

history, this is a first for a regional campus to house and operate an entire department.

ACADEMIC PRORAMS OFFERED AT LAKELAND DEGREE REQUIREMENTS

• CRIMINOLOGY (CCJ)

The major in Criminology provides students with an in-depth exposure to the total criminal justice system including law enforcement, detention, the judiciary, corrections, 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. 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:

- Each of the following core courses:
CCJ 3024 (3)* CCJ 3610 (3)*
CCJ 3701 (3)** CCJ 4934 (3)
- At least two of the following substantive courses:
CJL 3110 (3) CJE 4114(3)
CJL 4410 (3) CJC 4010(3)
CJE 4010 (3)
- 18 semester hours of electives within the major.

* These are gateway courses and are required for all other coursework in the major or minor; therefore, they need to be taken first.

**Students who plan to continue on to graduate school must 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.

These residence 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.

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.

Requirements for the Minor in Criminology

The Department of Criminology offers a minor in Criminology. The minor consists of:

- Two required courses:
CCJ 3024 (3) CCJ 3610 (3)
- The selection of four of the following 3 hour courses for a total of 18 semester hours:
CJL 3110 CCJ 3621
CJE 4114 CJL 4410
CJC 4010 CJE 4010

Students must receive approval from the Department prior to starting their minor work. A minimum of 9 semester hours must be completed at USF. Students minoring in Criminology are subject to the Department's "2 D" Rule.

• 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."

Elementary Education with ESOL Endorsement

The College of Education offers a full ESOL Endorsement for all Elementary Education major graduates. The special requirements for ESOL endorsement through infusion are as follows: Successful completion of (1) ESOL 1, 2, and 3, with a minimum grade of 70% or better on all three sections of the ESOL Comprehensive Exam administered in the three ESOL courses; (2) a 20-hour early ESOL field experience in ESOL 1; (3) a late ESOL field experience where students plan, implement, and evaluate lessons for one or more ESOL students over a series of weeks; and (4) an ESOL folder, containing all assignments and test results from ESOL 1, 2, and 3, and all ESOL performance check-off sheets from other ESOL-infused courses that a student has taken.

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 2005 Introduction to Education
EDG 2701 Teaching Diverse Populations
EME 2040 Introduction to Educational Technology

- Nine (9) hours of Mathematics (to include College Algebra or above and Geometry)*
- Twelve (12) hours of Social Science (to include American History and General Psychology)
- Nine (9) hours of Natural Science (to include an Earth Science course, a Life Science course and a Physical Science course)
- One (1) Natural Science Course must have a lab component
- Six (6) hours of International or Multicultural Focus
- Nine (9) hours of English (to include Writing, Literature and Speech)
- Six (6) hours Humanities (to include Philosophy and Fine Arts)

*Only courses with the prefixes MGF, MTG, MAC, and STA will qualify for the courses in mathematics. MGF 1106 Liberal Arts Mathematics I meets the intent of the program approval rule with respect to the inclusion of geometry in the mathematics requirement.

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 (35-36 credit hours):

EDF 3122 Learning and the Developing Child	3
EDF 3604 Social Foundations of Education (Exit)	3
EDG 4620 Curriculum and Instruction	3
EDF 4430 Measurement for Teachers	3
EEX 4070 Integrating Exceptional Students in the Regular Classroom	2-3
FLE 4316 Language Principles and Acquisition	2
FLE 4317 Teaching LEP Students K-12	3
EDG 4909 Second Language Acquisition and Literacy	3
EDE 4940 Internship	12

Specialization (40 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	3
LAE 4414 Teaching Literature in the Elementary Schools	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 School Social Studies	3
EDG 4909 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, economics, finance, management, management information systems, 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.

Requirements for a Minor in Business Administration (Non-Business Majors Only): Students are required to process an application for the minor in the College of Business. Students must complete an introductory computer course (with a content similar to CGS 2100 Computers in Business) or obtain a waiver for this requirement from the College of Business Administration by demonstrating competence in the use of computers.

