Graduate Academic Catalog

2006-2007

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Southern Polytechnic State University in the University System of Georgia

Lisa A. Rossbacher Ph.D, President

1100 South Marietta Parkway
Marietta, Georgia 30060-2896

Southern Polytechnic State University is proud to be Georgia's Technology University. Our academic, professional, outreach and service programs embrace all aspects of technology, including the practical applied sills (***techne) needed*** to solve today's real-world problems and the theoretical knowledge (***logos***) necessary to meet tomorrow's challenges. SPSU graduates are well prepared to lead the scientific and economic development of an increasingly complex state, nation, and world.

Our mission is to serve both traditional and non-traditional students at the undergraduate, graduate, and continuing education levels; in engineering and engineering technology, the sciences, applied liberal arts, business and professional programs. We work to develop the broader community's intellectual, cultural, economic, and human resources. Facilitated by our innovative faculty, dedicated staff, and supportive campus environment, our learning community empowers SPSU students with the ability and vision to transform the future.

General Information

About This Catalog

The statements set forth in this catalog are for informational purposes only and should not be construed as the basis of a contract between a student and this institution.

While the provisions of this catalog will ordinarily be applied as stated, Southern Polytechnic State University reserves the right to change any provision listed in this catalog, including but not limited to academic requirements for graduation and various fees and charges without actual notice to individual students.

Every effort will be made to keep students advised of such changes. Information on changes will be available in the Office of the Registrar and major academic program offices. It is especially important to note that it is the responsibility of the student to keep apprised of current graduation requirements for a particular degree program and current academic procedures.

Southern Polytechnic State University is an equal educational and employment opportunity institution and does not discriminate on the basis of race, color, sex, religion, creed, national origin, sexual orientation, age, or disability.

Student Rules and Regulations

The rules and regulations for Southern Polytechnic State University students are comprised of the catalog sections on Academic Regulations and Student Life Regulations. These regulations are intended to set forth the requirements of the faculty to the end that a large student body may live and work together harmoniously with a minimum of friction and misunderstanding. Each student is expected to be familiar with these catalog sections. The student is also expected to be a law-abiding citizen and to obey the laws of the City of Marietta, Cobb County, the State of Georgia, and the United States.

Responsibility for Notices

Students are expected to be aware of the contents of all general notices including those appearing on official campus bulletin boards and in the official school newspaper. Students are also expected to keep the university apprised of their current mailing address and email address. All official notifications are issued by way of email.

University Police and Crime Statistics

Southern Polytechnic is committed to a safe, healthy environment in which our students, faculty, and staff can grow professionally and personally. The University promotes strong safety policies and prompt reporting and investigation of any actions or events that would harm the well-being of any student, employee, or faculty member.

The University Police employs police officers that comply with certification, training, and all other requirements of the Peace Officers Standards and Training Council of Georgia. Our officers have arrest powers on Southern Polytechnic property, which is under the control of the Board of Regents of the University System of Georgia, and on any public or private property within five hundreds yards of property under the control of the Board of Regents.

Our officers conduct preventive patrols on campus including the residence halls; are responsible for the security of university-owned property; investigate reported crimes at the university; conduct educational programs and workshops to promote personal safety; and actively work to prevent and detect crime throughout the Southern Polytechnic campus. **Our program complies with The Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act. Our disclosure report can be found on the police department web page at http://police.spsu.edu.**

Accreditation

Southern Polytechnic State University is an accredited, coeducational, residential university offering associate, bachelor, and Masters degrees.

Southern Polytechnic State University is **regionally accredited by the Commission on Colleges of the Southern Association of Colleges and Schools** (1866 Southern Lane, Decatur, GA 30033-4097, Telephone: 404-679-4501).

All Bachelor of Science degree programs in Engineering Technology are accredited by the Technology Accreditation Commission; ABET, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone: 410-347-7700; email accreditation@abet.org, website: http://www.abet.org.

The National Architectural Accrediting Board, Inc. (NAAB) accredits the Bachelor of Architecture program. (www.naab.org)

The American Council for Construction Education (ACCE) accredits the Bachelor of Science program in Construction Management. (www.acce-hq.org)

The Association of Collegiate Business Schools and Programs (ACBSP) accredits the Master of Business Administration, B.S. in Management, B.A.S. in Management, and B.A. in Management

Programs of Study

Southern Polytechnic State University offers the following graduate programs of study:

Master of Business Administration (MBA)

Master of Science programs in:

Computer Science

Construction Management

Engineering Technology (Electrical Concentration)

Information Design and Communication

Information Technology

Quality Assurance

Software Engineering

Systems Engineering

Undergraduate Degrees

Associate of Science transfer program in General Studies

Bachelor of Apparel and Textiles

Bachelor of Applied Science

Bachelor of Architecture program

Bachelor of Arts programs in:
- Business Administration
- Computer Science
- English and Professional Communication
- Mathematics
- Physics

Bachelor of Science programs in:
- Biology
- Business Administration
- Civil Engineering Technology
- Computer Engineering Technology
- Computer Science
- Construction Engineering
- Construction Management
- Electrical Engineering Technology
- Industrial Engineering Technology
- Information Technology
- International Studies
- Mathematics
- Mechanical Engineering Technology
- Physics
- Software Engineering
- Surveying and Mapping
- Technical Communication
- Telecommunications Engineering Technology

Certificates

In addition to the above degree programs, SPSU also offers certificates in the following areas:

Graduate

Graduate Certificate in Business Continuity (Information Technology)
Graduate Transition Certificate in Computer Science (Computer Science)
Graduate Certificate in Information Security and Assurance (Information Technology)
Graduate Certificate in Information Technology (Information Technology)
Graduate Transition Certificate in Information Technology (Information Technology)
Graduate Certificate in Quality Assurance (Industrial Engineering Technology)
Graduate Certificate in Software Engineering (Software Engineering)
Certificate in Systems Engineering
Advanced Certificate in Systems Engineering
Graduate Certificate in Technical Communication (English, Technical Communication and Media Arts)

Undergraduate

Certificate in Apparel Product Development (Industrial Engineering Technology)
Professional Certificate in Land Development (Construction Management)
Certificate in Engineering Sales (ETM)
Certificate in Land Surveying (Civil Engineering Technology)
Certificate in Logistics (Industrial Engineering Technology)
Certificate in Production Design (Industrial Engineering Technology)
Professional Certificate in Project Management: Construction (Construction Management)
Professional Certificate in Programming (Computer Science)
Certificate in Quality Principles (Industrial Engineering Technology)
Professional Certificate in Specialty Construction (Construction Management)
Professional Spanish (International Studies)

Other certificates may be available. Check our web site for additional information.

Quick Facts for Prospective Students

Students who wish to pursue a Masters degree, a transition certificate, or a graduate certificate at SPSU are admitted to the School of Graduate Studies. The admissions requirements are outlined below.

What are the qualifications I must possess in order to be considered for admission into a graduate program at SPSU?

You must have:

- Graduated from a regionally accredited institution with a bachelor's degree
- Have attained a 2.75 undergraduate grade point average (on a 4.0 scale) (Some degrees require higher GPA's.)

If you are an **international student**, see the special section in this catalog for additional requirements.

The following graduate programs have additional requirements:

M.S. in Electrical Engineering Technology:
Undergraduate engineering or engineering technology degree in the areas of electrical, computer, or telecommunications

M.S. in Information Design and Communication:
A timed, proctored, on-campus essay written in response to a given assignment

M.S. in Software Engineering:
Documentation of at least one year of software project-related work experience (or comparable co-op work)

M.S. in Systems Engineering:
Undergraduate engineering, engineering technology, computer science or physical science degree

Some departments require the GRE or GMAT. See admissions requirements for the specific major you are interested in for details.

What if I don't meet these qualifications?

If you do not meet the criteria above, you might still be admitted, but a committee will review your overall application and make a determination based on:

- Your undergraduate work,
- Your professional industry experience,
- Any other indicators that might point to your potential to succeed. You may submit anything you feel might help the committee to understand your background for consideration.

If you are admitted by the review committee, you will be admitted on probation. If you attain a 3.0 GPA at SPSU after 9 hours of graduate work (or three courses) you will be removed from probation and will be allowed to continue as a graduate student. If you do not attain a 3.0 GPA after 9 hours, your academic record will be reviewed and you may be dismissed.

What documents should I submit in order to be considered for admission?

In order for an application to be complete, all required documents must be submitted and evaluated.

- An application for admission to a graduate program
- An official transcript from each college previously attended
- A certificate of immunization
- Three letters of recommendation from faculty, work supervisors, clients, or professional colleagues
- A description of relevant work experience, if applicable
- A Statement of Purpose, describing professional career goals and how completion of the graduate program will help achieve them

If you are an **international student**, see the special section in this catalog for additional requirements.

Are the graduate programs at SPSU eligible for federal and other types of financial aid?

Yes.

Are the graduate programs at SPSU accredited?

Yes. Southern Polytechnic State University is an accredited, coeducational, residential university offering associate, bachelor, and Masters degrees.

Southern Polytechnic State University is regionally accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097, Telephone: 404-679-4501)

The Association of Collegiate Business Schools and Programs (ACBSP) accredits the Master of Business Administration.

When do I have to have my application and other documents submitted in order to be considered for the coming term?

SPSU uses a rolling admission process. This means you can apply at any time up until the term has started. However, the number of seats in each program is limited and you are encouraged to apply early in order to be assured of there being sufficient space. You will dramatically decrease the chances of having problems with your admission and your application for financial aid if you will meet the following priority deadlines:

Fall Term: July 1st
Spring Term: November 1st
Summer Term: April 1st

SOME DEPARTMENTS REQUIRE MUCH EARLIER APPLICATIONS IN ORDER TO MEET REVIEW BOARD REQUIREMENTS.

In order for an application to be complete, all required documents must be submitted and evaluated. If, for some reason, you cannot assemble all of your documents in time, submit the materials you have and then follow up with other documents when they become available. The earlier you have everything submitted before a term starts, the easier it will be to have a seamless and trouble-free start to your academic pursuit.

Graduate Admissions

General Information

This section contains information that pertains to all graduate programs.

Admission Information – All applicants require:

- A completed application form
- A $20 non-refundable application fee
- Three letters of reference
- An official transcript from each previous college attended
- A certificate of Immunization
- Some departments require the GRE or GMAT. See admissions requirements for the specific major you are interested in for details.

All admission materials must be received by the dates in the following schedule:

Term	Deadline for Admission
Fall	July 1
Spring	November 1
Summer	April 1

Materials received after the deadline dates will be processed, but may not be processed in time to allow students to begin that term.

Admission to Southern Polytechnic State University is made without regard to race, nationality, sex, or religion. For any information regarding admission to Southern Polytechnic State University, write the Director of Admissions, Southern Polytechnic State University, 1100 South Marietta Parkway, Marietta, Georgia 30060-2896.

The university reserves the right to withdraw admission prior to or following enrollment if the student becomes ineligible as determined by the standards of the University or Board of Regents.

Each program has unique entrance requirements. For details, see the admissions requirements for the program you are interested in below.

International Students

Students whose native language is not English must submit minimum official TOEFL scores of a total of 550 (213 computer-based, 79 internet-based) to the Admissions Office. Also, graduates of foreign schools of higher education must be able to document that their degree is equivalent of a four year bachelor's degree awarded by an accredited United States college or university. Note: Southern Polytechnic State University reserves the right to require applicants to send their international educational credentials to an approved SPSU professional evaluation service before being considered for admission.

All international students must purchase medical insurance made available through Southern Polytechnic State University or provide proof of alternate coverage through a comparable policy. International students applying from outside the United States must submit all admissions documents, including immunization certificates, at least 60 days prior to the above deadlines.

Admissions of Students with Non-U.S. Academic Credentials
Admissions of Students whose secondary education was completed outside of the United States system of education may be considered for admission with:

- Acceptable foreign credentials
- English language proficiency as described below

Additional Requirements for International Applicants
In addition to meeting the regular admission requirements, international applicants needing a student visa (F-1 or J-1) must complete a Financial Affidavit. The Financial Affidavit must show ability to meet the financial obligations of tuition, fees and living expenses before an I-20 or acceptance letter will be issued.

Current (less than one year old) letters of financial support must accompany the Financial Affidavit. Financial Affidavit forms are available in the Admissions Office.

All international students must purchase medical insurance made available through Southern Polytechnic State University or provide proof of alternate coverage through a comparable policy.

Readmission

Students who have an absence of two or more consecutive terms of matriculation at Southern Polytechnic State University and who are not academically dismissed must be approved by the appropriate graduate academic program for readmission before being eligible for registration. An application for readmission, together with any pertinent supporting information, must be submitted to the appropriate graduate academic program at least 20 working days before the registration date of the semester in which the student plans to enroll.

General Information
Admission to Southern Polytechnic State University is made without regard to race, nationality, sex, or religion. Admission to Southern Polytechnic State University is based on a number of factors depending upon your admissions type of entry and previous educational experience. The admission requirements for the University have been developed in accordance with the rules and regulations of the Board of Regents for the University System of Georgia.

Falsification
Approval for admission is valid only for the term specified at the time of acceptance and does not imply that approval will be granted for a term not specified. The University reserves the right to withdraw admission prior to or following enrollment if the student becomes ineligible as determined by the standards of the University of the Board of Regents or if the student has falsified application materials.

Other Admission Requirements
SPSU reserves the right to require any applicant for admission to take appropriate standardized tests in order that the institution may have information bearing on the applicant's ability to pursue successfully the program of study for which the applicant wishes to enroll.

Special Students
Special students and all other students of classifications not covered in these policies shall be expected to meet all admission requirements prescribed by Southern Polytechnic State University.

Appeals
Formal appeals of the University's admission decision may be filed with SPSU's Director of Admissions. Contact the Office of Admissions for additional instructions on the appeal process.

Admission Procedures and Deadlines

General Information
All applications for admission to Southern Polytechnic State University must have all required credentials on file in the Admissions Office by the application deadline date for the semester in which the applicant plans to enroll.

All international applicants are required to submit all admissions documents to the Office of Admissions at least **three months before** the registration date of the semester in which the student plans to enroll.

- All applications must be accompanied by a non-refundable $20.00 application fee. Checks should be made out to Southern Polytechnic State University.

- Complete both sides of the application, sign and return with application fee, to the Admissions Office. Southern Polytechnic State University, 1100 South Marietta Parkway, Marietta, GA 30060-2896.

- Request that all colleges and universities that you have attended send an official transcript to the Admissions Office. Only official transcripts mailed directly from the colleges will be accepted. Official student copies will not be accepted. Note: If you have attended Southern Polytechnic State University, you need only the transcripts which are not already on file.

- Complete the Certificate of Immunization and return it to the Admissions Office. Note: If you attended Southern Polytechnic State University, you are not required to complete the Certificate of Immunization.

- Submit three reference forms from former college professors, employers, or other people who are familiar with your abilities. Mail the reference forms to the address listed on the front of the form. Technical and professional communication applicants are required to submit three reference letters instead of reference forms.

- Students whose native language is not English must submit minimum TOEFL scores of a total of 550 (213 computer-based, 79 internet-based) to the Admissions Office. Students who are on F-1 visas will also need to provide a financial affidavit indicating financial security to the Admissions Office. Graduates of foreign schools of higher education must be able to document that their degree is equivalent of a four year bachelor's degree awarded by an accredited United States college or university. Students who have academic work outside of the United States will also be required to complete and submit to the Admissions Office an International Educational Summary Sheet. Note: Southern Polytechnic State University reserves the right to require applicants to send their international educational credentials to a professional evaluation service before being considered for admission.

- Submit individual graduate program requirements as indicated.

Special Accommodations
Upon acceptance and before enrollment, any student with a documented disability or special need must notify the Disability Services Coordinator in the Advising, Tutoring, Testing, and International Center (ATTIC) of any particular accommodations required.

Financial Information

Index to Financial Information

Financial Aid Information
Applying for Financial Aid
Types of Financial Aid
Maximum Time Frame Requirement
Completion Rate Requirement
Cumulative Grade Point Average Requirement
Tuition and Fees
Student Fees
Fee Payment
Cancellation of Registration
Advanced Registration
Regular Registration
Delinquent Accounts
Refund of Fees and Charges
Vehicle Parking Fee
Academic Credit by Examination
Graduation Fee
International Student Health Insurance
Students Sixty-two Years of Age or Older

Financial Aid Information

Southern Polytechnic State University subscribes to the principle that the primary purpose of a financial assistance program is to provide aid to students who without such assistance would be unable to attend or remain in school.

The financial aid program is intended to assist students in meeting normal university expenses and to help as many students as possible. An applicant should realize, however, that the amount of financial aid granted seldom meets all the student's educational expenses.

Applying for Financial Aid

Step one in applying for financial aid is to fill out the Free Application for Federal Student Aid (FAFSA), which is available at the Student Financial Aid Office, or on the World Wide Web at www.fafsa.ed.gov.

Although applications are processed until all federal funds are expended, students who apply by the March 1st deadline have a greater chance of receiving the maximum amount of federal financial aid than those who apply late.

Aid awarded to a student one year does not mean that he or she is eligible to receive aid in a subsequent year, unless the student continues to demonstrate need as defined by the U.S. Office of Education. An application for financial aid must be completed each year in order for a student to continue to receive financial aid.

Information and applications concerning financial aid may be obtained by writing to:

Director of Financial Aid
Southern Polytechnic State University
1100 South Marietta Parkway
Marietta, Georgia 30060-2896

or by calling the Office of Scholarships and Financial Aid at 678/915-7290 or 800/635-3204, or email at finaid@spsu.edu.

Types of Financial Aid

Types of aid for which graduate students might be eligible include:

- The Federal Work Study Program (FWSP)
- The Federal Family Educational Loan Program

Depending on financial need, the maximum that a graduate student may borrow from the combined Subsidized and Unsubsidized Stafford Loan Program is $18,500 per year and only $8,500 in subsidized per year maximum. The total limit is $138,500 and not more than $65,500 can be in subsidized loans.
Satisfactory Academic Progress

Federal law requires students receiving federal student aid to maintain satisfactory academic progress as defined by the institution. The Satisfactory Academic Progress (SAP) requirements are separate from the regulations governing academic probation and suspension.

Southern Polytechnic State University's SAP requirements include:

- A maximum time frame requirement
- A completion rate requirement

- A cumulative grade point average requirement

Aid recipients must meet each of the three (defined below) in order to be considered to be making satisfactory academic progress and to continue to receive financial aid.

Maximum Time Frame Requirement

Financial aid recipients must complete their program within 150% of the published length of the program.

To figure the maximum time frame, first check the college catalog to determine the number of credit hours required for graduation in a particular major.

Second, multiply the required number of credit hours by 150%.

Third, subtract the number of credits transferred in toward the major.

(Example: A student majoring in construction management transfers in 50 semester credit hours. It takes 128 semester hours to earn a degree; therefore, the student's maximum time frame is (128X150%)-50 = 142. This student's financial aid eligibility is exhausted once he/she has attempted 142 semester hours at SPSU).

Students who have completed 100% of the maximum time frame will be warned by e-mail and reminded that they can receive financial aid for no more than 150% of the credit hours required for graduation.

Completion Rate Requirement

In order to complete a program of study within the required time frame, the aid recipient must complete 66.7% of all hours attempted at SPSU. Credit hours attempted are cumulative and include all hours for which the student was enrolled and received a grade of A, B, C, D, F, W, WF, I, IP, S, or U. Grades excluded from GPA due to multiple attempts are included in the completion rate. Excluded hours count in the student's completion rate.

Cumulative Grade Point Average Requirement

Graduate students receiving financial aid must maintain a cumulative grade point average of 3.00. The cumulative grade point average will be computed by dividing the number of quality points earned by the total credit hours attempted for which the student received grades of A, B, C, D, F, WF, or I. No quality points are earned for an F, WF, or I.

How Often Is SAP Checked?

Percentage completion rates and cumulative GPA requirements are monitored at the end of each spring semester. If a student is not making SAP at the end of spring term he or she will be placed in one of two categories:

Financial Aid Probation

Students with a GPA of less than the required 3.00 but greater than or equal to 2.00 and/or
Students with a completion rate less than the required 66.7% but greater than or equal to 25%.

Financial Aid Suspension

Any student earning less than a 2.00 GPA and/or earning a completion rate under 25%.
Any student on financial aid probation and still not making SAP

Students on Financial Aid Probation may receive financial aid. If the student does not achieve the required completion rate and cumulative GPA requirement by the end of the probationary year, he or she will be placed on Financial Aid Suspension until the requirements are met. Students on Financial Aid Suspension may not receive financial aid.