1. The course requirements are as follows:

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 4XXX Managerial Applications (see advisor)	3
MKT 3023 Basic Marketing	3
Total	18

2. A grade point average of 2.0 or better must be achieved in the minor course work at USF and in all minor courses completed at other institutions.

3. At least 12 hours of the required 18 credit hours must be taken in residence at USF.

*ACG 2021 & ACG 2071 can be substituted for ACG 3074.

**ECO 2013 & ECO 2023 can be substituted for ECO 1000.

• **INDUSTRIAL ENGINEERING**

Departmental Policies

In addition to the College's graduation requirement, the department has the following policies:

1. Mandatory academic advising of students for each term.
2. Exit interviews as a graduation requirements.
3. All graduating seniors must take the Fundamentals of Engineering Examination.

Four-Year Curriculum in Industrial and Management Systems Engineering

Prerequisites (State Mandated Common Prerequisites) for Students Transferring from a Florida 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.

Students qualify for direct entry to the department if they have completed the following courses at a Community College or University in the Florida State University System (SUS) and meet all other admissions requirements of the University and College.

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

Communications:

ENC 1101/1102 English I and II (6)

Humanities & Social Sciences:

Humanities Courses (6)
Social Science Courses (6)
Humanities or Social Sciences (3)

Mathematics:

USF	C/C
MAC 2281	MAC 2311* (4)
MAC 2282	MAC 2312* (4)
MAC 2283	MAC 2313* (4)
MAP 2302	MAP 2302 (3)

*or MAC 2281, MAC 2282, MAC 2283

Natural Sciences:

USF	C/C
CHM 2045	CHM 1045* (3)
CHM 2045L	CHM 1045L* (1)
PHY 2048	PHY 2048 (3)
PHY 2048L	PHY 2048L (1)
PHY 2049	PHY 2049 (3)
PHY 2049L	PHY 2049L (1)

*or CHS 1440 Chemistry for Engineers

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

Industrial Engineering Admissions Requirements

Transfer students must have completed the equivalent USF Engineering Calculus sequence with a 2.0 GPA; must have completed one year of equivalent USF General Physics and Chemistry courses with a minimum of 2.0 GPA; must have a USF and overall GPA of 2.0 or better.

BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING

The schedule that follows indicates how a diligent student who can devote full time to coursework can satisfy requirements in four academic years. Students without a solid foundation or those who cannot devote full time to academics should plan a slower pace.

Semester I

CHM 2041	Chemistry I	3
CHM 2045L	Chemistry I Lab	1
EGN 3000	Foundations of Engineering	1
ENC 1101	Composition I	3
MAC 2281	Engineering Calculus I	4
Social Science Elective		3
Total		15

Semester II

CHM 2042	Chemistry II	3
EGN 2031	History of Technology (or Historical Perspectives elective)	3
ENC 1102	Composition II	3
MAC 2282	Engineering Calculus II	4
PHY 2048	Physics I	3
PHY 2048L	Physics I Lab	1
Total		17

Semester III

EGN 3443	Engineering Statistics	3
MAC 2283	Engineering Calculus III	4
PHY 2049	Physics II	3
PHY 2049L	Physics II Lab	1
Historical Perspectives		3
Total		14

Semester IV

EGN 3311	Statics	3
EGN 3373	Electrical Systems Engineering I	3
EGN 4450	Linear Systems	2
MAP 2302	Differential Equations	3
Fine Arts Elective		3
Total		14

Summer Term

EGN 1113	Engineering Graphics	3
EGN 3613	Engineering Economy I	3
ALAMEA Elective		3
Total		9

Semester V

COP 2510	Programming Concepts	3
EGN 3365	Materials Engineering I	3
EIN 4312C	Work Analysis	3
EIN 4411	Manufacturing Processes	3
ESI 4312	Deterministic OR	3
Total		15