Tuition and Fees

Tuition and Fees
SEMESTER RATES, EFFECTIVE FALL 2006
Georgia Residents

Credit Hours	1	2	3	4	5	6	7	8	9	10	11	12 or more
Undergraduate	399	514	629	744	859	974	1089	1204	1319	1434	1549	1661
Graduate	422	560	698	836	974	1112	1250	1388	1526	1664	1802	1935

Non-Residents

Credit Hours	1	2	3	4	5	6	7	8	9	10	11	12 or more
Undergraduate	743	1202	1661	2120	2579	3038	3497	3956	4415	4874	5333	5789
Graduate	835	1386	1937	2488	3039	3590	4141	4692	5243	5794	6345	6890

Distance Learning	FY 2006-2007
Undergraduate (resident and non-resident)	$189 per credit hour *Plus $75Tech Fee*
Graduate (resident and non-resident)	$227 per credit hour *Plus $75Tech Fee*

The Board of Regents of the University System of Georgia establishes matriculation and Non-Resident fees. All fees and charges are subject to change without notice; however, Southern Polytechnic will make every effort to communicate changes as they occur.

The following required fees are included in the above charges for all enrolling students:

- ***Activity*** ***$41***
- ***Recreation - Wellness Center*** ***$51***
- ***Athletic*** ***$94***
- ***Health Service*** ***$23***
- ***Technology*** ***$75***

Parking Fees of $15.00 are not included.
A $40 fee for expendable lab supplies is attached to some laboratories.

Dorm fees:

- ***Howell Hall - $1605.00 per semester (Double occupancy).***
- ***Norton Hall - $1605.00 per semester (Double occupancy).***

Rental for the University Commons apartments (rented by the bedroom):

- ***$515 per month per student for a 2 bedroom 2 bath apartment, including utilities***
- ***$435 per month per student for a 4 bedroom 2 bath apartment, including utilities***

Rental for University Courtyard apartments (rented by the bedroom):

- ***$495.00 per month per student for a 4 bedroom 4 bath apartment, including utilities***

Student Fees

The Board of Regents of the University System of Georgia establishes matriculation and Non-Resident fees. All fees and charges are subject to change without notice; however, Southern Polytechnic will make every effort to communicate changes as they occur.

Fee Payment

Registration and fee payment dates are published in the registration bulletin. Payment of fees and other charges may be made with:

- Cash
- Checks
- Approved financial aid
- Credit cards

(Visa, MasterCard, and American Express are accepted on campus in the Business Office and the University Bookstore.)

Registration fees may be paid on the SPSU web site using the same credit cards. On-line transactions are fully encrypted for the safety of both the student and the university.

Students who register for courses and pay appropriate fees using any acceptable method of payment shall be considered enrolled and space shall be reserved in the class(es) for the duration of the term.

Payment of matriculation or non-resident matriculation shall not be accepted after the close of business at the end of the official drop/add period. Students are encouraged to register and pay fees as early as possible to avoid potential problems.

All payments returned to the University due to insufficient funds are subject to a $25.00 returned check fee. Any outstanding returned check payments will be turned over to either a collection agency or the State Attorney General's Office for further legal collection action. All accounts turned over to a third party for legal collections will be subject to an additional collection cost of twenty five percent in addition to the original debt owed to the University.

Cancellation of Registration

Failure to pay tuition and fees by the published deadline date can cause the cancellation of your registration.

Advanced Registration

SPSU offers an advanced registration period for currently enrolled students to give them the opportunity to secure a schedule for a coming term. In order to keep a schedule that is produced during advanced registration, students must:

- Register for classes during the advanced registration period
- Pay for classes (or apply for financial aid) before the published fee payment deadline for advanced registration (students who have signed an official award letter which signifies acceptance of the financial aid award are considered to have paid their fees)

If these actions are not taken, the schedule will be removed from the computer system and the student will be required to register again during regular registration.

Regular Registration

Regular registration is the period immediately before the beginning of a term when a student registers for classes.

The registration process is not complete until payment of fees is completed. Students who have signed an official award letter, (which signifies acceptance of the financial aid) and have registered for classes, are assumed to be students who will attend classes. The fee payment deadline for regular registration is published each term in the registration bulletin.

Delinquent Accounts

All delinquent debts and/or obligations to the University will be turned over to either a collection agency or the State Attorney General's Office for further legal collection action. All accounts turned over to a third party for legal collections will be subject to an additional collection cost of twenty five percent in addition to the original debt owed to the University.

Refund of Fees and Charges

Refunds of fees and charges will be made only upon official withdrawal from all classes through the Registrar's Office. A student who partially withdraws (withdraws from some classes, but is still registered in other classes) after the official drop/add period **does not receive a refund**.

The Board of Regents of the University System of Georgia and the Department of Education establishes the refund policy for the university. The refund schedule is published in the Registration Bulletin.

Residence hall charges are refunded on a pro-rata basis, only by separate application to the Director of Housing and Residence Life. Refunds are subject to the rules and regulations regarding student responsibilities in the residence halls, as outlined in the Student Handbook.

Where applicable, any refunds resulting from unearned financial aid will first be returned to the Title IV programs, other sources of aid, and/or finally to the student. The student must repay all funds to the university that are determined to be "unearned financial aid" that resulted from the calculated refund.

Vehicle Parking Fee

Students who are currently enrolled may purchase a parking permit each term at a cost of $15. Permits valid for the academic year (fall, spring, and summer terms) are available at a cost of $45. A limit of one vehicle per student is allowed on campus at any given time. To avoid traffic fines, parking permits must be purchased prior to the end of the first week of classes. For additional information and a copy of university parking regulations, contact the University Police Department.

Academic Credit by Examination

Students who wish to attempt academic credit by examination shall be charged a testing fee of $50.00. An official receipt from the Business Office must be presented prior to taking the examination. Acceptance of the fee from a student does not imply that the credit by examination has been approved by the university. All requests for credit by examination are subject to approval by the academic department and by the registrar.

Graduation Fee

Every student receiving a degree must pay a graduation fee of $40. The final due date for payment of this fee is published in the registration bulletin. Students who fail to observe the petitioning deadline are charged a late fee of $60.00 (in addition to the $40.00 fee).

International Student Health Insurance

Based on the guidelines provided by the American College Health Association and NAFSA: the Association of International Educators, Southern Polytechnic State University requires international students on F-1 and J-1 visas to purchase the endorsed SPSU International Student Insurance policy. Payment of this fee is mandatory and should be paid directly to the Office of Business and Finance along with payment of tuition and miscellaneous fees. Purchase of this insurance policy is mandatory each semester.

Students Sixty-two Years of Age or Older

Citizens of the State of Georgia who are 62 years of age or older may attend Southern Polytechnic State University without payment of matriculation and fees (except for supplies and laboratory or shop fees) when space is available in a course scheduled for resident credit.

To be eligible for participation under this amendment to the Georgia Constitution, such persons:

- Must present a birth certificate or other comparable written documentation of age to the Registrar's Office at the time of registration
- Must meet all University System and Southern Polytechnic State University admission requirements
- Must meet all University System, Southern Polytechnic State University, and legislated degree requirements if they are degree-seeking students

Student Life

Index to Student Life

Emergency Locator Service
Student Housing
Student Health Services
The Student Center
The Bookstore
The Post Office
Career and Counseling Center
Internship Program
Athletics and Recreational Sports
Recreational Facilities
Athletic Facilities
The Library
The ATTIC
Licensure of Professional Engineers
University Police
Extended University

Student Life

The student affairs areas at Southern Polytechnic State University include:

- Student housing
- Student activities
- The Student Center
- Student health services
- Recreational sports and intercollegiate athletics
- Career & Counseling services
- Cooperative education
- Judicial Programs

The Dean of Students supervises a professional staff which is responsible for providing these services and activities for students. In addition, the Dean of Students should be contacted by students with hardship situations or by those who are encountering difficulties with campus life.

Emergency Locator Service

Emergency assistance in locating a student is provided by the Office of the Dean of Students (678-915-7374) during normal school hours, from 8:00 a.m. until 5:00 p.m., Monday through Friday. The University Police Department provides emergency assistance in locating students on weekends and after 5:00 p.m. on weekdays (678-915-5555).

Student Housing

With the addition of newly built and acquired apartment units, SPSU now offers nearly 1200 on-campus beds for student housing. In addition to providing a convenient and economical "home", on-campus living also meets a student's physical needs of shelter, comfort, and attractive surroundings. Living on campus contributes to the educational development of each student through exposure to students of varied backgrounds, experiences, and personal philosophies. The Director of Residence Life, who is assisted by a professional staff from the Ambling Management Company and paraprofessional student staff, supervises the Residence Life program. The primary function of the residence life staff is to create and maintain a desirable environment for all residents.

Application
All students who have applied for admission to Southern Polytechnic State University and who have requested information about on-campus housing will be sent an application. Since space is limited, it is important to make requests for housing early. A request for housing consists of:

- The completed and returned Residence Life lease agreement
- A $100 application fee

The application and fee should be sent to the University's Residence Life Office. However, completing the request does not guarantee housing will be assigned. When the lease agreement and deposit have been received, a notification of housing status will be sent by Residence Life.

The Director of Residence Life is responsible for all room assignments. Preferences for a specific residence hall or apartment will be honored whenever possible. Mutual roommate requests should be so marked on the lease agreements of both students. Consideration of a roommate request will be given providing the request is mutual and space is available.

Student Health Services

The school nurse, who is on duty Monday through Friday in the clinic located in the Recreation and Wellness Center, provides limited outpatient services for minor illnesses. If the nurse cannot provide sufficient medical treatment, she may refer the student to a medical facility located near the campus. Due to the limits on the health services provided by Southern Polytechnic State University, each student is encouraged to have adequate health and accident insurance through either a personal or family insurance policy.

International students are required to have private health insurance protection. Southern Polytechnic State University is not responsible for any medical expenses incurred by international students beyond those that are covered for any student paying the Student Health Fee.

The Student Center

Southern Polytechnic State University's Student Center includes:

- Food service and dining areas
- A 467 seat theater for films, concerts, and entertainment productions
- A bookstore
- A post office
- A large recreation room featuring pool and ping-pong tables
- Additional meeting rooms, lounges, and TV/video viewing areas
- A Cyber Café offering 8 internet & e-mail computer stations

Offices for the Dean of Students, Student Activities, Student Center Operations, and Counseling & Career Services are also located in the student center.

The student center is the focal point for the majority of entertainment activities provided by the Campus Activities Board including concerts, dances, and videos. Also, the student government, newspaper, radio station, fraternity/sorority and other student organization offices are located here. The Student Center is where the Southern Polytechnic State University community comes together to eat, meet, relax, and be entertained.

The Bookstore

The Southern Polytechnic State University bookstore is located on the lower level of the Student Center. In addition to new and used textbooks, you can also purchase software, reference books, school supplies, engineering supplies, calculators, SPSU apparel, greeting cards, health and beauty aids, drinks, and snacks.

On the last day of registration and the first week of classes, the bookstore is open for extended hours.

The Post Office

The Southern Polytechnic State University Post Office is located next to the Bookstore and is open 9:00 a.m. to 5:00 p.m. Monday through Friday. Post Office boxes are available for rental by the term.

Career and Counseling Center

Counseling Services
The Career and Counseling Center offers a variety of counseling services to students, including help with personal, academic, and career concerns.

Personal concerns such as anxiety, depression, relationship problems, low self-esteem, low self-confidence, and communication issues can make it very difficult for students to gain the most from the university environment and from their classes. Professional counselors provide **individual sessions for students** seeking confidential assistance with these and other personal issues.

Part of the career development process involves increasing our self-understanding in such areas as our values, life goals, interests, and skills. **Counselors can help students increase their self-understanding and learn how to match their personal characteristics with the work environments that a university education makes possible for them.**

Academic concerns center around more effective time management, study skills and dealing with test anxiety. Counselors can assist students in identifying deficiencies in these areas to make the overall academic experience more successful. Many students find university work more difficult than they expected and find that it strains their abilities.

Counselors can assist students to develop skills in stress management, overcoming test anxiety, test-taking strategies, academic motivation, and enhancing memory by understanding learning style.

The Career and Counseling Center provides a variety of tests that are adjunctive to counseling services. With the student's consent, counselors use these instruments when they feel that the data provided will facilitate the student's use of the service.

Counselors provide outreach programs on many topics, including stress management, assertiveness training, depression, deciding on a major, relationship building, and special student concerns. All counseling services are **free of charge**, confidential, and are available on an appointment or a walk-in basis.

Career Services
The Career and Counseling Center provides placement assistance for graduates and students seeking full-time or part-time employment. The Center provides assistance to students in preparing for the job search and obtaining employment suited to their career goals and aspirations, but can never guarantee employment for any student or graduate. Services offered include:

- Assisting in resume preparation
- Offering career search workshops and mock interviews
- Resume referral
- Campus interviews

In addition, the Center maintains employer and occupational information as well as part-time and temporary job listings.

Students are encouraged to make use of the career services as early as possible during their stay at Southern Polytechnic. **Degree candidates should begin the job placement process two semesters prior to their graduation.**

Students interested in part-time or temporary employment should survey the jobs listed on the Career and Counseling Center web page. Some of the jobs require technical expertise; however, many require no experience. Most students seeking part-time employment are able to find suitable work in the metro area. Alumni assistance is also offered through the Career and Counseling Center. Employment opportunities for alumni are posted through our Career Lane database on the Center's web page.

Internship Program

The Southern Polytechnic State University Internship program is a short-term work experience in a professional environment where the emphasis is on learning versus earnings. It is designed to enhance academic, personal, and professional development and will assist you in making a smooth transition from the classroom to the world of work, or to provide students with insight about potential careers. Usually, an Internship is a one-time experience for a student who has attained at least some academic preparation in a professional field.

Internship Eligibility and Requirements:

- Must be a registered student at the time of application to the program
- Must have completed at least one semester
- Must have maintained at least a 2.0 GPA (undergraduate)
- Must have maintained at least a 3.0 GPA (graduate)

International Students

International Students must obtain written eligibility authorization from the SPSU International Services Office before beginning EACH working assignment. Due to the INS regulations, International students are not permitted to Intern more than one and a half-academic years for undergraduates and one academic year for graduates. Once an Internship is obtained, International students MUST return to the International Office to complete additional paper work. International students failing to do so will be DROPPED from the Internship Program.

Advantages include:

- Providing career related hands-on work experience
- Earning a competitive salary for school and tuition expenses
- Learning the company culture
- Networking with professionals
- Helping get your foot in-the-door for full-time employment
- Developing self-confidence
- Establishing valuable contacts for letters and references
- Gaining practical experience in the work environment
- Improving opportunities for post graduate jobs
- An opportunity to work with professionals in your field
- Learning to work with colleagues

Athletics and Recreational Sports

The Department of Recreational Sports maintains a comprehensive program of activities that appeal to the leisure time interests and needs of the campus community.

Activities available through the intramural sports program include competitive team sports leagues such as flag football, volleyball, basketball, and softball.

There are also individual competitive tournaments such as billiards, golf, tennis, and racquetball.

In addition to the intramural sports program, the department offers:

- A club sport program
- A wellness program
- Special events
- An outdoor recreation program

The outdoor recreation program sponsors various adventure trips throughout the year.

Recreational Facilities

The Recreation and Wellness Center, opened in the summer of 1996, offers many recreational opportunities to the student. A state of the art weight room that includes free weights, Cybex weight training, and cardiovascular equipment highlights the facility. The facility also boasts a large multipurpose gym that accommodates 2 basketball courts, 2 volleyball courts, 4 badminton courts, and a perimeter jogging/walking area. The Recreation and Wellness Center also has 2 racquetball courts, locker rooms/showers, and a pool complete with an outdoor sunbathing area. The pool can be used for recreation, lap, and competitive swimming. The Department of Recreational Sports and Campus Health Services are housed in the Recreation and Wellness Center.

The Southern Polytechnic Outdoor Recreation Complex provides 3 softball fields and one large multipurpose field for student use. The intramural sports program makes use of these fields throughout the year with flag football, soccer, and softball leagues. Also included in the complex are 9 tennis courts and a half-mile jogging trail.

Athletic Facilities

SPSU competes in the NAIA (National Association of Intercollegiate Athletics) Division I and is a member of the Southern States Athletic Conference. The University has four intercollegiate sports teams:

- Men's Basketball
- Woman's Basketball
- Baseball
- Men's Soccer

The Athletic Department offices are located in the Athletic Gymnasium.

The Library

General Information – The Lawrence V. Johnson Library collection consists of some 118,000 cataloged volumes and more than 1,300 periodical and serials titles. Other formats include: Microforms, U.S. Geological Survey Maps for the State of Georgia; Professor Reserves; and Text Reserves. An increasingly popular service is e-Reserves whereby journal articles, sample tests, plus syllabi are delivered electronically to the students.

GALILEO – Georgia Library Learning online, popularly known as GALILEO, is an initiative funded by the University System that allows access to online databases, including full-text and full-image files. Faculty and students have access to more than 100 indexing and abstracting services and to the Internet. Additionally, students who bring their laptops will be able to access GIL, GALILEO and the Internet for research purposes in any area of the Library which has wireless access.

GIL – The automated library union catalog, GIL, lists materials held by libraries throughout the state of Georgia. Materials from libraries nationwide may be obtained through the Interlibrary Loan service in the Reference Department. GILExpress is a self- initiated, free service to request materials from other University System of Georgia Libraries.

Additional information about services offered at the Johnson Library may be accessed at http://www.spsu.edu/library/library.html ; or, patrons may enter queries via email to reference@spsu.edu .

The ATTIC

The ATTIC (Advising, Tutoring, Testing, International Center) represents the collaboration of student services at SPSU. Located in J 253, the ATTIC houses advising for Joint Enrollment and General Studies students, Tutoring, Testing, International Student Services and Disability Services. For more information, call (678) 915-7361.

Tutoring
The ATTIC provides opportunities for individualized assistance to Southern Polytechnic students. Tutors help students with core courses in English, mathematics, physics, and ESOL (English to Speakers of Other Languages). Tutoring is conducted in J210 from 9:00-2:00 Monday-Friday and 5:00-8:30 Monday-Thursday.

Disability Services
The Disability Services/Testing Advisor coordinates academic support services for students who have a permanent or temporary disability. Individuals eligible for services include, but are not limited to, those with mobility, hearing, learning, visual, speech, or specific neurological disabilities. Services are available free of charge on a self-referral basis.
Students at Southern Polytechnic State University who have a disabling condition and need academic accommodations have the responsibility to voluntarily self-identify by scheduling an appointment with the Disability Services Advisor as soon as possible.

The ATTIC is responsible for providing special assistance for students diagnosed as having specific learning disabilities. To become eligible for special services at Southern Polytechnic State University, students must verify the specific learning disability by having a psychological evaluation on file in the ATTIC.

If you believe you have a specific learning disability, visit the ATTIC for more information.

Under the Americans with Disabilities Act (ADA), special services are available through the ATTIC to any learning-disabled student at Southern Polytechnic State University. All such services are offered based on individual needs.

International Student Services
International Student Services advises the University's international student body, faculty, and staff on Immigration and Naturalization regulations. The coordinator provides student assistance with banking, social security, insurance, housing, employment, practical and curricular practical training, travel regulations, income tax, and the lottery.

International Student Services provides cultural, social, and educational programs. CultureFest introduces international students' culture, food, and talent to the SPSU community. Friends of Internationals and AMIS (American Ministry of International Students) sponsor family and community activities.

Licensure of Professional Engineers

To protect public safety, each state establishes laws to license engineers who are responsible for decisions that affect public health and safety. The licensing process involves formal education, two written examinations, appropriate work experience, and recommendations by professionals in the field. The two written examinations consist of the Fundamentals of Engineering (FE) and the Principles and Practices of Engineering (PE).

The requirements for a Professional Engineer vary by state, and not all states allow engineering technology graduates to seek licensure. However, it is possible for engineering technology graduates to become Professional Engineers in Georgia and many other states. In Georgia, students completing a bachelor's degree in engineering technology may take the Fundamentals of Engineering (FE) exam in the senior year of study. After accumulating the requisite number of years of appropriate work experience, an engineering technology graduate who has passed the FE exam is eligible to take the PE exam in Georgia or other states in which they are eligible for licensure.

Any student with a goal of becoming a Professional Engineer should contact their faculty advisor for additional information.