Semester VI

EGN 3343	Thermodynamics	3
EIN 4333	Production Control	3
ESI 4221	Industrial Statistics/Quality Control	3
ESI 4313	Probabilistic OR	3
Tech Elective	Engineering Science	3
Total		15

Semester VII

EIN 4364C	Facilities Design I (MW/MI)	3
EIN 4933	Management Cost	3
ESI 4244	Design of Experiments	3
ESI 4523	Industrial Systems Simulation	3
Tech Elective	Industrial Engineering	2
Total		14

Semester VIII

EIN 4313C	Human Factors (6A)	3
EIN 4365	Facilities Design II	3
EIN 4601	Automation/Robotics	3
ENC 3211	Communication for Engineers (6A L&W)	3
Social Science Elective		3
Total		15

Gordon Rule (6A) is fully met through the mathematics courses above, ENC 1101, ENC 1102, ENC 3211 and EIN 4313 or by completing an AA degree at a Florida Community College. Exit Requirements in Major Works/Major Issues (MW/MI) and Literature and Writing (L&W) are fully met through ENC 3211 and EIN 4364.

• 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 through the Lakeland Campus.

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.

Four-Year 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	Intro to Statistics
ECO X013	Macroeconomics
CGS XXXX	Any Database Course
COP 2XXX	Any Computer Programming 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.

The schedule that follows indicates how a diligent student, who can devote full time to coursework, can satisfy requirements in four academic years. Students without a solid foundation, or those who cannot devote full time to academics, should plan for a slower pace.

Semester I	
CGS 2100	Computers in Bus. 3
ENC 1101	Composition I 3
MAC 1147	Coll. Alg. and Trig. 3
Gen. Ed.	6
Total	15

Semester II	
COP 2510	Programming Concepts 3
ENC 1102	Composition II 3
MAD 3100	Discrete Math 3
ECO 2013	Economic Principles (Macro.) 3
PSY 2012	Psychological Science I 3
Total	15

Semester II	
Natural Science	3
COP XXXX	OO Programming (e.g., C++) 3
Electives	9
Total	15

Semester IV	
STA 2023	Introductory Statistics I 3
PHY 2020	Conceptual Physics 3
Fine Arts	3
Electives	6
Total	15

Semester V	
COP 3515	Program Design for Information Technology 3
CDA 3101	Computer Organization for Information Technology 3
ENC 3211	Communication for Engineers 3
INR 3033	International Political Cultures 3
CEN 3722	Human Computer Interfaces for IT 3
Total	15

Semester VI	
EEL 4854	Data Structures and Algorithms for IT 3
COP 4610	Operating Systems for IT 3
ENC 4260	Advanced Technical Writing 3
COP 3451	IT Concepts 3
IT Approved Electives	3
Total	15

Semester VII	
CIS 4703	Database Systems for IT 3
CEN 4031	Software Engineering Concepts for IT 3
EEL 4782	Computer Information Networks for IT 3
IT Approved Electives	6
Total	15

Semester VIII	
COP 4930	Information Technology Seminar 1
CIS 4935	Senior Project in IT 3-5
CIS 4253	Ethical Issues for Information Technology 3
IT Approved Electives	6
Total	13 - 15

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 that may be required.

IT MANAGEMENT CERTIFICATE

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

- 1. MACxxxx Pre-Calculus 3 hrs.
- 2. STA2023 Intro. To Statistics 3 hrs.
- 3. 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:

ETG 3931	ST: IT Electronic Commerce	3
CEN 3722	IT Human Computer Interface	3
ETG 4931	IT Web Page Design & Adm.	3
COP 4930	IT Seminar	3
CIS 4925	IT Senior Project	3
ENC 4260	Advanced Technical Writing	3
CIS 4361	IT Security Management	3
CIS 4412	IT Resource Management	3
	IT Current Topics	3
	IT Approved Elective	3