University Police

Southern Polytechnic is committed to a safe, healthy environment in which our students, faculty and staff can grow professionally and personally. The University promotes strong safety policies and prompt reporting and investigation of any actions or events that would harm the well-being of any student, employee, or faculty member.

The University Police employs police officers who comply with certification, training, and all other requirements of the Peace Officers Standards and Training Council of Georgia. Our officers have arrest powers on Southern Polytechnic property and on any public or private property within five hundred yards of property under the control of the Board of Regents. Our officers conduct preventive patrols on campus including the residence halls, secure University-owned property, investigate reported crimes at the university, conduct educational programs and workshops to promote personal safety, and actively work to prevent and detect crime throughout the Southern Polytechnic community. Our disclosure report can be found at http://police.spsu.edu.

Extended University

Extended University (EU) is an administrative unit reporting to the Vice President for Academic Affairs. The mission of EU is to provide services to SPSU, the business community and the community at large by extending, enhancing and expanding the traditional teaching and service roles of the university to new clients, in new formats and through the infusion of new technologies.

Extended University includes a variety of program and service units. For more information regarding these programs and services, contact the EU Dean's Office at 678/915-3714, stop by J -330, or visit the unit's web site at: http://eu.spsu.edu.

Office of Continuing Education
The Office of Continuing Education (OCE), located in Building F, is responsible for providing all non-credit professional continuing education instruction sponsored by the university. OCE sponsors open enrollment programs in computing, engineering, business, quality, and communications. OCE also offers customized corporate training. OCE Certificate Programs feature a sequential set of courses designed to provide a body of knowledge in selected areas. Currently available certificates include:

- BICSI/SPSU Telecommunications
- Certified in Convergent Network Technology (CCNT)
- Certified Information Systems
- Certified Professional Fiber Optic Installer
- Certified Quality Manager
- CISCO Certified Network Associate (CCNA)
- Distribution Fundamentals (TDF)
- E-Business Solutions in Java
- Embedded Systems (Yamacraw)
- Linux Professional and Linux +
- Microsoft Certified Systems Administrator
- Microsoft Office Specialist
- Network + and A +
- Oracle9i Database
- Outside Plant Engineering
- Practitioner (SSCP)
- Professional Project Management Certificate
- Security +
- Security Professional (CISSP)
- Six Sigma – Green and Black Belt
- Systems Security Certified
- Web Development

Call 678/915-7240 for additional information or check the OCE web site at: http://oce.spsu.edu

Office of Distance Learning (ODL)
The Office of Distance Learning (ODL) provides administrative, marketing and technical support for distance learning activities at SPSU. SPSU has offered distance-learning options in a variety of formats since 1995. Academic programs maintain the responsibility for program selection, content and delivery and ODL assists with administration and marketing as well as providing full technical support including development and delivery support. Methods for distance delivery at SPSU include videoconferencing, web and satellite. For more information go to http://eu.spsu.edu/DistanceLearning

Center for Quality Excellence (CQE)
The CQE, a training and consulting unit of the Office of Continuing Education, is an organizational development and improvement center that provides information, training, consulting, technical assistance, and research, focused on the body of knowledge that relates to Quality Management, ISO 9001:2000, Six Sigma, CQM, CQIA, Customer Service, and Team Development. The CQE provides these services to private and public organizations to help them improve their organizational effectiveness and compete more successfully in the global marketplace. For more information go to: http://cqe.spsu.edu

Grant Development Center (GDC)
The Grant Development Center is designed to assist faculty and staff with identifying and securing sources of external funding to increase research and service. For more information go to:
http://eu.spsu.edu/GrantDevelopmentCenter

The Usability Center (UC)
Since 1995, The Usability Center at Southern Polytechnic has been helping clients apply usability concepts to products in the development process. This allows the user's experience to improve the product before it reaches market. The Usability Center provides usability testing, consultation, lab management, cognitive walk-through, heuristic evaluations, usability research, as well as participant recruitment and selection, and other customized usability related services. For more information go to: http://usability.spsu.edu

Computing and Software Engineering - Industry Liaison
Services include the support and development for Industry Advisory Board, CSE newsletter development, support of academic credit certificates, administration of the Software Engineering Retraining Program, management of Software Center projects and support for other special projects.

Software Center
The School of Computing and Software Engineering has long been known for applications-oriented educational opportunities. Students regularly participate in class projects, internships, and co-op assignments. In addition, the Software Center offers opportunities to connect business representatives and SPSU students and faculty in research and development projects. For more information go to: http://eu.spsu.edu/ComputingandSoftwareCenter

ICAPP Program Development
ICAPP Advantage prepares people to be knowledge workers (workers who generate value for others by creating, sharing or using ideas) in occupations that are in high demand and short supply in specific regional labor markets. ICAPP Advantage is directly tied to specific job commitments by employers.

- ICAPP was created to help employers succeed in Georgia. ICAPP is company-focused, and is not intended to create new degree programs at institutions.
- ICAPP Advantage can be used as an economic development incentive to encourage a company or other employer to either expand in or relocate to Georgia.
- ICAPP Advantage students earn credit hours that can count toward earning a degree. Students may also earn career-related certificates with the academic credit earned.

For more information go to: http://www.icapp.org

English Language Services (ELS)
ELS Language Centers provides a unique opportunity for foreign students to learn English as a second language or to improve their English proficiency.

ELS distinguishes itself as the finest in English language instruction by providing excellent customer service. ELS Language Centers have become the world's largest network of campus-based, English language instruction centers with over 30 locations throughout the United States. We provide full-time daily classes year-round in four-week terms. In addition, we offer specialized programs that are customized to fit your needs. For more information go to:
http://eu.spsu.edu/EnglishLanguageServices

Center for Teaching Excellence (CTE)
At the Center for Teaching Excellence, our job is to facilitate communication on teaching and learning issues and help SPSU continue to be an exceptional teaching-focused university.
The goals of CTE are:

- To provide state of the art teaching resources
- To promote excellence in teaching and learning
- To identify and share best practices in teaching
- To recognize and reward excellence in teaching

For more information go to: http://cte.spsu.edu

Academic Regulations

Index to Academic Regulations

- General Information
- Student Responsibility
- Definitions
- Academic Standing
- Appeals Procedure
- Auditing Classes
- Catalog and Curriculum Appeals
- Certificate Programs
- Changing Your Student Record
- Classification of Students
- Classroom Attendance
- Credit for Courses Completed More than Eight Years Prior to Graduation
- Credit for Duplicate Courses or Dual Credit
- Credit by Examination
- Continuous Enrollment
- Cross Registration
- Cumulative Grade Point Average
- Disruptive Behavior and Academic Dishonesty
- Enrollment Verification and Student Status
- Exceptions to Academic Regulations
- Grade Appeals
- Grade Changes
- Grade Reports
- Grading System
- Graduation Requirements
- Late Instructor
- Maximum Credit Hours
- Progress Reports
- Removal of Previous Major Courses
- Student Activity Absence
- Student Records
- Transfer Credit, Policy for Acceptance of
- Transcript Request
- Transient Authorization
- Withdrawal from Classes
- Withdrawals after the Deadline

General Information

The university's academic rules and regulations are developed and approved by the faculty. The set of processes used to enforce regulations and maintain order are called administrative procedures. In general, each academic rule has an underlying administrative procedure.

For example, the criteria against which a student is judged for graduation is developed and approved by the faculty. The process that is used to examine records and declare a student eligible to graduate is an administrative procedure.

Student Responsibility

Students are expected to have read this section of the catalog and to be generally familiar with academic rules.

Students are expected to consult this section of the catalog and follow the procedures that are outlined herein when the appropriate time in their academic tenure approaches.

For example, a student who is within a year of graduating should review the graduation section and comply with the time table for petitioning to graduate.

In a pedagogical setting, students are expected to develop the ability to read and follow instructions as part of their educational experience. Academic advisors are available to help students interpret what they've read and to encourage appropriate actions. However, it is in the student's best interest to ask questions when in doubt, and to seek out information from official sources rather than to allow rumor to dictate actions.

Definitions

Full-time Student – Full-time status is defined for each student level in the table below. Remember that other agencies (such as federal financial aid) may have different definitions of full-time. The definitions below are used when enrollment verifications are produced by SPSU. Note that the definition of full-time changes for summer semester.

Fall and Spring Semester				
	Part-Time	Half-Time	¾ Time	Full-Time
Undergraduate	Less than 6 Hours	6, 7, or 8 Hours	9, 10, or 11 Hours	12 Hours or More
Graduate	Less than 4 Hours	4 or 5 Hours	6 or 7 Hours	8 Hours or More

Summer Semester				
	Part-Time	Half-Time	¾ Time	Full-Time
Undergraduate	Less than 4 Hours	4 or 5 Hours	6 or 7 Hours	8 Hours or More
Graduate	Less then 3 Hours	3 or 4 Hours	5 Hours	6 Hours or more

NOTE: Most forms of financial aid (except HOPE) require that a student be registered for at least 6 hours without regard to the institutional definition of a full-time student.

Part-time Student – See table above.

Good Standing – A graduate student is in good standing who has a cumulative GPA of 3.00 or higher, and is making reasonable progress toward a degree.

Grade Point Average – The grade point average is calculated by dividing the total quality points earned, by the total number of hours of credit for which grades have been received. Additional information is available on the registrar's web pages.

Advanced Registration – The first period of open registration for a term. Dates are determined by the registrar and posted to the academic bulletin. The purpose of the advanced registration period is to allow current students in good standing the opportunity to secure needed classes and to provide an indicator of course needs for the university.

Regular Registration – The registration period immediately before the term begins. Regular registration includes a period of free registration that extends into the new term by several days. There is no implied or explicit intent to allow students to use regular registration and the drop/add period to "shop" for classes. The intended purpose of the drop/add period is to allow students ample time to develop a schedule and make necessary adjustments.

Audit – Students who audit classes must declare their audit status during the drop/add period. Auditing provides students with the opportunity to attend a class without penalty or risk. The "V" grade is assigned when a course has been audited. No credit is given. This grade may not be used at any future date as a basis for receiving course credit. Courses taken under the audit status carry the same tuition and fees as courses taken in the normal mode. See "Registration" later in this chapter for details about auditing courses.

Withdrawal – Withdrawal is defined as the official act of discontinuing participation in a course or courses during a time in which withdrawal is permitted (usually after the drop/add period or regular registration, but before the mid-point of the term). Withdrawal must be initiated by the student. Students who withdraw during the withdrawal period earn a grade of "W". See "Registration" later in this chapter for details about withdrawing.

Drop – The term "drop" refers to the removal of a course from a student's schedule during the official drop/add period. Dropping classes results in no grade being issued and no charge for tuition or fees.

Administrative Procedures – Administrative procedures are the steps and actions taken in order to follow established rules and regulations.

Term GPA – The term GPA is the pure GPA earned during any particular term of attendance at SPSU.

Cumulative GPA – The cumulative GPA is a student's GPA that includes all course work taken throughout all terms of attendance at SPSU. Grades from other institutions are not included in a student's SPSU cumulative GPA.

Academic Standing

In order to graduate a graduate student must achieve a cumulative grade point average of 3.00. In the event that a graduate student repeats a course, only the last attempt counts in the institutional GPA.

Good Standing
To be considered in good academic standing a graduate student must have a cumulative GPA of 3.00 or better.

Academic Probation
Academic probation is assigned to graduate students whose cumulative GPA falls below 3.00.

Continued Probation
A student whose cumulative grade point average remains below 3.0 for two or more consecutive terms of enrollment, but whose term average is 3.0 or higher, may continue enrollment on probation.

A student may continue enrollment while on probation. However, if a student on probation fails to achieve a term grade point average of at least 3.00 (for graduate students) the student will be placed on dismissal.

Academic Suspension
An undergraduate student whose semester grade point average is below 3.0 and whose cumulative grade point average is below 3.0 for at least two consecutive terms of enrollment shall be academically dismissed for unsatisfactory scholarship. There are currently no provisions for the reinstatement of a dismissed graduate student.

Appeals Procedure

Any rule, regulation, or procedure can be appealed. Decisions are based on evidence that the student was treated unjustly or was not afforded the same opportunities as other students. It is not enough to simply claim "nobody told me". You must have quantitative proof that your were misadvised or misinformed by someone on SPSU's staff, or that you were not treated as other students were treated. Your version of the series of events that led to this situation must be clearly articulated and credible. Your evidence does not have to be prima facie, but it must provide enough reasonable doubt that you were afforded proper guidance to make a policy exception for your case.

Auditing Classes

The following rules apply to Audit courses:

- Audit courses count at full value in determining the number of credit hours for which the student is enrolled.
- No academic credit is granted for audited courses.
- Students may not change a class to or from audit status after the close of the drop-add period.
- The grade assigned for auditing is "V" (visited), and will have no effect upon the student's scholastic average.

Students will not be permitted to receive credit for their participation in a course as an auditor.

Additionally, students who audit a course will not be allowed to receive credit by examination or credit by experience for the same course.

Catalog and Curriculum Appeals

Matters requiring Petitions to the Faculty include requests for consideration for exceptions to policies published in the catalog or as formal institutional Policies and Procedures. Examples include:

- Receiving a grade of "W" past the withdrawal date
- Extension of the time limit for converting a grade of "I"
- Exceptions to residency requirements

Students should complete a Petition to the Faculty form when they feel the academic policies or procedures have not been applied, or will not apply, fairly or appropriately to them.

Students desiring to petition the faculty for an exception should see the registrar's office for information on how to proceed.

If the petition is approved, the matter should be resolved. If the petition is denied, and the student feels that he or she has grounds for an appeal, the following steps are followed:

- The student should discuss the petition with the Registrar to determine the basis for refusal, to be informed of the appeals procedure in his or her particular case, and to be informed of any additional information or documentation that may be desirable, helpful, and/or required.

- Upon written request for appeal to the Registrar's Office, all related information is forwarded to the Vice President for Academic Affairs for review. The Vice President may approve or refuse the appeal.

- If the Vice President for Academic Affairs denies the appeal, upon written request to the Vice President for Academic Affairs, the student may appeal to the President. All related information will at that time be forwarded to the President for review.

- The President may approve or deny the appeal. The President is the final level of appeal.

Certificate Programs

Students admitted to a certificate program may apply the courses completed for the certificate toward a degree program if they are accepted to a degree program. Students admitted to a degree program may be awarded a related certificate based on completion of the courses in the certificate program provided they also apply for the certificate.

Changing Your Student Record

Changing your major
If any student decides to pursue a different program of study than the one originally listed on the admissions application, the student must officially change majors by:

- Visiting the registrar's office and completing a change of major form
- Visiting the student information system on-line and initiating a change of major.

Note that you must have permission to enter some majors.

Changing your demographic information
Most demographic information such as address or phone number can be changed by the student using the student information system on the World Wide Web. To change your name or social security number, you must visit the registrar's office with appropriate documentation.

Note that the official means of communication between the university and students is email. It is the responsibility of the student to check their email daily for notices posted to them.

Classification of Students

Definition of a Credit Hour - One credit hour corresponds to one hour per week of classroom work for a semester, or to three clock hours or its equivalent of laboratory work per week for a semester. Some exceptions exist.

Full-time Students
Graduate students enrolled for 8 or more credit hours are considered full-time students. Graduate students enrolled for 6 or more hours are considered full-time during summer term.

Note that the federal government and some other agencies have different definitions of student status.

Classroom Attendance

There are no formal institutional regulations regarding class attendance. Each classroom or laboratory instructor sets his or her own attendance policy. However, professors are required to report students who are on the class roll and do not attend. Within the first calendar week of classes, or the first laboratory meeting, of the term the instructor will notify the students in writing of the attendance policy for that class. It is the prerogative of the instructor to determine and impose grade penalties for absences. Students are responsible for all course material covered and any academic consequence of their absences. In some cases, federal and state laws require that attendance be recorded and reported. Professors are required to report students who are registered and do not attend, or who stop attending to the registrar's office.

Credit for Courses Completed More than Eight Years Prior to Graduation

Graduate work completed more than eight years prior to the date of graduation may be credited toward degree program requirements with the approval of the student's major Department Chair, or if the student's enrollment at Southern Polytechnic State University has been continuous since the course was taken.

Credit for Duplicate Courses or Dual Credit

Credit may not be awarded for the same course twice, or for courses deemed so similar as to be considered the same. For example, if a student completes PHYS 1111K (Trigonometry based Physics I) and then takes PHYS 2211K (Calculus based Physics I), only one may be counted as hours earned, and only one may be used for graduation purposes.

Credit by Examination

Awarded at the Discretion of the Department Chair
Student evaluation by standardized and/or program examinations may be used at the discretion of the Department Chair as a basis for awarding credit for some courses. These evaluations are available only to currently enrolled students. A fee will be charged before the evaluation.

In order to receive credit by examination:

- Check with the appropriate Department Chair about the applicability of credit by examination to the course(s) under consideration
- If credit by exam is appropriate, obtain a Request for Credit by Examination form from the Office of the Registrar, complete it and pay the requisite fee at the Business Office
- The Business Office will validate the form, and it should then be submitted to the Department Chair who is responsible for the course(s) in question

After the evaluation, the Department Chair will make his or her recommendation for credit to the Registrar's Office. The Registrar will notify the student in writing of the final disposition of the credit.

Credit by exam or by experience may not be awarded for a course previously failed or audited at SPSU.

Continuous Enrollment

To remain continuously enrolled, a student must not have an absence of two or more consecutive terms of matriculation at Southern Polytechnic State University, summer semester included.

Cross Registration

Students may not attend Southern Polytechnic State University and another institution concurrently for transfer purposes, except under the cross registration program.

Southern Polytechnic State University participates in the cross registration program established among the member institutions of the Atlanta Regional Consortium for Higher Education (ARCHE). The purpose of cross registration is to provide opportunities for enriched educational programs and experiences by permitting students at any ARCHE institution to take courses at any other member institution. A student may cross register only for:

(1) Courses for which the student has met the prerequisites and
(2) Courses not offered at the home institution for the given term.

Applications and additional information about cross registration can be obtained from the Registrar's Office.

Cumulative Grade Point Average

Computing the GPA
The cumulative grade point average determines the student's scholastic standing. The cumulative grade point average is computed by dividing the total quality points earned by the total number of credit hours for which the student has received a final grade of "A", "B", "C", "D", "F", or "WF".

Courses Taken at Other Institutions
Only courses taken at Southern Polytechnic State University, or courses completed under the cross-registration program, are computed in the cumulative grade point average. Credits earned at other institutions, credit by examination, credits for which quality points are not assigned, institutional credit courses, and courses otherwise excluded by institutional policy are not considered when calculating the cumulative grade point average for graduation purposes.

Quality Points are assigned as follows:

Grade	Quality Points
A	Four quality points are assigned
B	Three quality points are assigned
C	Two quality points are assigned
D	One quality point is assigned
F	Zero quality points are assigned
WF	Zero quality points are assigned

Graduate student grade point averages, for the purpose of remaining in good standing or graduating from a program are computed using only those courses in the major department and those courses approved by the program faculty

Disruptive Behavior and Academic Dishonesty

A faculty member reserves the right to remove any student from his or her course if the student's behavior is of a disruptive nature or if there is evidence of academic dishonesty. In instances of disruptive behavior and/or academic dishonesty, the faculty member will discuss the circumstances with the student(s) before taking final action. In the event the student cannot be reached, he or she will be given the grade of "Incomplete" until such time as he or she can be reached. The student shall have the right of appeal of the faculty member's decision:

- First to the faculty member's Department Chair
- Then to the appropriate school dean,
- and, if necessary, to the Vice President for Academic Affairs

Removal from a course under this provision will result in a grade of "F". A grade of "F" issued under these circumstances shall not be superseded by a voluntary withdrawal or by forgiveness policies, and will be included in the student's cumulative grade point average calculated for graduation purposes.

Enrollment Verification and Student Status

Students desiring that their enrollment status be reported to an outside agency such as another university, or an insurance company, should fill out an enrollment verification request form in the registrar's office. Student status shall be reported as follows:

Fall and Spring Semester				
	Part-Time	Half-Time	¾ Time	Full-Time
Undergraduate	Less than 6 Hours	6, 7, or 8 Hours	9, 10, or 11 Hours	12 Hours or More
Graduate	Less than 4 Hours	4 or 5 Hours	6 or 7 Hours	8 Hours or More

Summer Semester				
	Part-Time	Half-Time	¾ Time	Full-Time
Undergraduate	Less than 4 Hours	4 or 5 Hours	6 or 7 Hours	8 Hours or More
Graduate	Less then 3 Hours	3 or 4 Hours	5 Hours	6 Hours or more

Note that the federal government and some other agencies have different definitions of student status. For example, without regard to the above table, all undergraduate students must be enrolled in at least 6 hours to qualify for most types of financial aid (HOPE excepted).