IT PROFESSIONAL CERTIFICATE

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

- 1. STA 2023 Intro. To Statistics 3 hrs.
- 2. CGS xxxx Any Data Base 3 hrs.
- 3. COP 2xxx Computer Programming 3 hrs.
- 4. COP 2xxx OO Programming 3 hrs.
- 5. MAC xxxx Pre-Calculus 3 hrs.
- 6. 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 (12 credit hours):

COP 3515	IT Program Design	3
COP 4610	IT Operating Systems	3
COP 4610L	IT Operating Systems Lab	1
CDA 3200	IT Computer Organization	3
EEL 4854	IT Data Structures and Algorithms	3

Electives (18 credit hours):

ETG 3931	ST: IT Electronic Commerce	3
CEN 3722	IT Human Computer Interface	3
CIS 4500	IT Database Systems	3
CEN 4031	IT Software Engineering	3
EEL 4782	Computer Information Networks for IT	3
EEL 4782L	Computer Information Networks for IT Lab	1
ETG 4931	IT Web Page Design and Administration	3
COP 4930	IT Seminar	3

CIS 4935	IT Senior Project	3
ENC 4260	Advanced Technical Writing	3
CIS 4361	IT Security Management	3
CIS 4412	IT Resource Management	3
	IT Current Topics	3
	IT Approved Elective	3
Total		30

• 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.

Some of the following courses if available, during the program of study at the community college, and when feasible in General Education/Gordon Rule courses, could count toward the ISS degree. 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)
or		
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)
or		
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 is the third core course required for majors in Interdisciplinary Social Sciences.

Coursework required for Interdisciplinary Social Sciences Majors

- 1. Required core courses for the major are:
 - ISS 3010 Introduction to Social Sciences (3)
 - ISS 4935 Seminar in the Social Sciences -MW (3)
 - STA 2122 Social Sciences Statistics -6A QM (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 Sciences and Disorders, Criminology, Economics, Environmental Science and Policy, Gerontology, Geography, History, Humanities, International Studies, Latin American Studies, Library and Information Science, Political Science; Psychology; Public Administration, Religious Studies, Social Work, Sociology, and Woman's Studies.

• NURSING PROGRAM (FOR REGISTERED NURSES)

The registered nurse sequence is designed so that registered nurses can enroll in the nursing major on a full-time or on a part-time. Registered nurses who enroll as full-time students may complete requirements for the bachelor's degree in three semesters. If they enroll as part-time students, the degree requirements can be completed in six semesters.

Registered nurse students are admitted to the College each semester and may apply according to University admission deadlines. Registered nurse students desiring to transfer from other nursing programs are eligible for admission to the College on a space available basis. To be considered for transfer into the nursing major, applicants must meet University eligibility requirements. Registered nurse students are admitted to the College contingent upon completion of transcript evaluation and completion of admission requirements.

For more specific information contact the College of Nursing, Office of Student Affairs for overall requirements (974-9305) or visit the College of Nursing web site at <http://www.hsc.usf.edu/nursing>.

NURSING COURSES - REGISTERED NURSE SEQUENCE

Registered nurse students are required to take the following courses:

NUR 3806	Educational Transitions for RN	3
NUR 3064	Physical Examination & Assessment	2
NUR 3064L	Clinical Experiences in Health Assessment - RN	1
NUR 3125	Pathophysiology for Nursing Practice	3
NUR 3145	Pharmacology in Nursing Practice	3
NUR 4636	Community/Public Health: Population Focus Nursing	3
NUR 4636L	Community/Public Health Nursing Clinical for the RN	3
NUR 4838	Leadership and Management in Professional Nursing Practice	3

NUR 3829	Ethical Legal Aspects Nursing/Health Care	3
NUR 4165	Nursing Inquiry	3
	Nursing Elective	3

In addition to the requirements listed, the RN student must also meet all university graduation requirements as listed in the catalog.

• STUDENT LEADERSHIP MINOR

The minor in Leadership Studies consists of a minimum of 18 credit hours with a "B" average (3.0). All students shall complete the first courses in the sequence and select four additional courses from the list of approved courses for the program. The series of courses is designed to help students develop personal and organizational leadership skills. The program is interdisciplinary in nature and should be of significant benefit to students in all areas of study.

The seven courses are designed to give students a practical and theoretical grasp of leadership. The basic assumption is that leadership can be learned and, therefore, taught. This program has a unique approach to leadership education that combines practical theories of leadership and learning to provide opportunities for students to study the nature of authority, leadership, social and role dynamics, political processes and the values that orient their careers. Students learn personal, diagnostic, operational, and tactical skills. In these classes, students are challenged to investigate self, context, and strategy.

Required Courses (6 hours):

SLS 2260	Leadership Fundamentals	3
SLS 4272	Survey of Leadership Readings	3

Elective Courses (12 hours):

SLS 3948	Community Leadership Practicum	3
SLS 4271	Organizational Theories and Processes	3
SLS 4273	Theories of Leadership	3
SLS 4274	Ethics and Power in Leadership	3
SLS 4276	Images of Leadership in Print and Film	3

• 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 a concentration in Applied Behavioral Analysis, or to the Honors Program. The graduate faculty of the Psychology Department are divided into three broad program areas: Clinical, Cognitive and Neural Sciences, and 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 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.

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

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.

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

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 3044 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

- 2000/3000 Level Requirement (6 semester hours)
 - PSY 2012 Psychological Science I (if not already taken at a community college)
 - PSY 3044 Psychological Science II
- Methods Course Requirement (7 semester hours)
 - PSY 3213 Research Methods
 - 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.
- 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 4013C Physiological Psychology
- EXP 4304 Motivation
- EXP 4523C Cognitive Psychology

Group II

- CLP 4143 Abnormal Psychology
- INP 4004 Industrial Psychology
- SOP 4004 Social Psychology
- DEP 4005 Developmental Psychology
- PPE 4004 Personality

and any 3 additional courses numbered at the 4000 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. Nor may EAB 4715 (Supervised Practicum) count towards the major for those in the Applied Behavior Analysis program.

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 3044 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 the 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.

Requirements for the Minor in Psychology

A minor in Psychology consists of a minimum of 15 credit hours, comprising PSY 2012, PSY 3044, and any three 4000-level psychology courses except PSY 4913. Students minoring in Psychology must also obtain a "C" or better in any college level statistics course in lieu of PSY 3213, or must complete PSY 3213 with a "C" or better. A GPA of 2.0 or better in the minor is required for certification. The purpose of the minor is to help students majoring in other disciplines to obtain an appropriate psychology background that will complement their work in their major. See the Psychology Department Undergraduate Advisor for suggested minor programs for students majoring in various fields.

Concentration in Applied Behavior Analysis

Undergraduate majors working toward the B.A. in psychology may complete a structured sequence of coursework and practicum in Applied Behavior Analysis. Students are admitted to the program in the junior or senior year, after completing EXP 4404, Psychology of Learning and CLP 4414, Behavior Modification with a grade of B or better. Admission requirements further include a minimum overall USF GPA of 3.0 or better, GPA of 3.2 for Psychology coursework, completion of at least 75 hours, and three letters of recommendation. Admissions are made in the fall of each academic year. Successful completion of the concentration prepares students for employment opportunities in a variety of settings, for advanced study in Applied Behavior Analysis, and eligibility for completion of the Florida Certification Examination for Associate Behavior Analysis. Detailed information regarding the program and the admission process may be obtained from the undergraduate advisor or the program secretary.