Exceptions to Academic Regulations

Exceptions to the Academic Regulations of Southern Polytechnic State University may be made by the faculty or by the Registrar whenever a consideration of the student's complete record indicates that the application of a specific regulation will result in an injustice.

Grade Appeals

Grade appeals fall into a special category. Grades are assigned by professors based on an evaluation of a student's academic performance. **A student who wishes to appeal a grade must present clear evidence that a grade was assigned by some criteria other than an evaluation of academic performance.** Appeals that proceed beyond the professor who issued the grade, must be in writing. Check with the Registrar's Office for the procedure to follow.

Grade Changes

Grades that have been assigned to a student by an instructor may be changed no later than the end of the third consecutive term following the term in which the grade was awarded. The instructor must initiate grade changes. Grades included in this provision are "A", "B", "C", "D", "S", "U", and "F".

Grade Reports

Grades are reported to students by way of the student information system. Grade reports are not mailed.
Students who desire a written grade report may obtain one by written request to the registrar's office.

Grading System

Regular Grades
The following letter grades are used to specify the level of performance in academic courses and are computed into the semester and cumulative grade point averages:

Grade	Definition	Comments
A	Excellent	
B	Good	
C	Satisfactory	Passing, but often must be repeated if needed for graduation
D	Poor	Usually must be repeated if required for graduation
F	Failure	Course must be repeated if required for graduation
WF	Late Withdrawal	A grade of "WF" in a course is assigned upon official withdrawal after the midpoint of the term, and is counted in the student's scholastic average as a failing grade.

Lab Grades
For subjects including class and laboratory work, both portions are considered essential and the grades on each will be combined at the end of the semester and reported as one. Failure in either class or lab may result in failure of the entire course.

Other Grades
The following symbols are used in the cases indicated but are not included in the calculation of semester or cumulative grade point averages:

Grade	Definition	Comments
I	Incomplete	This symbol indicates that a student was doing satisfactory work but, for **nonacademic reasons** beyond his or her control, was unable to meet the full requirements of the course An incomplete must be removed during the next term in which the student attends classes, otherwise the Registrar's Office shall convert the "I" into an "F". Once an incomplete grade is issued, a student should not re-register for the course until the grade becomes permanent, or converts to a permanent grade.
IP	In Progress	This grade indicates that credit has not been given in courses that require a continuation of work beyond the term for which the student signed up for the course. The use of this symbol is approved for thesis and project courses. This symbol cannot be substituted for an I (incomplete).
V	Audit	The "V" grade is assigned when a course has been audited. No credit is given. This grade may not be used at any future date as a basis for receiving course credit.
W	Withdrawal	A grade of "W" is assigned when a student officially withdraws from a course before the midpoint of the term. Courses carrying the "W" grade will not be counted in the student's scholastic average.
S	Satisfactory	This symbol indicates that credit has been given for completion of degree requirements other than academic course work.
U	Unsatisfactory	This symbol indicates unsatisfactory performance in an attempt to complete degree requirements other than academic course work.

Graduation Requirements

Catalog for Graduation Evaluation

- A student may elect to be evaluated for graduation from any catalog in effect during the time he or she has been enrolled, provided that enrollment has been continuous or that the student has not changed majors.

- Students readmitted or reinstated will be evaluated for graduation from the catalog in effect at the time of readmission or reinstatement, or any catalog in effect during subsequent periods of continuous enrollment.

- Students changing majors will be evaluated for graduation from the catalog in effect at the time of the change, or any catalog in effect during subsequent periods of continuous enrollment.

- Each student is responsible for determining the appropriate catalog to be used for academic advisement and for evaluation of graduation requirements. Catalog selection applies only to the course requirements of that catalog; all other academic procedures and graduation requirements must be satisfied according to regulations in effect at the time of graduation. For further information on the selection of an appropriate catalog, contact your major Department Chair or the Registrar's Office.

General Requirements

A graduate student is eligible for graduation when he or she:

- Has satisfactorily completed the required number of hours for the degree
- Has passed all required courses for the degree
- Has achieved the necessary scholastic average (3.00 for graduate students)
- Has paid all required fees, fines, and other financial obligations
- Has filed an official "Petition of Admission to Candidacy for a Degree" through the Department Chair to the Registrar's Office.
- Has satisfied any program related requirements
- Has merited the recommendation for the degree by the faculty and the President of the university
- Has earned 25% of the total hours required for the degree in residence at SPSU
- Has earned in residence at SPSU the last
  (Transient coursework does NOT count as resident work)
  - 20 credit hours required for an associate degree
  - 30 credit hours required for a bachelor’s degree
  - 45 credit hours required for a bachelor of Architecture degree

Graduation Petitions

A student must submit a formal petition for "Admission to Candidacy for a Degree" to their academic department in accordance with the deadline published in the academic bulletin.

All fall semester petitions for students not in school summer should be made in the spring semester of that year, and co-op students should petition the term before a work term if the work term immediately precedes the term of anticipated graduation.

Students are encouraged to petition early.

Late Instructor

Should the instructor be late in meeting a class or a laboratory period, students will wait a minimum of fifteen minutes. If during the fifteen-minute waiting period no notification to remain is given, students may leave without penalty.

Maximum Credit Hours

Graduate students may register for a maximum of 12 hours each term. Academic department chairs may authorize additional hours under unusual circumstances.

Progress Reports

"All faculty members shall make available to each student in their classes each semester, an evaluation of the student's academic progress in the class on or before the mid-date of the term. The evaluation must be in the form of graded/evaluated class assignments, examinations, papers or essays, or projects returned to the students on or before the deadline stated above." Instructors will make every effort to be available during their office hours for discussion of the student's progress in the course prior to the midpoint of the total grading period.

Attendance or participation in a class for which a student has not registered and paid is strictly prohibited without express permission from the office of the registrar.

Removal of Previous Major Courses

Students may request deletion of previous major courses for graduation scholastic average and hours purposes by completing a Petition to the Faculty. Students should discuss this action with their program advisor first to determine its benefit potential. All courses that were unique to the excluded program will be excluded under this rule. For example, if a non-core mathematics course is part of the degree requirements for a management degree, and the student requests exclusion, the mathematics course would be excluded along with all management and related courses. Courses included in the University System of Georgia core are not excluded.

Student Activity Absence

Students who are absent because of participation in approved university activities such as field trips and athletic events will be permitted to make up the work missed during their absences. The student is responsible for reporting such absences to the instructor and for arranging with the instructor for make-up work. This policy is not to be construed as blanket permission to miss classes and any excessive absence may result in failure of the class.

Student Records

In accordance with the policy of the Board of Regents of the State of Georgia and under the provisions of the Family Education Rights and Privacy Act of 1974, Southern Polytechnic State University maintains various educational records for each matriculating student.

These records are considered confidential and will not be released for use outside the institution without the written consent of the student. Exceptions as authorized by the Act are noted.

Directory Information

Southern Polytechnic maintains student information in various forms. Students who desire that "directory information" not be released without consent should so notify the Registrar's Office in writing. The following may be included as "directory information" unless notification is received to the contrary:

- Student's name
- Place of birth
- Class schedule
- Current enrollment status
- Dates of attendance
- Major field of study
- Participation in officially recognized activities and sports
- Degrees and awards received
- Hometown
- Weight and height of members of athletic teams
- Prior college(s) attended

Policies and procedures

Specific policies and procedures for the maintenance of student records according to the Board of Regents of the University System of Georgia and the test of the Family Educational Rights and Privacy Act of 1974 are available for review in the Registrar's Office.

Destruction of Records

The complete academic record of all matriculating students will become permanent records of the institution. Following the third continuous term of non-enrollment by a student, the nonacademic records will be placed in an inactive, but accessible status. Following the end of the ninth year of inactive status, the nonacademic records will be purged and destroyed by the official responsible for their maintenance.

Students also have the right to file complaints with the FERPA Office of the Department of Education, Washington, D.C., 20201, regarding alleged violations of the Act.

Transfer Credit, Policy for Acceptance of

Transfer credit is awarded in accordance with the policies of the university system of Georgia, accrediting agencies, and SPSU. Courses under consideration for transfer credit are evaluated by the department chair whose department is primarily responsible for the course.

Transfer credit should not be confused with course substitutions. A course might not be equivalent to any course offered at SPSU, but still have enough content to be considered as a substitute for a course

within a degree program. Transfer credit would be awarded for free elective hours and a course substitution petition would be initiated and processed through the curriculum committee.

To be considered for transfer credit, courses must normally:

- Represent college or university-level work
- Have been completed with a grade of "B" or better
- Have been taken at institutions holding college-level accreditation by a United States regional accrediting authority
- Be equivalent to courses at SPSU with regard to
    - Credit hours
    - Course content
    - Level of instruction
- Not have been in a subject for which the student received a failing grade at SPSU

Evaluation of Courses for Transfer Credit
In order for SPSU to perform an evaluation of transfer credits, the student

- must provide official transcripts containing all the courses being considered,
- must be accepted for admission to SPSU,
- must provide course descriptions, syllabi, or other documentation on course content if requested by SPSU

Students may be required to demonstrate proficiency by passing an examination in order to be awarded some credit.

The amount of transfer credit awarded can be limited by:

- Residency requirements defined in Academic Regulations
- The applicability of transferring courses to the chosen major
- Performance of the student during proficiency evaluations.

Responsibility for transfer credit decisions at SPSU:
The Student has responsibility for providing complete and correct information (including course descriptions, syllabi, and other required documents).

The Chair of the department at SPSU in which the subject is taught has responsibility for determining whether transfer credit will be awarded.

The Chair of the student's major program of study has responsibility for determining whether transfer courses are applicable to that degree program.

The Registrar is responsible for determining restrictions and limits on amounts of transfer credit that can be granted.

The Registrar has final authority in checking compliance with university-wide academic standards and graduation requirements.

Transfer Credit for Courses Earned Outside the United States
Transfer credit for courses completed at institutions of higher learning outside the United States shall be subject to the same criteria as those courses earned in the United States, but outside the State of Georgia.

In addition, the following conditions must also be met by the institution where the credits were earned:

- International course descriptions must have been translated by a recognized translation service and certified as a true and correct translation.

The institution at which the credit was earned:

- Must have been evaluated and endorsed/certified/accredited by a nationally-known evaluation agency
- Must be offering degrees and course work at the college or university level and
- Must have a well-established international reputation for quality instruction

Transcript Request

Students must request transcripts in writing from the Registrar's Office. All transcripts will include the entire academic record; no partial or incomplete record will be issued as a transcript. Though transcripts are normally issued promptly, requests should be made several business days before the document is required, particularly at the beginning or end of a semester. A transcript will not be issued when a student's record shows financial indebtedness to the institution. Transcripts may be ordered in person in the Registrar's Office, or by faxing or mailing a signed request.

Transient Authorization

Southern Polytechnic State University students planning to attend another institution for one semester and then return to Southern Polytechnic State University should complete a transient letter authorization form, available in the Registrar's Office.

Withdrawal from Classes

Students desiring to withdraw from one or more classes before the midpoint of the term may do so by:

- Completing a Request to Withdraw at the Registrar's Office
- Or withdrawing through the Web-based registration system
- Or by sending a signed fax or letter to the registrar's office

After doing so, the student will be assigned a grade of "W" for those course(s). While a grade of "W" does not count in the student's cumulative grade point average, it does count in attempted hours for financial aid purposes and could affect a student's eligibility for aid if there are repeated withdrawals.

Refunds associated with withdrawals are made only in the case where a student withdraws completely from all classes for a term. Refunds are based on the date of the withdrawal and are pro-rated. By University System of Georgia rule, refunds are not initiated for withdrawing from a portion of registered classes.

Withdrawing After the Mid-Point
Students who withdraw after the midpoint of the term are not eligible for a grade of "W" except in cases of hardship or extenuating circumstances as approved by the faculty. (See Administrative Procedures for instructions.) Students withdrawing after the withdrawal deadline date receive a grade of "WF" for the course(s), which counts the same as an "F" for grade point purposes.

Professor Initiated Withdrawals
In the event that a student ceases to attend classes and is beyond any reasonable chance to earn a passing grade, a professor, at his or her discretion, may withdraw the student unilaterally. If the student was already failing the class when he or she stopped attending, this policy should not be applied unless there are other mitigating circumstances. **Professor initiated withdrawals are at the discretion of the professor and there is no obligation on the professor's part to initiate a withdrawal under any circumstances.** Students who have decided to stop attending should initiate the withdrawal process as outlined above.

Withdrawals after the Deadline

A request for a grade of "W" (past the deadline date) is properly made on a Petition to the Faculty form, available in the Registrar's Office.

- The petitions must be completed and signed by the student's instructor(s), instructors' Department Chair(s), and major Department Chair.
- The petition must be substantiated by evidence sufficient to support the extenuating circumstances claimed.

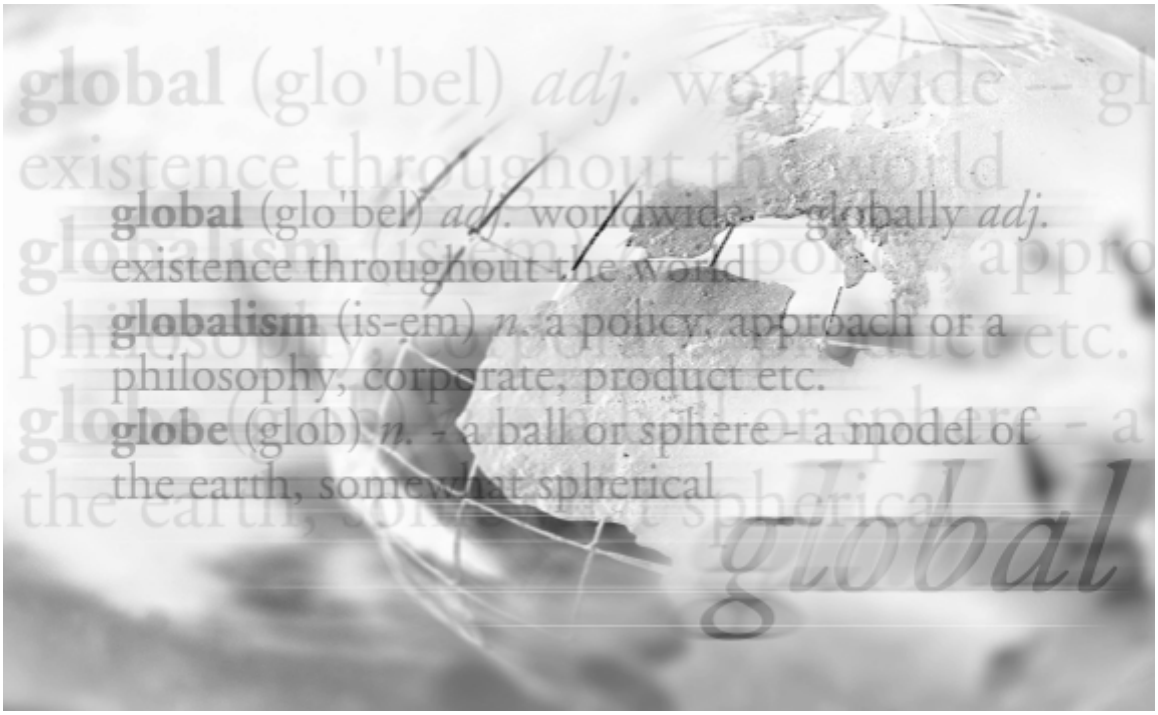
No student will be allowed to withdraw from a course after the final class day of the term.

Students withdrawing from **all** classes during the refund period are entitled to a refund of a portion of the fees paid for the course(s). Students should check the Registration Bulletin to determine the date and amount of refund (if any) available. **No refunds are made for partial withdrawal.**

Graduate Degree Programs

Business Administration

Offering the Master of Business Administration Degree



Master of Business Administration (MBA) Program

Admission to the MBA program is open to persons holding the bachelor or higher degree from an accredited college.

Admission Procedure
Applicants to the MBA program must submit the following to the Admissions Office no later than the semester deadline date before the beginning of the semester in which they plan to enroll:

- An application for admission to the MBA program
- An official copy of scores from the GMAT (within the past five years)
- An official transcript from each college the applicant has attended,
- Certificate of immunization
- At least three recommendation forms which have been completed by former or current supervisor, professors, or professional colleagues.

International students should refer to the International Students sub-section for additional admission requirements.

Admission Criteria
Applicants for admission to the MBA program must meet the following criteria:

Regular admission index: GMAT + (200 * undergraduate GPA) = 900

In order to have scores forwarded to SPSU you must provide our reference code number (5626) on your test application.

Advanced Admission Criteria
A candidate for admission who has already earned a recognized Masters or doctorate degree in another field of study is NOT required to take the GMAT if the advanced degree has been completed in the United States.

Admission Status
The MBA coordinator in conjunction with the department head determines the student's admission status.

Full admission status applies to students who have met all of the admission requirements of the MBA program. Fully admitted students who have not taken courses in the common professional core (CPC) will be required to take the 5000-level transition courses or equivalent undergraduate courses to fulfill this requirement.

Provisional admission status applies to students who have not met all of the admission criteria. With provisional admission, students are limited to designated courses during a specified time period while they work to fulfill the full admission requirements. Students with provisional admission status are not guaranteed full admission status.

Post-baccalaureate status is available to students who meet the admission criteria but who are NOT seeking a degree.

Master of Business Administration
Accreditation standards require that all students being awarded the Master of Business Administration satisfy the Common Professional Core (CPC). This requirement may be satisfied by completing graduate transition courses or undergraduate courses in these subject areas: accounting, finance, economics, business law, management and organizational behavior, marketing, operations management, and statistics. Applicants who have earned college credit for courses such as these will be considered to have satisfied the Common Professional Core for that area.

Degree Requirements for the Master of Business Administration Program

ACCT 6000	Managerial Accounting	3 hours
FIN 6005	Financial Management	3 hours
MGNT 6005	Managerial Economics	3 hours
MGNT 6025	Managing Professionals	3 hours
MGNT 6090	Strategic Management	3 hours
MIS 6010	Management of Information Technology	3 hours
MKTG 6010	Marketing Management	3 hours
OPSM 6005	Service and Production Operations Management I	3 hours
MBA Electives	Select 4 additional elective 6000 level courses with an MGNT, MIS, MKTG or OPSM prefix	12 hours
TOTAL FOR THE PROGRAM		36 hours

A grade of "C" or better is required for each course and an overall "B" average (3.0), including in the 5000-level transition courses, is required.

Transition Courses

The following transition courses may be required for provisional acceptance students. These courses may not be used to satisfy degree requirements.

MGNT 5653	Financial Decision Making	3 hours
MGNT 5773	Managerial Decision Making	3 hours
MGNT 5873	Strategic Environment of Business	3 hours

Accounting Graduate Courses

ACCT 6000
Managerial Accounting
Prerequisite: MGNT 5653 or ACCT 2101 or equivalent
3-0-3
The course deals with the procedures and concepts of computing and allocating costs for reporting, pricing, planning and control, and internal decision making. It will focus mainly on the principles and techniques dealing with merchandise and manufacturing costing, job order and process costing, standard and conventional costing, and make or buy decision-making.

Finance Graduate Courses

FIN 6005
Financial Management
Prerequisite: MGNT 5653 or 3125 or equivalent
3-0-3
This course includes a review of capital budgeting and ratio analysis, making further extensions in the areas of probability-dependent project analysis, co-varying risks and optimal capital structure. Other topics include working capital management, insurance and hedging strategies.

Management Graduate Courses

MGNT 5653
Financial Decision Making
3-0-3
Students are introduced to fundamental principles of accounting for economic events and the use of basic financial statements. The business finance component presents an overview of financial analysis, budgeting, asset management and financial strategy in business decision-making. Transition course for the undergraduate common professional core (CPC).Covers the concepts from ACCT 2101 and MGNT 3125.

MGNT 5773
Managerial Decision Making
3-0-3
Introduces the application of probability and statistics to business decision making; including descriptive statistics, probability, normal distribution, sampling, confidence intervals, hypothesis testing, and simple linear regression. The production/operations topics include productivity, competitiveness, strategy, product and service design, process selection, capacity planning, facility layout, work system design, and location planning. This course also introduces the student to the study of human behavior in organizations. It explores management and organizational behavioral practices which lead to human resource development and organizational effectiveness. Transition course for the CPC. Covers the concepts from MGNT 3105, MGNT 3505, and MGNT 4151.

MGNT 5873
Strategic Environment of Business
3-0-3
An overview of economic theory with an introduction to the impact of fiscal and monetary policies, and consumer and business decision-making. The marketing component explores buyer motivation, organizational and individual decision-making, changing buyer behavior, and market positioning and segmentation. The legal component introduces the fundamental legal and regulatory parameters that define, promote and limit business activities. Topics include constitutional law, torts, intellectual property, contracts, business organizations, employment law, agency law and antitrust law. Transition course for the CPC. Covers the concepts from ECON 2101, MGNT 3135, and MGNT 3145.

MGNT 6001
Management Communications
3-0-3
Effective communication skills are essential for managers in high technology environments. This course will emphasize skill building in writing, oral presentations, interpersonal communication, and research.

MGNT 6005
Managerial Economics
Prerequisite: ECON 2101 and MGNT 3505 or equivalent
3-0-3
Managerial economics focuses heavily on applied microeconomics issues. At its core is a value maximizing objective for the firm. Included in the course work will be traditional topics associated with microeconomics. Analysis of demand, production, cost, market structure, pricing and capital budgeting.

MGNT 6015
Technology and Innovation Management
Prerequisite: MGNT 3105 or equivalent
3-0-3
This course emphasizes innovation and creativity, and evaluation and analysis of new technology. The objective is to learn how to evaluate new technologies (either hard or soft) in order to be able to determinate whether or not to make significant investments in them.

MGNT 6020
R&D Management
Prerequisite: MGNT 6015
3-0-3
A systematic examination of product innovations ranging from planning and research to development and commercialization or implementation of new product technology. Topics include pertinent business policy and strategic management issues, the process of innovation, concepts and interconnections between product and process creativity management, technology transfer, and relevant marketing issues. Students will analyze cases and do a project.

MGNT 6025
Managing Professionals
Prerequisite: MGNT 3105 or equivalent
3-0-3
This course examines the working relationship between management and professional employees in high technology organizations. Using management theory as a foundation, the course emphasizes experiential learning in order to develop effective leadership and team building skills which students can apply immediately. Learning methods include case studies, team exercises, role playing, individual and group presentation, experiential and group discussions.

MGNT 6040
Current Readings in Management of Technology
3-0-3
This course will examine how technology impacts public issues. The content of the course will be based on the issues currently of concern and will range from ecology to health care to telecommunications.

MGNT 6050
Project Management
Prerequisites: MGNT 3105, MGNT 3505 or equivalent
3-0-3
A study of the project planning, organizing, control concepts and techniques. Coverage will include projects and specifications. Work Breakdown Structures (WBS), the Critical Path Method (CPM), the Program Evaluation and Review Technique (PERT), Gantt charting, and time/resource management.

MGNT 6055
Total Quality Management
Prerequisites: MGNT 3105 or equivalent
3-0-3
The concepts of TQM will develop leadership and interpersonal skills along with an understanding of planning and customer satisfaction, in addition to process analysis. The discussion will focus on quality and how to use project teams, such as selecting a project and choosing team members. Topics will be covered concerning setting up meetings and guidelines for productive meetings. Team aspects and team building and activities will also be discussed.

MGNT 6060
Entrepreneurship
Prerequisites: MGNT 3105, MGNT 3125, MGNT 3135 and MGNT 6005 or equivalent
3-0-3
This course addresses the management challenges associated with starting and successfully running a new venture. It provides students with an opportunity to apply the theories and tools that they have learned elsewhere in the curriculum to the venture creation process.

MGNT 6065
Issues in International Management
Prerequisites: MGNT 3105, MGNT 3125, MGNT 3135, MGNT 6005 or equivalent
3-0-3
This course deals with cultural, institutional, economic, and financial environments characteristic of international markets. It will focus on strategic and operational plans that managers must undertake in formulating international business activities.

MGNT 6070
Employment and Labor Relations
Prerequisite: MGNT 3105 or equivalent
3-0-3
This course will cover employment practices and employment law in unionized and non-unionized settings. The focus will be on decision making and administrative issues for managers.

MGNT 6090
Strategic Management
Prerequisites: MGNT CPC covered in 5000-level transition courses; MGNT 6001, instructor approval
3-0-3
This capstone course exposes the student to the process of strategic decision-making. Emphasis is placed on the use of various tools for strategic analyses in development of the strategic plan and the determination of the long-term character of the enterprise. Cases will be analyzed, and classroom presentations will be made by distinguished industrial executives and leaders.

MGNT 6901-6903
Special Topics
Prerequisites: as determined by the instructor and Department Chair
1 to 3 hours
Special topics selected by the Department Chair. Offered on a demand basis. A student may repeat this course with special permission.

MGNT 7501-7503
Independent Research
Prerequisite: MGNT 3105 or equivalent
1 to 3 hours
Course covers special topics of interest to the students. Course credit and topic are arranged between instructor and student.

Management Information Systems Graduate Courses

MIS 6010
Management of Information Technology
3-0-3
A comprehensive study of the application of information technology within organizations. Includes focus on data generation, retrieval, analysis, and utilization in managing and decision-making activities.

MIS 6020
Analysis and Logical Design
Prerequisite: MIS 6010
3-0-3
This course provides an understanding of the system development and modification process. It enables students to evaluate and choose a system development methodology. It emphasizes the factors for effective communication and integration with users and user systems. It encourages interpersonal skill development with clients, users, team members, and others associated with development, operation and maintenance of the system. Topics will include project oriented analysis, design, and use of data modeling tools.

MIS 6030
Physical Design and Implementation with DBMS
Prerequisite: MIS 6020
3-0-3
This course covers information systems design and implementation within a database management system environment. Students will demonstrate their mastery of the design process acquired in earlier courses by designing and constructing a physical system using database software to implement the logical design.

MIS 6040
Physical Design and Implementation within a Programming Environment
Prerequisite: MIS 6020
3-0-3
This course covers physical design, programming, testing and implementation of the system. Implementations of object-oriented, client-server designs using a programming environment.

MIS 6050
Project Management and Practice
Prerequisites: MGNT 3105 and MGNT 3505 or equivalent
3-0-3
This course covers the factors necessary for successful management of system development or enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems.

Marketing Graduate Courses

MKTG 6010
Marketing Management
Prerequisite: MGNT 3135 or equivalent
3-0-3
In this course students learn to recognize and understand the mechanisms that drive production and consumption - commonly referred to as "marketing." This course will deliver the logic and common sense associated with sound marketing management principles under changing global conditions. The student will learn to understand events occurring in today’s dynamic global marketplace as well as to apply these marketing principles to specific managerial environments.

MKTG 6012
Sales Management
Prerequisite: MGNT 3135 or equivalent
3-0-3
Sales management will highlight the differences in responsibilities experienced by a sales manager from those of a manager geographically located with his or her subordinates. A study of the "arms length" supervision requirements of sales management and the key role of motivation will better equip students to manage any group in a business environment. Emphasis is also placed on hiring skills because much of a sales manager's effort is devoted to maintaining and expanding a sales force.

MKTG 6024
Business-to-Business Marketing
Prerequisite: MGNT 3135 or equivalent
3-0-3
This course in business-to-business marketing builds a foundation for the student to better understand all of the underlying conditions that govern an industrial marketing transaction beyond simply analyzing the product that is being sought. The role of technology and its importance in the development of industrial products is explored along with the critical role of services and their interrelation to the products with which they are connected.

MKTG 6028
Marketing Research
Prerequisite: MGNT 3505 or equivalent
3-0-3
Marketing Research enables the student to actually conduct an opinion research project to better understand the underpinnings of a successful marketplace query. Actual business survey opportunities are sought so that the student gains "hands-on" experience in questionnaire design, data gathering and analysis. The student teams then prepare both a written and oral presentation of the results to experience the relationship between researcher and management in the gathering and communication of research information. The statistics prerequisite enables the student to effectively utilize SPSS for windows to manipulate the gathered data and disseminate it into meaningful decisions.

Operations Management Graduate Courses

OPSM 6005
Service and Production Operations Management I
Prerequisite: MGNT 4151 or equivalent
3-0-3
A survey of service and production management. Topics include productivity, forecasting, competitiveness, operations strategy, product and service design, process design selection, capacity planning, facility layout, design of work systems, and location planning.

OPSM 6006
Service and Production Operations Management II
Prerequisites: MGNT 4151 or equivalent, OPSM 6005
3-0-3
This course is a continuation of OPSM 6005. Topics include aggregate planning, inventory management, quality assurance, materials requirement planning, shop floor management, scheduling, performance measurement, Just-in-Time, synchronous operations, and global enterprise operations.

OPSM 6025
Purchasing Management
Prerequisites: MGNT 3145, MGNT 4151 or equivalent
3-0-3
Study of the activities, responsibilities, relationships and systems involved in the purchase of materials, services and capital equipment. Topics include identifying requirements; evaluating and selecting "best value" vendors; techniques for planning and executing the purchasing function, including fundamentals of negotiating, ethical and legal aspects of purchasing; interactions with the engineering, quality, manufacturing, materials management, transportation and legal functions and with suppliers; and international aspects of purchasing. Purchasing responsibility for quality, delivery, inventory, price and contribution to profit are also covered.

Computer Science

Offering the Master of Science Degree

Masters Program in Computer Science

The Master of Science program with a major in Computer Science is designed to enhance career options for a broad mix of students. The distinctions of the program include both a high quality and accessibility to nontraditional groups of students. The Masters courses are all taught by full-time faculty holding doctorates or occasionally by carefully elected experts with both academic and industrial experience. In addition to welcoming full-time students with degrees in Computer Science, we also cater to two major non-traditional groups of students: those whose schedules allow only for part-time studies and those without a degree in Computer Science. For the first group, we offer almost all of our classes during the evenings (and a few on Saturdays). For the second group of students, courses are offered that allow them to "transition" into the Masters courses. The six transition courses are packaged into the credit-based Graduate Transition Certificate in Computer Science (GTCCS).

Although no specific undergraduate major is required, applicants must have a baccalaureate degree from an accredited school.

Admission Procedure
Applicants for admission to the Master of Science program with a major in Computer Science should submit the following to the Admissions Office:

- An application for admission to the program
- A transcript from each college the applicant has attended
- A certificate of immunization
- An official copy of scores from the "General Test" of the Graduate Record Examination (GRE),
- A statement of purpose in seeking this degree, and
- Three recommendation forms completed by former or current supervisors, professors, or professional colleagues

International students should refer to the International Students sub-section for additional admission requirements.

In addition to having a baccalaureate degree from a recognized college/university, one of the following must be met for a student to be considered for this MS program at Southern Polytechnic State University:

Basic

- Undergraduate GPA of 2.75 or better (out of a possible 4.0) or the equivalent
- Official GRE scores meeting the current admission profile (350V + 600Q + 500A)

Note: Higher scores may compensate for a lower GPA. In some cases, the GMAT may be considered.

Advanced
The candidate for admission has already earned a recognized Masters or doctor's degree in a closely related, quantitative field of study (e.g., engineering, physics, chemistry, mathematics); the GRE is not required for consideration. The GRE is strongly recommended if the degree is not from the United States.

Alternative
A student holding a baccalaureate degree from an accredited school who does not meet the criteria for Basic or Advanced categories may be admitted upon convincing the faculty of the School of CSE of extraordinary alternative qualifications (e.g., lengthy and distinguished employment in the computer field) that would predict the likelihood of success in completing the MS program.

Provisional Acceptance
Students applying to the program who do not have a degree in Computer Science or Software Engineering may be accepted provisionally. Upon acceptance, the admissions committee will evaluate the student’s transcripts. If the committee determines necessary prerequisite courses the student must take before being fully admitted into the Masters Program, the student will be admitted with provisionally matriculated status. The required prerequisite courses are listed on the student's provisional acceptance letter and are required to make up deficiencies in the student's academic background.

Upon completion of the prerequisite courses with a grade of "B" or better, the student will be fully admitted into the Computer Science program and eligible to register for regular Masters (6000 level) coursework. None of the prerequisite courses (5000 level) will count towards the Masters Program.

Degree Requirements for the Master of Science program in Computer Science

CS 6123	Theory and Implementation of Programming Languages	3 hours
CS 6153	Advanced Database Systems	3 hours
CS 6223	Advanced Computer System Architecture	3 hours
CS 6413	Theory of Computation	3 hours
CS 6423	Algorithmic Processes	3 hours
SWE 6623	Software Engineering I	3 hours

Computer Science Electives 18 hours

Select 6 graduate courses from the following list, including at least 3 with a CS prefix.

- All 6000 level and 7000 level CS and SWE courses, with the exception of SWE 7903 – Software Engineering Capstone.
- No more than one of the following IT courses: IT 6643, IT 6663, IT 6683, IT 6723, IT 6753, and IT 6763.
- A course at the 6000 level or above offered by another program, with the approval of the CS Department Chair.

TOTAL FOR THE PROGRAM 36 hours

An overall GPA of 3.0 ("B") or better is required over all graduate coursework attempted.
Only grades of 'C' or better may be applied to meet the degree requirements (including transition coursework).
A maximum of 2 'C's at the level of 6000 or above may be applied if offset by the same number or more of 'A's at the level of 6000 or above.

Transition Courses

The following transition courses may be required for provisional acceptance students. These courses may not be used to satisfy degree requirements.

CS 5123	Advanced Programming and Data Structures	3 hours
CS 5153	Database Systems	3 hours
CS 5183	Object-Oriented Programming	3 hours
CS 5223	Computer Architecture	3 hours
CS 5243	Operating Systems	3 hours
CS 5423	Mathematical Structures for Computer Science	3 hours

NOTE: Some students may be advised to start with the undergraduate Computer Science I course.

Graduate Transition Certificate in Computer Science

The Graduate Transition Certificate in Computer Science prepares individuals for Masters level computer science programs or entry-level positions in the industry. The program is designed for those students holding an accredited bachelor's degree in an area unrelated to computer science and having an interest in computer science.

The focus is on providing broad-based knowledge and skills. The required courses are:

- CS 5123
- CS 5153
- CS 5183
- CS 5223
- CS 5243
- CS 5423

Admissions prerequisites include:

- Some knowledge of programming (equivalent to CS 1301)
- Calculus

Applicants with additional preparation may be allowed to substitute up to two approved 6000-level courses for the same number of required courses.

Computer Science Graduate Courses

CS 5123
Advanced Programming and Data Structures
Prerequisite: CS 1301 or equivalent course
3-0-3
Transition course for graduate students with a limited background in programming. Topics include pointers, recursion, data structures such as lists, stacks, queues, trees, etc., sorting and searching, data abstraction, introduction to runtime analysis and the big-oh notation. Appropriate programming projects are also included.

CS 5153
Database Systems
Prerequisite: CS 5123 or CS 1302 or IT 5113
3-0-3
Transition course. This course provides an overview of various database models including relational, object-oriented, hierarchical, and network. Also covered are various file structures including sequential, indexed sequential, and direct. It covers planning, analysis, design, and implementation of a database. Entity Relationship models and normalization are covered. It covers an SQL-based database system such as Oracle. A major project and/or paper required.

CS 5183
Object-Oriented Programming
Prerequisite: CS 5123 or CS 3424
3-0-3
Transition course: Topics to be covered include encapsulation and abstraction, objects and classes, inheritance, polymorphism, class libraries, and messaging. The course includes major project(s) and/or paper(s).

CS 5223
Computer Architecture
Prerequisite: CS 1301 or equivalent course
3-0-3
Transition Course: Topics from the principles of computer organization and architecture include number systems, digital logic, basic logic design in combinational and sequential circuits, and assembly and machine language.

CS 5243
Operating Systems
Prerequisites: CS 5123/3424 and CS 5223/3223
3-0-3
Transition Course: Topics from the principles of operating systems include management of resources including processes, real and virtual memory, jobs, processes, peripherals, network, and files.

CS 5423
Mathematical Structures for Computer Science
Prerequisites: An undergraduate course in Calculus
3-0-3
Transition course: Topics from discrete mathematics include set theory, relations and functions, principles of counting, introductory graph theory, formal logic, recursion, and finite state machines.

CS 6023
Research Methods and Presentations
3-0-3
Materials and methods of scholarly research in computer science. Includes study of standard research paradigms with illustrative cases of each and the use of research methods and presentations in industrial and business settings.

CS 6103
Discrete -Time Signals and Systems
Prerequisite: CS 5423
3-0-3
Underlying principles of discrete-time signals and digital signal processing. Topics include mathematical representation of discrete-time signals and systems, sampling theorem and aliasing, introduction to difference equations, IIR and FIR filters, DTF, FFT, and Z-Transforms.

CS 6123
Theory and Implementation of Programming Languages
Prerequisites: CS 5123/3424 and CS 5423
3-0-3
Comparative study of programming language paradigms with emphasis on design and implementation issues. Covers formal definitions of syntax and semantics, data types, static and dynamic storage allocation, definition of operations, control of program flow, subroutine and function linkages, formal tools for characterizing program execution, and abstraction techniques.

CS 6153
Advanced Database Systems
Prerequisite: CS 5153/3153 and CS 5423
3-0-3
An advanced course in database systems emphasizing design issues and implementation tradeoffs. It covers the theory, algorithms, and methods that underlie distributed databases. Relational algebra is discussed. The client-server architecture and application development are also covered.

CS 6163
Information Retrieval and Search Engines
Prerequisites: CS 5123 and CS 5423
3-0-3
The course covers efficient storage and effective retrieval of large amounts of unstructured text information, including an overview of conventional IR techniques and newer perspectives.

CS 6223
Advanced Computer System Architecture
Prerequisites: CS 5243/3243
3-0-3
Topics include computer performance issues, instruction set architectures, RISC versus CISC, machine language, microprocessor design and implementation, performance enhancing techniques, cache memory design, and implications to operating system design.

CS 6243
Advanced Concepts in Operating Systems
Prerequisite: CS 5243/3243
3-0-3
Topics from the theory of operating systems include: memory and process management of high-performance architectures that address concurrent, parallel, and distributed processing.

CS 6263
Computer Networks
Prerequisite: CS 5243/3243
3-0-3
Issues involved in computer communications are examined, based on the layered ISO/OSI Reference Model and the TCP/IP Protocol suite. A bottom-up approach is taken with particular emphasis placed on the physical, data link, and network layers. Topics include WANs, LANs, ADSL, and wireless communication systems. Laboratory projects involve simulation of various aspects of computer communication.

CS 6283
Real-Time Systems
Prerequisite: CS 5243/3243
3-0-3
The software development life cycle as it applies to real-time systems. Labs involve the use of a real-time operating system and an associated development environment. Related topics such as concurrent task synchronization and communication, sharing of resources, schedulability, reliability, fault tolerance, and system performance are discussed. Project included.

CS 6293
Information Security: Implementation and Application
Prerequisites: CS 5123 and CS 5423
3-0-3
This course covers the fundamentals of computing security, access control technology, cryptographic algorithms, implementations, tools and their applications in communications and computing systems security. Topics include public key infrastructure, operating system security, database security, network security, web security, firewalls, security architecture and models, and ethical and legal issues in information security.

CS 6323
Human Factors
3-0-3
The psychological, social, and technological aspects of interaction between humans and computers. Includes usability engineering, cognitive and perceptual issues, human information processing, user-centered design approaches, and development techniques for producing appropriate systems. Major project included.

CS 6353
Computer Graphics and Multimedia
Prerequisites: CS 5123/3424 and CS 5423
3-0-3
A study of the hardware and software of computer graphics and multimedia systems from the programmer's perspective. Includes a survey of display and other media technologies, algorithms and data structures for manipulation of graphical and other media objects, and consideration of user interface design. Major project included.

CS 6363
Computer Game Design and Development
Prerequisites: CS 5123/3424
3-0-3
Topics include graphics, multimedia, visualization, animation, virtual reality simulation concepts, methods, and tools of game design and development. A team project on a game prototype is required.

CS 6413
Theory of Computation
Prerequisites: CS 5423
3-0-3
A study of topics from theoretical computer science that includes automata and languages, computability theory, and complexity theory.

CS 6423
Algorithmic Processes
Prerequisites: CS 5123/3424 and CS 5423
3-0-3
Design and analysis of algorithms. Includes notations for representing algorithms, mathematical techniques for analyzing algorithms for appropriateness, efficiency, completeness, correctness, and decidability.