Psychology Honors Program

The purpose of the Honors Program is to provide a select group of undergraduate Psychology majors an opportunity to undertake an intensive individualized research experience. The culmination of the Honors Program is the completion and defense of an honors thesis. Application for the program will take place during the second semester of the student's junior year or, typically, prior to completion of 90 semester credits. Admission to the program is competitive and based on the student's overall academic record, performance in psychology courses, and a letter of recommendation from a member of the Psychology Department faculty. Successful completion of the program requires a GPA of 3.5 in major coursework, an overall GPA of 3.25 at USF, and, typically, completion of 43 hours in Psychology including PSY 4932, Honors Seminar (6) and PSY 4970, Honors Thesis (6). See the Psychology Department Undergraduate Advisor for details of the program and an application form.

• SPECIAL EDUCATION with ESOL Endorsment

The College of Education offers a full ESOL Endorsement for all Special Education major graduates. The special requirements for ESOL endorsement through infusion are as follows: Successful completion of (1) FLE 4317 and FLE 4316 with a minimum grade of 70% or better on part one and part two of the ESOL Comprehensive Exam administered in the two ESOL courses; (2) a 20-hour early ESOL field experience in FLE 4317; (3) a late ESOL field experience where students plan, implement, and evaluate lessons for one or more ESOL students over a series weeks; and (4) an ESOL binder, containing all ESOL-related assignments taken in the College of Education and an ESOL-performance Standards Checklist that documents the completion of the necessary number of standards.

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 2005 Introduction to Education
- EDG 2701 Teaching Diverse Populations
- EME 2040 Introduction to Educational Technology

- Nine (9) hours of Mathematics (to include College Algebra or above and Geometry)*
- Twelve (12) hours of Social Science (to include American History and General Psychology)
- Nine (9) hours of Natural Science (to include an Earth Science course, a Life Science course and a Physical Science course)
- One (1) Natural Science Course must have a lab component
- Six (6) hours of International or Multicultural Focus
- Nine (9) hours of English (to include Writing, Literature and Speech)
- Six (6) hours Humanities (to include Philosophy and Fine Arts)

*Only courses with the prefixes MGF, MTG, MAC, and STA will qualify for the courses in mathematics. MGF 1106 Liberal Arts Mathematics I meets the intent of the program approval rule with respect to the inclusion of geometry in the mathematics requirement.

Professional Education Core (31 credit hours):

The required courses in the professional education core are as follows:

- | | |
|---|---|
| EEX 4941 Practicum in ESE | 6 |
| EDF 3122 Learning and the Developing Child | 3 |
| or | |
| EDF 3214 Human Development and Learning | 3 |
| EDF 3604 Social Foundations of Education (Exit) | 3 |
| EDF 4430 Measurement for Teachers | 3 |

- | | |
|--|---|
| FLE 4316 Language Principles and Acquisition | 2 |
| FLE 4317 Teaching LEP Students K-12 | 3 |
| EEX 4940 Internship: Exceptional Student Education | 9 |
| EEX 4936 Senior Seminar in Exceptional Student Education | 1 |

Area of Specialization

Varying Exceptionalities (BPX)

Students seeking the B. S. degree with certification in Varying Exceptionalities are required to take the following courses:

- | | |
|---|---|
| EEX 4011 Foundations of Special Education | 3 |
| EEX 4054 Perspectives on Learning and Behavioral Disorders | 3 |
| EEX 4221 Educational Assessment of Exceptional Students | 3 |
| EEX 4243 Education of the Exceptional Adolescent and Adult | 3 |
| EEX 4604 Behavior Management for Special Needs and at Risk Students | 3 |
| EEX 4742 Narrative Perspectives on Exceptionality: Cultural and Ethical Issues (Exit) | 3 |
| EEX 4846 Clinical Teaching in Special Education | 3 |
| EMR 4011 Mental Retardation and Developmental Disabilities | 3 |
| LAE 4314 Teaching Writing | 3 |
| MAE 4310 Teaching Elementary School Mathematics I | 3 |
| RED 4310 Early Literacy Learning | 3 |
| RED 4511 Linking Literature Assessment to Instruction | 3 |