CS 6453
Simulation and Modeling
Prerequisites: CS 5123/3424, Matrix Algebra, and Probability and Statistics
3-0-3
The application of various modeling techniques to the understanding of computer system performance. Includes analytic modeling, queuing theory, continuous and discrete simulation methods, and the use of some simulation software tools to implement a major project.

CS 6523
Survey of Artificial Intelligence
Prerequisite: CS 5123/3424 and CS 5423
3-0-3
A survey of the major issues in AI. Knowledge representation, reasoning, and learning with AI programming techniques. Current topics are also included.

CS 6563
Digital Image Processing and Analysis
Prerequisites: CS 5123 and CS 5423
3-0-3
Theory and application of digital image processing. Topics include sensing, sampling and quantization, image enhancement and restoration, image transforms, geometrical image modifications, edge detection, image segmentation and classification, image coding, feature extraction, image representation, morphological image processing, and parallel image processing. Applications include satellite images and biomedical images.

CS 6593
Selected Topics in Artificial Intelligence
Prerequisites: As determined by the Instructor and Department Chair
3-0-3
In-depth study of specific AI topics. Possible topics include, but are not limited to, Expert Systems, Neural Networks, Genetic Algorithms, Machine Learning, Fuzzy Logic, etc.

CS 6703
Independent Study
Prerequisites: Approval of course director
3-0-3
Independent study/project under the direction of a graduate CS faculty member.

CS 6901-6903
Special Topics
Prerequisite: As determined by the Instructor and Department Chair
1 to 3 hours
Special topics selected by the Department Chair. Offered on a demand basis. A student may repeat this course with special permission.

CS 7803
Masters Thesis
Prerequisite: Consent of the Department Chair and the Thesis Advisor
3-0-3
The thesis is designed for students wanting a research focus to their degree. The student works independently under the supervision of a designated CS faculty member on a thesis of substance in computer science. The student will generate a formal written thesis and give a final defense of the thesis. This course may be repeated, but only 6 hours may be applied toward the degree.

Construction Management

Offering the Master of Science Degree

Masters Program in Construction Management

The Master of Science program in Construction Management is designed to offer education in construction and project management to:

- Practicing U.S. and international professionals educated in related disciplines such as engineering, engineering technology, business or architecture, who desire more knowledge in the construction process
- Professionals educated in construction or construction management and who wish to pursue the subject in greater depth
- Persons holding a baccalaureate or higher degree who are actively pursuing a construction industry career but lack education in construction and project management.

Program objectives are:

- To offer a degree oriented toward the practice of construction
- To deliver this graduate education in an evening and weekend setting
- To provide a program which will enhance graduates' management skills and advancement opportunities

Admissions
Admission to the Master of Science program with a major in Construction Management is open to persons holding the bachelor or higher degree from a regionally accredited college or university in:

- Engineering
- Engineering Technology
- Construction Management
- Construction Technology
- Architecture
- Management

In many cases, other degrees may be acceptable.

Preference in admission will be given to applicants having professional experience in a construction work environment. The admission procedure is competitive in that students will be admitted only if their academic accomplishments and work experience demonstrate that they can successfully complete the program.

Admission Procedure
Applicants for admission to the Master of Science program in Construction Management must submit the following to the Admissions Office:

- An application for admission to the program
- An official copy of scores from the General Test of the Graduate Record Examination (GRE) or scores from the Graduate Management Admissions Test (GMAT)
- An official transcript from each college the applicant has attended
- A certificate of immunization
- At least three recommendation forms which have been completed by supervisors, professors, or professional colleagues; one of which must be from the current supervisor.

Students who are accepted into the CNST graduate major must attend the mandatory orientation.

Admission Criteria
Applicants for admission to the Master of Science program in Construction Management must meet the following criteria:

Regular Admission:

- A GRE score of 850 or better on the General Test (verbal and quantitative) or a score of 500 on the GMAT
- An undergraduate GPA of 2.75 or better on a 4.00 scale

Provisional Admission: Applicants not meeting the minimum requirements will be considered for provisional admission based on an evaluation of

- Undergraduate GPA
- Professional industry experience
- GRE/GMAT scores
- Commitment to graduate studies

In the event that any aspect of an applicant's application does not meet the required minimum, probationary acceptance may be granted by the construction graduate committee.

NOTE: Students who are admitted under provisional admission will be changed to regular admission by obtaining a GPA of 3.0 or better in the first three CNST graduate courses.

Foundation Requirements:
In addition to the 36 required hours for the Masters degree, students may be required to demonstrate competency in the following:

- English communication skills
- construction graphics
- construction methods and techniques
- structural systems
- computer skills
- construction scheduling
- construction estimating
- construction accounting and finance

Courses taken to show competency in these areas **will not count toward the 36** hours required for the Graduate degree. Competency can be shown by:

- Successfully completing coursework
- Successfully completing competency testing developed by the Program

Degree Requirements for the Master of Science program in Construction Management

CNST 6000	Information Methods	4 hours
CNST 6100	Construction Law: Contracts and Claims	4 hours
CNST 6200	Strategic Bidding and Estimating	4 hours
CNST 6600	Construction Risk Analysis and Control	4 hours
Construction Degree Option (select one of the options listed below)		20 hours
TOTAL FOR THE PROGRAM		36 hours

Elective Option

- Select five construction elective courses, up to two of which may be **approved** courses from another graduate department.

Thesis Option

- Select two 4-hour construction elective courses at the 6000 level
- 12 hours of Masters thesis work:
  - CNST 7801
  - CNST 7802
  - CNST 7803

Project Option

- Select five 4-hour construction elective courses at the 6000 level
- Up to 3 of these courses may be replaced by project courses, CNST 7701-7703

A grade of "C" or better is required for each course applied to the degree program

A cumulative 3.0 grade point average is required in all courses that apply to the degree.

Construction Management Graduate Courses

CNST 5030
Descriptive Structural Systems
4-0-4
A descriptive study of structural behavior with an overview of statics, strength of materials, design of beams and columns for concrete, steel and timber structural systems.

CNST 6000
Information Methods
4-0-4
A course in communications technique improvement and preparation for functioning in an information based society. Conceptual and methodological issues in construction research will be explored with emphasis on construction specific resources. Data development and analysis will be studied to include the concepts of validity, reliability, and applications of statistics.

CNST 6100
Construction Law: Contracts and Claims
4-0-4
This course focuses on the legal problems and concerns frequently encountered by constructors and others who participate in the construction process. Topics include the formation of contracts and the various contractual relationships; methods of modification and termination of the contracts; exploration of licensure and professional liability of the construction practitioner.

CNST 6110
Commercial Construction Transactions
Prerequisite: CNST 6100
4-0-4
This course is an extension of CNST 6100, with course topic discussion being devoted to commercial construction transactions in relation to the construction contracting process. Discussion is devoted to UCC Article 2, 3, and 9 as applicable to construction vendor contracts. Also, discussion is devoted to the hybrid contracting process and the legal implications of bidding for goods and services that qualify under commercial contract law.

CNST 6120
Dispute Resolution
Prerequisite: CNS T 6100
4-0-4
This course will survey the growth of the alternate dispute resolution field, giving emphasis to alternative dispute resolution theory and its application to the construction industry. A student will be exposed to different resolution processes relative to the construction industry: namely, negotiations, meditation and arbitration.

CNST 6130
Case Studies in Construction
Prerequisite: CNST 6100
4-0-4
This course is designed to explore the multiple contractual complications that typically arise within the construction contracting process. Topics will develop and explore the technical aspects of procurement, implementation, construction operations, through to post contractual obligation and liabilities inherent in the construction industry.

CNST 6200
Strategic Bidding and Estimating
4-0-4
A review of all normal bid-preparation activities that should take place in a prime contractor's organization from the initial decisions on project selection and receipt of drawings and specifications, through the estimating process and sub-bid research, final bid assembly, markup and submission, to postmortems and necessary follow-up actions. Significant attention will be devoted to bidding techniques, strategies, practices, and methods recommended to handle these functions.

CNST 6310
Advanced Scheduling and Integrated Controls
4-0-4
An exploration of current techniques and practices of integrated project control systems for construction. Subjects covered include various methods of project scheduling and monitoring, resource management, time-cost tradeoffs, organizing and managing schedule data, forecasting and trend analysis, and presentation of schedule information. Special emphasis is placed on the use of modern integrated scheduling practices and associated computer tools.

CNST 6320
Construction Information Systems
4-0-4
The interaction of information technology with the construction industry. Opportunities and risks for individuals and organizations are examined in the realms of information flow, decision-making and a changing world. Human and ethical issues are considered. Students are introduced through laboratory exercises to construction specific products, to construction applications of conventional database systems and to data transfer technologies.

CNST 6330
Advanced Operations: Constructability, Value Engineering, Productivity
4-0-4
An exploration of project processes and organization including procurement, startup, documentation, payment, change order administration and job closeout. Included is project analysis for constructability, value engineering, and productivity analysis/improvement techniques.

CNST 6410
Building Failures and Defective Work
4-0-4
A study of problems, trends and issues related to workmanship and product failures during a time of rapid change in the construction industry. It will discuss concepts, philosophy and technology behind the subject issues and seek the exchange of ideas and views. Students will be expected to gain knowledge in the subject topics and develop skill in researching for facts extended to effective written and verbal presentations of the findings.

CNST 6420
Tall Buildings
4-0-4
A study of tall buildings in the society of today and tomorrow. Form giving factors will be identified and problems of planning, design and construction explored. The project manager's role in the tall building process will be related to specific building examples. International differences in the role of tall buildings will become apparent, yet common threads will be found which can be useful in a shrinking world and a more universal construction industry.

CNST 6430
Automation and Robotics
4-0-4
A study of the level of application of automation and robots to construction. Techniques and equipment in varying stages of development as well as current applications will be presented for analysis and discussion. Students will be challenged to conceptualize new ways of applying technology to improve industry productivity through automation and robotics.

CNST 6510
Marketing of Construction Services
4-0-4
An examination of how construction services are marketed in the various sectors of the construction industry. The relevant characteristics of construction organizations and target clients will be explored with various scenarios structured to highlight critical parameters of search and match. The potential contributions of the media and conventional planning/analysis techniques will be considered.

CNST 6520
International Construction
4-0-4
An introduction to the construction industry in the international arena. Projects and processes will be studied. Issues of contract law, industry regulation, currency exchange, payment guarantees and risk management will be examined and related to respective countries of concern. Operations under different cultural norms will be projected in realistic scenarios.

CNST 6530
Construction Markets
4-0-4
A study of the dominant factors at work in different construction markets. Geographic, technological, economic, political, organizational, and social influences on construction markets are included. Market groupings by type of construction are identified and paradigms of construction are explored.

CNST 6540
The Construction Company
4-0-4
Organization of the construction firm is covered in this course. Financing of the firm, marketing the various construction services of the firm and exploring the economics which are unique to the construction industry are analyzed. Strategic planning and planning for growth of a construction firm are included in the course. Insurance, bonding, employee development, and labor relations are studied. The continuing relationships with clients, bankers, bonding companies and design professionals are explored.

CNST 6600
Construction Risk Analysis and Control
4-0-4
This course focuses on the safety practices mandated by government regulation and required by good business practice. The costs of safety and the lack of it is examined. Workers' compensation insurance cost is integrated into the issues of safety. Exposure analysis, risk management, risk transfer and the costs associated with each are examined in this course.

CNST 6800
Construction Seminar
2-0-2
Business and management topics pertinent to the construction industry. The course consists of a series of seminar presentations by prominent industry representatives.

CNST 6901-6904
Special Topics
Prerequisite: Consent of the department head
1 to 4 hours
Special topics offered by the department. Offered on a demand basis.

CNST 7701-7704
Masters Project
Prerequisites: CNST 6000 and consent of the department head
4 hours
This course is designed for the students who want to focus their course of study on a particular aspect of construction. The student works independently under the supervision of the course professor on a project or an inquiry that is significant in the construction industry. The topic of the project or inquiry must be approved prior to registration and the student must continue the work in a manner that is satisfactory to the course professor. The student is expected to submit a substantial report and to defend this submittal and the course work taken in the degree program. This course may be repeated with departmental approval but no more than 8 hours may be applied toward the requirements for graduation.

CNST 7801-7804
Masters Thesis
Prerequisites: CNST 6000, completion of 28 hours of graduate courses
4 hours
Construction degree course work or consent of the department head, approval of thesis proposal intensive research project that results in a formal written thesis. The thesis topic will usually be in an area of interest discovered by the student in early stages of the Construction program or work experience. Students may enroll for a maximum of 4 hours per term for thesis credit. The student works independently under the supervision of the thesis advisor on an inquiry that is significant to the construction industry. The topic must be approved before registration and the student must continue the work in a manner that is satisfactory to the thesis advisor. The student is expected to submit a substantial body of research work and to defend this submittal and the course work taken in the degree program. This course may be repeated with departmental approval but no more than 8 hours may be applied toward the requirements of graduation.

Engineering Technology--Electrical

Offering the Master of Science Degree

Masters Program in Engineering Technology, Electrical Concentration

Admission to the Master of Science program with a major in Engineering Technology, Electrical Concentration, is open to persons holding the bachelor or higher degree in engineering, engineering technology, or a related degree from an accredited college.

Preference in admission will be given to applicants having professional experience in a technical work environment. The admission procedure is competitive in that students will be admitted only if their academic accomplishments and work experience demonstrate that they can successfully complete the program.

Admission Procedure
Applicants for admission to the Master of Science program with a major in Engineering Technology, Electrical Concentration must submit the following to the Admissions Office no later than the semester deadline date before the beginning of the semester in which the applicant plans to enroll:

- An application for admission to the program,
- An official copy of scores from the "General Test" of the Graduate Record Examination,
- An official transcript from each college the applicant has attended,
- A certificate of immunization
- At least three recommendation forms which have been completed by former or current supervisors, professors, or professional colleagues.

International students should refer to the International Students sub-section for additional admission requirements.

Admission Criteria
Applicants should have an undergraduate degree in Electrical, Computer, or Telecommunications Engineering Technology or Electrical, Computer, or Telecommunications Engineering from an accredited college or university.

Applicants must have at least a 2.75 (on the 4.00 scale) undergraduate grade point average.

Applicants must score a minimum of 500 on either the quantitative or analytic components of the General Test of the Graduate Record Examination (GRE).

Admission Status
The program coordinator in conjunction with the graduate admissions committee determines the student admission status.

Full Graduate Status students have met all the criteria shown above and have been judged acceptable by the graduate programs committee.

Post-Baccalaureate status is available to students who do not meet the admission criteria bur who are NOT seeking a degree.

Provisional students are graduate students who have not met all the criteria shown above. They are limited to designated courses, either graduate or undergraduate, during which they will be evaluated to determine their likelihood of success. Provisional students are not guaranteed full graduate status.

Engineering Technology--Electrical Concentration
The scope of electrical engineering technology has become very broad as the knowledge base and applications associated with this discipline continue to expand at an accelerating pace.

The Master of Science degree is offered to meet the needs of individuals who wish to pursue advanced studies in modern electrical, electronic or computer technologies in order to fulfill their personal or career goals.

There are four principal objectives to the graduate program in Engineering Technology:

- To provide continuing in-depth technical education to individuals who hold an ABET-accredited baccalaureate degree in Electrical or Computer Engineering or Engineering Technology.

- To provide advanced studies in electrical, electronic or computer technologies to help individuals advance in their chosen careers. These individuals may work as engineers, engineer/technologists, technical managers, independent consultants, or in similar professions.

- To provide additional technical education to those individuals who desire to teach at the college, technical school, or high school level.

- To provide an opportunity for practicing professionals, who possess an accredited baccalaureate degree in a related discipline, to shift their career path into the electrical, electronic or computer fields.

Each graduate student will pursue an individualized course of study within the guidelines of one of the programs listed below. The student and his/her academic advisor will identify the graduate courses that will comprise that student's course of study. The courses will be chosen to:

- Meet the student's career goals
- Provide a high-quality educational experience for that student
- Satisfy the requirements of one of the programs

Degree Requirements for the Master of Science program in Engineering Technology – Electrical

Project-Based Program

Select 36 hours of graduate-level ECET courses including:

- ECET 6704: Project Proposal
- ECET 7704: Project (4)
- 4 hours of graduate-level free electives

Research-Based Program

Select 36 hours of graduate-level ECET courses including:

- ECET 7504: Research (4 credits)
- 4 hours of graduate-level free electives

A grade of "C" or better is required for each course within the student's graduate program and it is required that each student maintain a cumulative grade point average of 3.00 or higher in order to graduate.

Engineering Technology—Electrical Graduate Courses

ECET 6001
Circuit and System Modeling with SPICE
Prerequisite: Semiconductor Device Theory and Applications; equivalent to ECET 2210, ECET 2310
3-3-4
A detailed study of circuit modeling using SPICE. The student will learn to model circuits and systems at the device level up to the behavioral level. This includes BJT and MOS transistors, op-amps, communications systems, control systems, etc. The student will also learn how SPICE numerical algorithms function and how to maximize the speed and accuracy of simulations.

ECET 6002
Programmable Devices
Prerequisites: Digital Theory and Applications, C and any AMS language equivalent to ECET 2210, ECET 4710
3-3-4
A study of the programming and applications of programmable devices for rapid time-to-market product development. Devices range from PLDs through MicroControllers through Programmable Analog devices. Practical experience will result from completing projects that develop systems using several of the devices.

ECET 6003
Advanced Test Engineering
Prerequisite: Fundamental Test Engineering equivalent to ECET 3600
3-3-4
An in-depth study of test engineering with emphasis on computer-aided instrumentation utilizing the IEEE-488 bus and protocols. LabVIEW for windows will be used to develop automated test systems and virtual instruments. Component, board, backplane, in-circuit, functional and systems testing will be researched and analyzed in relationship to cost, testability and fault analysis. Surface-mounted device and ASIC testing are also studied. Boundary-scan, VXI/VME, commercially available software and other test strategies will be explored.

ECET 6004
System Engineering
3-3-4
This course provides a knowledge base of those elements comprising good design practices beyond circuit design and analysis. Topics include: concurrent engineering, quality, reliability, maintainability, productivity, life-cycle cost, projectizing, manufacturing and logistic support.

ECET 6100
Discrete-Time Signals and Systems
3-0-3
Underlying principles of discrete-time signals and digital signal processing. Topics include mathematical representation of discrete-time signals and systems, sampling theorem and aliasing, introduction to difference equations, IIR and FIR filters, Z-Transform, DFT, FFT and Spectral analysis. (Non-MSET majors only)

ECET 6101
Digital Signal Processing
3-3-4
This course is presented in three units. Unit one reviews underlying principles of discrete-time signals and systems, difference equations, and the design of finite impulse response and infinite impulse response filters. Topics of second unit include frequency response, Z-Transform, DTFT, DFT, and FFT with practical applications. The subject of third unit is implementation of digital filters and speech processing examples using popular DSP microprocessors such as TMS320, DSP56000, and ADSP21xxx families.

ECET 6102
Mechatronics
3-3-4
This course is about integrating electronics, mechanical engineering and computer science. It is essential for engineers or engineering technologists who have a need to work across disciplinary boundaries. The main topics covered in the course will be mechatronic system design which involves: 1) Modeling, analysis and control of dynamic physical systems; 2) Control sensors and actuators with special emphasis on brushless, stepper, linear and servo-motors; 3) Electronics for mechatronics with special emphasis on special purpose digital and analog integrated devices; and 4) Analog, digital and hybrid mechatronic systems such as hard-disk drives and robots.

ECET 6201
Advanced Digital Design
3-3-4
Prerequisites: Digital Theory and Application, C and Assembly Language equivalent to ECET 2210, ECET 4710 A detailed study of modern digital design principles and techniques. Topics will be investigated utilizing advanced programmable logic devices such as CPLD's, EPLD's, and FPGA's. Device development using both VHDL and schematic capture tools will be thoroughly explored. Practical experience and additional insight will be gained in the design and development of practical solutions to modern problems.

ECET 6202
Embedded PC Systems
3-3-4
This course will focus on the latest developments in the field of embedded PCs (80186 & 80386ex processors). Emphasis will be on single-board systems used in the control environment. Customizing the ROM BIOS and developing ROM code will be studied. C, assembly language and real-time executive programming tools will be used.

ECET 6203
Topics in Machine Intelligence
3-3-4
The principles, theory and current applications of fuzzy-logic and neural-networks are covered in this course. Discussions will include how neural network simulations are used to solve decision-making tasks. Other topics included are machine vision and speech analysis. Practical experience and additional insight will result from students using the principles and theories studied in class to develop practical solutions to actual problems.

ECET 6204
Networked Embedded PCs
Prerequisite: ECET 6202
3-3-4
A course covering the basics of embedded PCs and their applications in networks and wireless systems. Covers the 80x86 architecture and C++ programming, then covers network programming using TCP/IP. Emphasizes connecting embedded PCs via Ethernet, wireless systems and the Internet. Also, Win CE development will be introduced.

ECET 6300
Telecommunications Networking
3-0-3
A study of the fundamentals of telecommunications systems, emphasizing the management viewpoint. Course covers voice and data networks, and the regulations and standards affecting them. Laboratory demonstrations will illustrate key concepts. Course cannot be used as credit for ECET majors.

ECET 6301
Telecommunications
Prerequisite: Communications background equivalent to ECET 3400, ECET 4820
3-3-4
The study of technologies and services deployed in today's public and private wide-area networks. Circuit-switched and packet-switched networks for voice and data will be studied. Topics include ISDN, X.25, SONET/SDH, ATM, and more. Students gain practical experience through detailed studies of actual WAN solutions used by various organizations.

ECET 6302
Digital Communication Networks
Prerequisite: Communications background equivalent to ECET 3400, ECET 4820
3-3-4
A detailed study of local area networks emphasizing characteristics, standards, protocols, and performance. Topics include Ethernet, Token Ring, routing, domain and peer networking, and network security. The configuration and interaction of networking devices, operation systems, and applications will be examined. Lab exercises and projects illustrate concepts.

ECET 6303
Wireless Communication Systems
Prerequisite: Communications background equivalent to ECET 3400, ECET 3410
3-3-4
A detailed study of wireless communication networks with special emphasis on applications, access techniques and interconnection with other networks. Topics include cellular telephones, personal communication systems, wireless LANs, and satellite systems. Students will gain practical experience by studying networks used by enterprises to enhance productivity and competitiveness.

ECET 6401
Linear Control System Analysis and Design
3-3-4
This course is a thorough study of Modern Control Systems. Both time-domain and frequency domain methods of analysis, design and compensation of linear feedback control systems are covered. Topics include Laplace Transform methods, State Space analysis, stability analysis using Root Locus and frequency response methods, Nyquist criterion, and practical examples of design and compensation of feedback control systems. This course will make extensive use of computer-aided design packages such as MATLAB.

ECET 6402
Power Flow Studies and Fault Analysis
Prerequisite: Power system analysis background equivalent to ECET 4510
3-3-4
This is a course on modern power system analysis and design. The first part of the course is devoted to the typical topics in Power System analysis. In the second part of the course, emphasis is placed on topics such as power flow solutions, symmetrical faults, symmetrical components and sequence networks, unsymmetrical faults and power system stability.

ECET 6403
Applications of Power Electronics in Electric Drive Systems
Prerequisite: Undergraduate machinery course equivalent to ECET 3500
3-3-4
This course combines electric machinery, control and power electronics. The first part of the course is devoted entirely to Power Electronics. The second part is devoted to the application of power electronics in the speed control of electric machinery. Both dc and ac motor drive systems are covered. MATLAB and Spice will be extensively used for computation and verification purposes. Practical and hands-on experience will be gained using practical electric drive systems in the second part of the course.

ECET 6704
Project Proposal
Prerequisites: At least 24 hours completed toward degree and permission of project advisor
1-8-4
Guided by his/her Project Committee, the student will prepare a Proposal for his/her Masters Project. This proposal must conform to the published guidelines, be approved by the Project Committee and filed with the ECET office. In addition, the student will make substantial progress toward meeting the goals stated in the proposal and file an approved Progress Report. The filing of the Project-Committee approved Proposal and Progress Report will constitute completion of this course.

ECET 6901-6905
Special Topics
1 to 5 hours
The topic election and credit for this course will be by written agreement among the student, the instructor and the department head.

ECET 7504
Research
Prerequisites: At least 28 hours completed toward degree and permission of instructor
2-6-4
A seminar in research and development methods, current industrial practice and application of new technologies. Guided by the instructor, each student will choose a current topic in Electrical or Computer Engineering Technology, become informed about the principles and applications of that topic and ultimately produce a research report which is presented during the ECET Forum.

ECET 7704
Project
Prerequisites: ECET 6704 and permission of project advisor
1-8-4
Guided by his/her Project Committee, the student will complete his/her Masters Project. The student must demonstrate completion of the project to his/her committee and obtain the committee's approval. The student will prepare a final report that completely documents the project and will present this report to the department. Written acceptance by the Committee of the Final Report will constitute the completion of this course.

Information Design and Communication

Offering the Master of Science Degree

Masters Program in Information Design and Communication

The Masters program in Information Design and Communication has been developed in response to a growing need for professionals in the expanding field of information design, information architecture, content development, communications management, and visual communication.

The basic objectives of the program are

- To educate those persons with diverse academic and work backgrounds who seek to begin their careers in the field of information design and communication, and

- To provide a useful credential for current technical communicators who need advanced training to move ahead in their careers, either as employees or managers of a company or as independent consultants.

The Information Design and Communication program offers students the choice of three program options – an Internship Option, a Thesis Option, and a Class Work Option.

Degree Requirements for the Master of Science program in
Information Design and Communication

IDC 6001	Technical Writing and Editing	3 hours
IDC 6002	Information Design	3 hours
IDC 6030	Foundations of Graphics	3 hours
IDC Electives	Select 7 elective courses with an IDC prefix	21 hours
IDC Option	(Select one of the options listed below)	6 hours
TOTAL FOR THE PROGRAM		36 hours

Internship Option

- Masters Internship (IDC 7601-7603)
  While taking the internship, students may enroll in a maximum of 9 hours per semester: 3 hours of internship plus two courses or 6 hours of internship plus one course.

Thesis Option

- Masters Thesis (IDC 7801-7803, six-hour minimum)
  When taking the thesis, students may enroll in a maximum of 9 hours per semester--to include no more than 3 hours of thesis per semester.

Class Work Option

- Select an additional 2 elective courses (6 hours) with an IDC prefix.

NOTE: IDC 6001 must be taken the first semester of work in the Masters program, and IDC 6002 and IDC 6030 should be taken as soon as possible after admission.

Elective Courses for IDC Options			
IDC	6040	Applied Graphics,	3
IDC	6045	Foundations of Multimedia	3
IDC	6050	Applied Multimedia ,	3
IDC	6060	International Technical Communication	3
IDC	6070	User Documentation	3
IDC	6080	Professional Oral Presentations,	3
IDC	6090	Medical Communication	3
IDC	6110	Project Management	3
IDC	6120	Usability Testing	3
IDC	6130	Online Documentation ,	3
IDC	6135	Website Design	3
IDC	6140	Instructional Systems Design	3
IDC	6145	Performance Technology	3
IDC	6150	Marketing Communication	3
IDC	6160	Rhetoric,: History, Theory, and Practice	3
IDC	6165	Writing Style in the Workplace,	3
IDC	6170	Video Production,	3
IDC	6901-6903	Special Topics	1-3
IDC	7501-7503	Independent Study	1-3

Graduate students may take up to nine hours outside of the program with prior approval from both the Graduate Coordinator and the Department Chair.

NOTE: A grade of "B" or better is required in all courses that are applied to graduation (with the exception of the internship and thesis, which require an "S").

Graduate Certificates in Technical Communication

The Graduate Certificates in Technical Communication are online programs that prepare students for a variety of positions in technical communication. It also helps current technical communicators update and expand their knowledge and skills, enabling them to move ahead in their profession.

Admissions criteria for the basic online certificate is the same as for the Masters degree program, except that certificate applicants are not required to take the GRE. Certificate students take online versions of the following three Masters courses that are taught separately from the courses offered to Masters students:

IDC 6001, Technical Writing & Editing
IDC 6002, Information Design
IDC 6030, Foundations of Graphics

Basic certificate students then take 3 other courses as offered online in any given semester(s).

Students completing the basic certificate program may apply for admission to the Masters program without taking the GRE. They will need to submit a portfolio of work completed in the certificate program, which will be reviewed by the admissions committee. Completing the basic certificate program does not guarantee admission to the Masters program. Graduates of the basic certificate program who are accepted into the Masters program may count the six courses they have completed (18 credits) toward the Masters degree.

Students in the basic certificate program who decide to apply for admission to the graduate program before completing the basic certificate will need to take the GRE. If they are admitted to the Masters program, a maximum of 3 basic certificate courses will be counted toward the Masters degree.

After admission to the Masters degree program, students may take one additional certificate online from among the following to complete requirements for the Masters degree:

- Certificate in Content Development
- Certificate in Visual Communication and Graphics
- Certificate in Instructional Design
- Certificate in Communications Management

For questions about the certificate program, contact the English, Technical Communication, and Media Arts Department. The number is 678-915-7202; or write to TCOM@spsu.edu. Visit the web site at www.spsu.edu/htc for more information.

Information Design and Communication Graduate Courses

IDC 6001
Technical Writing and Editing
3-0-3
Overview of technical writing and editing. Emphasis on drafting and editing many documents that reflect the variety of writing done in the field of technical communication. Both experienced and inexperienced writers will benefit from this course, which must be taken the first semester of enrollment in the Masters program.

IDC 6002
Information Design
Prerequisite or Co-Requisites: IDC 6001, IDC 6030
3-0-3
Study of the main design elements in information products with an emphasis on rhetorical and theoretical underpinnings for design decisions. Students work on designing and redesigning products in various media. Requirements include a report on document design that demonstrates solid application of theoretical principles. Should be taken as soon as possible after admission.

IDC 6030
Foundations of Graphics
Prerequisite: IDC 6001
3-0-3
An introduction to the fundamental elements and principles of graphic design and application of these concepts to page design and layout. Study of elementary color theory. Introduction to production techniques and current software applications. Students who took TCOM 4030 Foundations of Graphics as undergraduates must take IDC 6040 Applied Graphics as their required graphics course instead of IDC 6030. Students who took TCOM 4030 Foundations of Graphics as undergraduates may not count IDC 6030 for credit toward their graduate degree.

IDC 6040
Applied Graphics
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Course examines the role of graphics in technical and professional communication. Students develop competency in desktop publishing, digital image editing, and vector-based graphics applications. Students complete practical projects that use typography, photographs, illustrations, engineering drawings, and data graphics. Projects focus on the role of graphics as both an independent communication and as support for text-based media used in business, industry, education, and training.

IDC 6045
Foundations of Multimedia
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
A study of the foundations of multimedia including theory, planning, scripting, storyboarding, and production. Students will submit research work on the theory of multimedia. This course is double-listed for both undergraduate and graduate students. Graduate students will be required to complete additional work that emphasizes theory and research over application. Thus they must demonstrate a higher level of learning than undergraduates. Students who took TCOM 4045 Foundations of Multimedia as undergraduates may not count IDC 6045 for credit toward their graduate degree.

IDC 6050
Applied Multimedia
Prerequisite: IDC 6001, IDC 6030, IDC 6045; Co- or Pre-Requisite: IDC 6002
3-0-3
Study of specific applications of multimedia in technical and professional communication, education, marketing, and training, including authoring for Web pages. Projects emphasize hypermedia, hyperlinks, and interactive design for use in technical manuals, proposals, informational kiosks, marketing presentations, resumes, and electronic information systems.

IDC 6060
International Technical Communication
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Survey of the major issues that affect technical communication from a global perspective. Topics may include cultural influences on communication, challenges associated with technical translation, differing uses of graphics, communicating within multinational organizations, and theoretical issues related to international communication.

IDC 6070
User Documentation
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Introduction to the process and principles of writing manuals, with emphasis on user manuals. Students write and produce all or part of a manual. Course includes study of structured writing. Course also includes discussion of (1) production issues, (2) theory relevant to designing usable and readable manuals, and (3) current software applications. Students who took TCOM 4070 User Documentation as undergraduates may not count IDC 6070 for credit toward their graduate degree. Graduate students will be required to complete additional work that emphasizes theory and research over application. Thus they must demonstrate a higher level of learning than undergraduates.

IDC 6080
Professional Oral Presentations
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Course designed to enhance students' presentation skills in a technical and business environment. Students practice various speech types such as briefings, interviews, formal technical presentations, panels, and impromptu presentations. Whenever possible, presentations are videotaped for analysis and review.

IDC 6090
Medical Communication
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Course examines the scope of medical communication, with emphasis on opportunities for technical communication professionals. Students will analyze, edit, and revise various medical document types, such as medical research abstracts, patient education materials, professional medical training documents, medical advertisements, and pharmaceutical package inserts. Students will independently study medical terminology and develop a portfolio of medical writing samples.

IDC 6110
Communications Project Management
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Course introduces and applies the literature, tools, and techniques of professional project management. Includes major online course elements. Students will choose a project in technical communication and apply the major phases of project management: definition, planning, execution, and closing. Topics of emphasis include communication skills, project management software tools, and project team dynamics.

IDC 6120
Usability Testing
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Study of the relevant research and practical application of usability testing as part of product development. Includes strategies for planning, conducting, and analyzing a test. Teams will perform tests and report results from an actual test in a usability lab.

IDC 6130
Online Documentation
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Study of the design and development of effective online Help systems and web-based documentation. Presents principles of usable online information design, task-based user analysis, and advanced tools and technologies for developing and delivering online information products, including single-sourcing, SGML, and XML. Students design and develop an HTML Help system. Instruction will be provided in the use of RoboHelp and alternative HTML Help authoring tools. Students entering the course without basic HTML knowledge will be expected to learn the basics of HTML on their own. This course is double-listed for both undergraduate and graduate students. Graduate students will be required to complete additional work that emphasizes theory and research over application. Thus they must demonstrate a higher level of learning than undergraduates.

IDC 6135
Website Design
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Advanced theoretical study and application of best practices for the design and delivery of information on the World Wide Web. Students learn the fundamentals of HTML, use of HTML authoring tools, web content writing and editing, page layout, design of web graphics and multimedia elements, and website architecture and content management. Students work individually and in teams to design and develop websites. Some classroom instruction is provided in basic HTML and XHTML coding, the composition of cascading style sheets, and the use of a current web site development software package.

IDC 6140
Instructional Systems Design
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Course introduces and applies the literature, tools, and techniques of systematic instructional design. Includes substantial online course elements. Students will study major models of instructional design and apply them to develop and refine a unit of instruction. The course addresses the literature and theory underlying formal instructional development -- particularly cognitive psychology -- and provides practice in goal analysis, team instructional development, formative evaluation, and evaluation.

IDC 6145
Performance Technology
Prerequisite: TCOM 6001 and TCOM 6030; Co- or Pre-Requisite: TCOM 6002
3-0-3
Course introduces and applies the literature, tools, and techniques of performance technology. The performance technologist analyzes and solves human productivity and efficiency problems in the workplace. Students will examine major models of performance improvement, and adapt and apply them to simulated corporate productivity challenges, and to real opportunities in their own work experience. This highly participatory course is a natural complement to graduate courses in instructional design and instructional technology.

IDC 6150
Marketing Communication
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Course examines those aspects of technical communication that include advertising, brochures, catalogs, press releases, and other means of marketing in both print and other media. Includes analysis of web pages and the uses of the World Wide Web for marketing purposes.

IDC 6160
Rhetoric: History, Theory, and Practice
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Course introduces rhetoric as the relationship between thought and expression. Explores connections between rhetoric and writing, between a public act and a personal thinking process, by examining classical and contemporary accounts of rhetorical history and theory. Students apply theory to their own writing as they explore the relationship between writers, readers, and subjects and the range of options available to communicators. This course is double-listed for both undergraduate and graduate students. Graduate students will be required to complete additional work that emphasizes theory and research over application. Thus they must demonstrate a higher level of learning than undergraduates.

IDC 6165
Writing Style in the Workplace
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
This course examines writing style in the workplace. Topics include grammar, paragraphs, sentence structure, diction, spelling, and revision, as well as some larger issues surrounding style (persuasion, discourse communities, appropriateness, tone, bias, ethos). The objective of the course is to make students better writers of technical prose by understanding how to make effective stylistic choices.

IDC 6170
Video Production
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
Introduction to the role and use of video production for technical and professional communication. Topics include scripts, storyboards, shot selection, continuity, lighting, sound, in-camera editing, and fundamental post-production techniques. Students complete at least two assigned videos as individual or team projects. This course is double-listed for both undergraduate and graduate students. Graduate students will be required to complete additional work that emphasizes theory and research over application. Thus they must demonstrate a higher level of learning than undergraduates. Students who took TCOM 4170 Video Production as undergraduates may not count IDC 6170 for credit toward their graduate degree.

IDC 6901-6903
Special Topics
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
1 to 3 hours
A course on a special topic of Importance and relevance to the field of technical and professional communication not covered in the graduate curriculum. Offered when needed.

IDC 7503
Independent Study
Prerequisite: IDC 6001 and IDC 6030; Co- or Pre-Requisite: IDC 6002
3-0-3
A directed study for a graduate student who wishes to pursue a special interest in technical and professional communication not covered in the curriculum. The student submits to the IDC Graduate Program Director a proposal that clearly defines the course of study and the benefits to be obtained. The proposal must be submitted at least one semester prior to registration for independent study hours. Once the proposal is approved, the student is assigned a faculty advisor and registers for 3 credit hours.

IDC 7601-7603
Masters Internship
Prerequisites: Completion of 27 hours of IDC coursework or consent of the department chair, confirmation of approved internship
1 to 3 hours
Course provides student with hands-on experience in technical communication in a professional environment. Work should be typical of technical communicators. Work may be either an extended project or a variety of shorter assignments. (Total of 6 hours of Masters Internship required.)

IDC 7801-7803
Masters Thesis
Prerequisites: Completion of 30 hours of IDC coursework or consent of the department chair, approval of thesis proposal
1 to 3 hours
Intensive research project that results in a formal written thesis. Usually flows from an area of interest discovered by the student in early stages of the Technical and Professional Communication program or through work experience. Thesis work will be closely supervised by the student's advisor. Students may enroll for a maximum of 3 hours per term for thesis credit, with exceptions at the discretion of the department chair. (Total of 6 hours of Masters Thesis required.)

Information Technology

Offering the Master of Science Degree

Masters Program in Information Technology

The Master of Science in Information Technology program is designed for those students interested in pursuing a career in the management and performance of information systems planning, development, implementation, and operation. Although no specific undergraduate major is required, applicants must have a baccalaureate degree from an accredited school. Students will be evaluated on an individual basis and will be admitted only if their academic accomplishments, recommendations, and motivation predict the ability to complete the program successfully.

Admission Procedure
Applicants for admission to the Master of Science program in Information Technology should submit the following to the Admissions Office:

- An application for admission to the program
- An official transcript from each college the applicant has attended
- A certificate of immunization
- An official copy of scores from the "General Test" of the Graduate Record Examination (GRE) or GMAT
- A statement of purpose in seeking this degree
- Three recommendation letters completed by former or current supervisors, professors, or professional colleagues.

International students should refer to the International Students section for additional admission requirements.

One of the following must be met for a student to be fully admitted to this MS program at Southern Polytechnic State University:

Basic

- Undergraduate GPA of 2.75 or better (out of a possible 4.0) or the equivalent
- Official GRE scores, OR for those students taking the GMAT use the following index:
  GMAT + (200 x undergraduate GPA) = 1000

Advanced
(A candidate for admission who has already earned a recognized Masters or doctor's degree in another field of study) The GRE/GMAT is not required if an advanced degree has already been completed in the United States.

Degree Requirements for the Master of Science program in Information Technology

• IT 6403	Windows Application Development	3 hours
• IT 6643	Issues in Information Management	3 hours
• IT 6683	Management of Information Technology **OR**	
MIS 6010	Management of Information Technology	3 hours
• IT 7883	IT Strategy and Policy (Capstone Course)	3 hours
• MGNT 6025	Managing Professionals	3 hours
• SWE 6623	Software Engineering I	3 hours
• SWE 6633	Software Project Management **OR**	
MIS 6050	Project Management	3 hours

IT Electives — Select 5 courses from the list below (all are 3 hours) — 15 hours

CS 6223	Human Factors
IT 6473	Multimedia Applications
IT 6663	Data Center Management
IT 6723	Managing Operating and Network Systems
IT 6733	Database Administration
IT 6753	Advanced Web Concepts and Applications
IT 6763	Electronic Commerce
IT 6823	Information Security Concepts and Administration
IT 7803	Thesis (students may substitute 2 thesis courses for 2 IT electives)
MGNT 6055	Total Quality Management
MGNT 6090	Strategic Management
MKTG 6010	Marketing Management
SWE 6743	Object-Oriented Analysis and Design
Other courses as approved by the Information Technology Department	

TOTAL FOR THE PROGRAM — 36 hours

Transition Courses
The following transition courses may be required for conditional acceptance students. These courses may not be used to satisfy degree requirements.

CS 1301	Computer Science I	4 hours
CS 5153	Database Systems	3 hours
IT 5113	Advanced Programming and Applications	3 hours
IT 5123	Web Development	3 hours
IT 5133	Data Communication and Networks	3 hours
MGNT 5653	Financial Decision Making	3 hours
MGNT 5773	Managerial Decision Making	3 hours

Graduate Certificate in Business Continuity

The Graduate Certificate in Business Continuity program is designed to cover all stages of business continuity management and contingency planning. Students in this program will learn to use software to assist with business impact analysis and risk analysis, create and maintain the continuity plan itself, as well as audit, exercise and implement the plan. Students graduating from this program will have a strong background in fundamental principles and applications of business continuity, whether they are entirely new to business continuity management, as well as hands-on experience with supporting tools commonly used in business continuity management.

Students in this program must complete the four courses in the following table for a total of 12 credit hours:

IT 6553	Business Continuity Risk Assessment	3 hours
IT 6823	Information Security Concepts and Administration	3 hours
IT 6563	Business Continuity Planning	3 hours
IT 6573	Business Continuity Implementation	3 hours

Graduate Certificate in Information Security and Assurance

The Graduate Certificate in Information Security and Assurance (ISA) Program is designed for IT professionals who have a bachelor's degree and have undertaken the Graduate Transition Certificate in Information Technology (or the equivalent through other coursework) to advance their knowledge in the field of information security and assurance.

Students graduating with this program will have a strong background in fundamental principles and applications of computer security and information assurance, as well as hands-on experience with security tools commonly used in industry.

Candidates must complete the three core courses in Information Security and Assurance and one elective course for a total of 12 credits.

Required Courses (9 Hours):

IT6823	Information Security Concepts and Administration	3 hours
IT6843	Ethical Hacking: Network Security and Penetration Testing	3 hours
IT6863	Database Security and Auditing	3 hours

Elective Courses (3 Hours, choose 1 from the following list):

IT6833	Wireless Security	3 hours
IT6853	Computer Forensics	3 hours
IT6873	Information Security Seminar	3 hours

Graduate Transition Certificate in Information Technology
The Graduate Transition Certificate in Information Technology prepares individuals who have an accredited bachelor's degree unrelated to information technology and who have an interest in either:

- Transitioning to a Masters program in Information Technology
- Or in obtaining an entry-level position in industry

Participants enroll in two classes per semester for three semesters. Applicants with additional preparation in the field of information technology may be allowed to substitute up to two approved 6000-level courses for the same number of required courses listed below.

CS 1301	Computer Science I	4 hours
CS 5153	Database Systems	3 hours
IT 5113	Advanced Programming and Applications	3 hours
IT 5123	Web Development	3 hours
IT 5133	Data Communication and Networks	3 hours
MGNT 5653	Financial Decision Making	3 hours
MGNT 5773	Managerial Decision Making	3 hours

Graduate Certificate in Information Technology

The Graduate Certificate in Information Technology prepares individuals who hold an accredited bachelor's degree and have undertaken the Graduate Transition Certificate in Information Technology (or the equivalent through other coursework) to advance their knowledge in the field of information technology.

Participants enroll in two classes per semester for three semesters. There are four required courses and two electives.

• IT 6403	Windows Application Development	3 hours
• IT 6683	Management Information Systems **OR**	
MIS 6010	Management Information Systems	3 hours
• SWE 6633	Software Project Management **OR**	
MIS 6050	Project Management	3 hours
• SWE 6623	Software Engineering I	3 hours
• IT Electives	Select 2 from the following list:	6 hours

- IT 6473 Multimedia Applications
- IT 6663 Data Center Management
- IT 6723 Managing Operating and Network Systems
- IT 6733 Database Administration
- IT 6753 Advanced Web Concepts and Applications
- IT 6763 Electronic Commerce
- IT 6823 Information Security Concepts and Administration

TOTAL FOR CERTIFICATE: 18 hours

Information Technology Graduate Courses

IT 5113
Advanced Programming and Applications
Prerequisite: IT 1113 or equivalent
3-0-3
This course includes topics in beginning data structures, including arrays, stacks and queues. In addition, the course examines different computer applications concentrating primarily on those used in business and management. CS and MSSE students cannot receive credit for this course.

IT 5123
Web Development
Prerequisite: IT 5113 or equivalent
3-0-3
This course examines how to create applications for the world- wide- web. Topics include current languages (such as HTML, XML, CGI, JAVA Script) and human-computer interfaces for the web.

IT 5133
Data Communications & Networks
Prerequisite: IT 5113 or equivalent
3-0-3
Fundamental concepts of computer networking. Topics include properties of signals and media, information encoding, error detection and recovery, LANs, backbones, WANs, network topologies, routing, Internet protocols, and security issues. The focus is on general concepts together with their application to support the business enterprise.

IT 6403
Windows Application Development
Prerequisite: CS 5153 or equivalent
3-0-3
This course covers the logical analysis, design, development, testing and implementation of a windows system. Students will implement an object-based, event-driven design using a programming environment.

IT 6473
Multimedia Applications
Prerequisite: CS 5153 or equivalent
3-0-3
This course introduces students to current practices, technologies, methodologies, and authoring systems in the design and implementation of systems that incorporate text, audio, images, animation and full-motion video. Students will complete multimedia projects using state-of-the-art tools.

IT 6553
Business Continuity Risk Assessment
Prerequisite: None
3-0-3
This course covers fundamental principles of risk, managing risk, and business impact analysis to maintain business continuity. Group projects and exercises will have students develop asset inventories and assess the levels of interrupting events using current tools and techniques. Some individual research will also be required.

IT 6563
Business Continuity Planning
Prerequisite: IT 6553 Business Continuity Planning
3-0-3
This course introduces students to current practices, technologies, methodologies, and authoring systems in the design and implementation of business continuity plans. Based on a risk assessment, students will complete a business continuity plan for a division of an enterprise. Some individual research will also be required.

IT 6573
Business Continuity Implementation
Prerequisite: IT 6553 Business Continuity Planning
3-0-3
This course first has students plan to exercise a business continuity plan. Then, students will implement the exercise using a tabletop exercise approach. A report with recommendations for plan improvement and implementation is required. Some individual research will also be required.

IT 6643
Issues in Information Management
3-0-3
This course addresses current issues relating to computers, ethics, and social values. Topics include computer ethics, computer crime, abuse, social responsibility, risk analysis, computer law and cultural impact. Library and internet research components are included, and a major research paper is required.

IT 6663
Data Center Management
Prerequisite: CS 5153 or equivalent
3-0-3
Issues in setting up and running a multi-user computer or data system. Includes RFP generation, vendor selection, project planning and control methods, backup and disaster recovery plans, site preparation, managing help desks, end user training, IT professional development, contract negotiation, outsourcing relationships and job scheduling.

IT 6683
Management of Information Technology
Prerequisite: CS 5153 or equivalent
3-0-3
A study of the use of computer and information management systems in the management of organizations. Includes formal characterization of management structures, identification of information needs, and integrated tools for providing MIS support. Major project included.

IT 6723
Managing Operating and Network Systems
Prerequisite: IT 5133 and CS 5153, or equivalent
3-0-3
This course covers the installation and management of operating systems and telecommunications networks, including cost-benefit analysis, and evaluation of connectivity options. Students learn to evaluate, select and implement different operating and communications options to support an organization.

IT 6733
Database Administration
Prerequisite: CS 5153 or equivalent
3-0-3
This course covers data administration and management, backup/recovery, security, access control, performance monitoring and tuning, data warehousing, data mining, online analytical processing, centralized versus distributed environments, client server and world-wide-web database integration.

IT 6753
Advanced Web Concepts & Applications
Prerequisites: IT 5123 and CS 5153, or equivalent
3-0-3
This course covers web services and content management for advanced web applications. Students will gain familiarity with: advanced business concepts for the web; best practices and development processes for web applications; and a variety of appropriate web tools both in the proprietary and open source domains.

IT 6763
Electronic Commerce
Prerequisite: CS 5153 or equivalent
3-0-3
This course covers tools, skills, business concepts, and social issues that surround the emergence of electronic commerce. The student will develop an understanding of the current practices and opportunities in EDI, electronic publishing, electronic shopping, electronic distribution, electronic collaboration and database issues. Other issues include standards, security, authentication, privacy, intellectual property, acceptable use, legal liability, and economic analysis.

IT 6823
Information Security Concepts and Administration
Prerequisite: IT 5113 Advanced Programming & Applications
3-0-3
This course covers the fundamentals of computing security, access control technology, cryptographic algorithms, implementations, tools and their applications in communications and computing systems security. Topics include public key infrastructure, operating system security, database security, network security, web security, firewalls, security architecture and models, and ethical and legal issues in information security.

IT 6833
Wireless Security
Prerequisite: IT 6823 Information Security Concepts and Administration, and IT 5133 Data Communication and Networks
3-0-3
This course covers methods and techniques to secure wireless networks against threats and attacks. Topics include: Encrypt wireless traffic for privacy and authenticity, implement WPA and the 802.11i security standards to protect Wi-Fi networks, wireless network intrusion detection and prevention, and security trouble-shooting WLANs.

IT 6843
Ethical Hacking: Network Security and Penetration Testing
Prerequisite: IT 6823 Information Security Concepts and Administration
3-0-3
This course covers the major issues surrounding the use of penetration testing to secure network security and important skills of a professional hacker and common security challenges that an information security officer will face in his/her work. Topics include the ethics of ethical hacking, laws and regulations, vulnerability discovery and risk analysis, internal and external attacks, how malicious hackers attack and exploit system vulnerabilities, penetration testing methods and tools, latest security countermeasures, and various types of penetration testing and programming skills required to complete successful penetration tests and to secure real systems against real attacks.

IT 6853
Computer Forensics
Prerequisite: IT 6823 Information Security Concepts and Administration
3-0-3
This course studies techniques and tools in computing investigation, digital evidence collection, recovery, and analysis. Topics include: Legal issues relating to digital evidence, recover deleted files and discover hidden information, reconstruct user activity from e-mail, temporary Internet files and cached data, assess the integrity of system memory and process architecture to reveal malicious code.

IT 6863
Database Security and Auditing
Prerequisite: IT 6823 Information Security Concepts and Administration and IT 5153 Database Systems
3-0-3
This course provides students with an understanding of security concepts and practices in general and those specific to database security in a highly detailed implementation. Students will learn fundamental principles of database security and how to develop database applications embedding from simple to sophisticated security and auditing models using advanced database systems and software tools.

IT 6873
Information Security Seminar
Prerequisite: IT 6823 Information Security Concepts and Administration
3-0-3
This course covers advanced topics in information security and assurance. This course is intended to provide students a solid foundation for further research and development in the area of information security and assurance with the opportunity to develop the skill of critically reading and evaluating research papers. Topics include: Latest development in network security, threat modeling, trustworthy computing, operating system security, program security, database security, and legal and ethical issues in information security and assurance. The course will consist of a lectures, guided research project, as well as presentations and discussions.

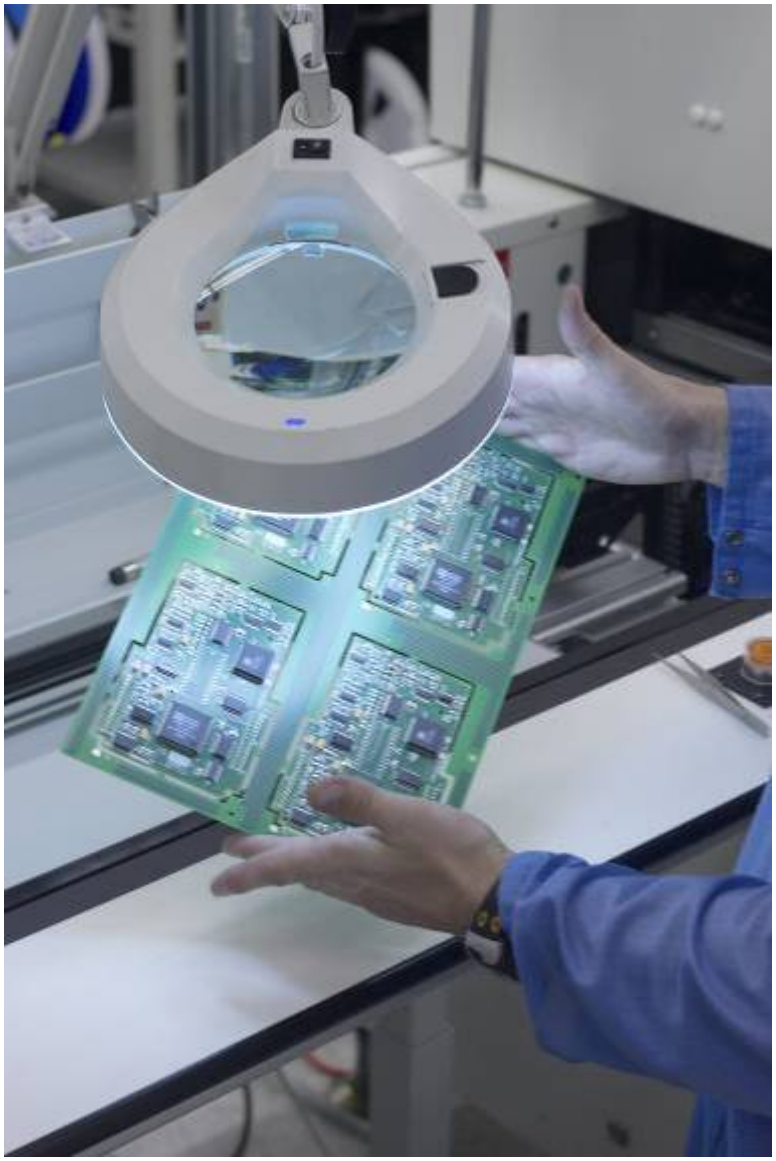
IT 6903
Special Topics in Information Technology
Prerequisite: CS 5153 or equivalent
3-0-3
Special topics selected by the Department Chair. Offered on a demand basis.

IT 7803
Masters Thesis
Prerequisite: Consent of both the department chair or graduate coordinator and the thesis advisor
3-0-3
The thesis is designed for students wanting a research focus to their degree. The student works independently under the supervision of a designated faculty member on a thesis of substance in information technology. The student will generate a formal written thesis and give a final defense of the thesis. The course may be repeated, but only 6 hours may be applied toward the degree.

IT 7833
IT Strategy and Policy
Prerequisite: CS 5153 and consent of department chair or graduate coordinator
3-0-3
This is a capstone course in which students complete a major project which integrates elements of the field.

Quality Assurance

Offering the Master of Science Degree



Masters Program in Quality Assurance

The Masters Program in Quality Assurance is offered by the Industrial Engineering Technology department in order to meet an established need in both manufacturing and service industries. The program focuses on total quality management and on analytical methods such as statistics, process, analysis, and problem solving techniques. A primary objective of the degree is to provide graduate level study opportunity to individuals who are currently practicing in the quality and related fields so that they may be aware of recent advances and modern practice.

Southern Polytechnic State University has been offering its Master of Science in Quality Assurance Degree since 1992. In 1997, SPSU began offering the same graduate level college degree online using distance learning technology. Many students from the around the world have earned a graduate degree from our nationally recognized program using the computer in their home or office.

Our courses deal with Quality topics in depth, stressing theory and the assumptions behind the techniques. That is what separates our education approach from certification training seminars. Our graduates know the details behind techniques, allowing them to know what to do when assumptions are violated (which happens a lot in the real world), and helping them to evaluate the relative merits of "new" quality tools. A lot of what is touted as new is just a repackaging of tried and true methods, with maybe a novel twist.

Program Options

The Quality Assurance program offers a Masters degree with concentrations in Engineering Technology and Quality Systems, as well as a Graduate Green Belt Certificate.

Admission Requirements for the Quality Assurance Program

Engineering Technology Concentration

Admission to the Engineering Technology Concentration is open to persons holding the bachelor or higher degree in engineering, engineering technology, or a related degree from an accredited college. Preference in admission will be given to applicants having professional experience in a technical work environment. The admission procedure is competitive in that students will be admitted only if their academic accomplishments and work experience demonstrate that they can successfully complete the program.

Applicants must have:

- College credit for a two (or more) course sequence in a physical science that included laboratories
- At least a 2.75 (on the 4.00 scale) undergraduate grade point average

Applicants should have:

- An undergraduate degree in engineering, engineering technology, physical sciences, or other technically orientated majors from an accredited college or university
- At least two consecutive years of experience in a full-time quality or closely related professional position
- College credit for a basic statistics math course that included hypothesis testing and confidence intervals.

Quality Systems Concentration

Applicants to the Quality Systems Concentration must have at least a 2.75 (on the 4.00 scale) undergraduate grade point average. Applicants should have an undergraduate degree from an accredited college or university in: Engineering, Engineering Technology Business, Social Science, Physical Sciences or Education. Other technical and non-technical majors may be acceptable. Students may be asked to take QA 5000 if they have not had an undergraduate statistics course. This 5000-level course will not count toward the Masters degree.

Graduate Green Belt Certificate

Applicants should have an undergraduate degree from an accredited college or university and at least two years of work experience in the field. Coursework completed in the certificate program will be entered on the student's official transcript as regular academic coursework counting for graduate credit. Admission in the Certificate program does not necessarily qualify students for full admission to the MSQA program.

Admissions Procedure

Applicants for admission to the Master of Science Program with a major in Quality Assurance must submit the following to the Admissions Office no later than the application deadlines shown below, before the beginning of the semester in which the applicant plans to enroll:

- An application for admission to the program,
- Two official transcripts from each college the applicant has attended, and
- A certificate of immunization
- A statement of purpose in seeking this degree
- At least three recommendation forms which have been completed by former or current supervisors, professors, or professional colleagues.

Admission Status

The program coordinator in conjunction with the graduate admissions committee determines the student admission status.

1) Full Graduate Status students have met all the criteria shown above and have been judged acceptable by the graduate programs committee.
2) Probationary students are graduate students who have not met all the criteria shown above. They are limited to designated courses, either graduate or undergraduate, during which they will be evaluated to determine their likelihood of success. Probationary students are not guaranteed full graduate status, but may still qualify for financial assistance.

International students should refer to the International Students sub-section for additional admission requirements.

Degree Requirements for the Master of Science program in Quality Assurance

Engineering Technology Concentration

This concentration is designed for prospective students who have undergraduate degrees in engineering technology (any major), physical science, mathematics, and other technical majors. To qualify fully for admission students will need the technically oriented undergraduate degree including a laboratory-based physical science, at least one calculus course, and a statistics course. Two years of full time experience in the field is also expected of all applicants for this concentration. Students are required to work frequently with the program coordinator to plan the program of study and to maintain progress.

QA 6602	Total Quality	3 hours
QA 6610	Statistics for Quality Assurance	3 hours
QA 6611	Advanced Statistical Applications	3 hours
QA 6612	Design of Experiments	3 hours
QA 6613	Linear Regression Analysis	3 hours
QA 6615	Applied Systems Reliability	3 hours
QA 6650	Quality Systems Design	3 hours
QA 6660	Six Sigma Concepts	3 hours
QA Electives	Select 2 6000-level graduate electives with a QA prefix	6 hours
QA Research	Select one of the following courses	3 hours
QA 7403	Graduate Seminar	
QA 7503	Research in Quality	
QA 7603	Applications in Quality	
TOTAL FOR PROGRAM		33 hours

Note: A grade of "C" or better is required for each course.

Quality Systems Concentration

This concentration is designed for students who are working in the quality, training, and related developmental disciplines. The program has been established to meet the needs of the professional who has not received a formal technical education in quality, yet must support total quality, continuous improvement, process management, and reengineering efforts within their organization.

The program focuses on total quality management and on analytical techniques. A primary objective of the degree is to provide graduate level study opportunity to individuals who are currently practicing in a quality related field who have not had any formal technical education in the discipline.

The concentration is designed for prospective students who have undergraduate degrees in business, social science, education, and other non-technical majors. To qualify fully for admission students will need to hold a bachelor's degree and either be working in a quality related field, e.g., human resources or training, or desire to work in the field.

QA 6600	Methods of Analysis	3 hours
QA 6602	Total Quality	3 hours
QA 6610	Statistics for Quality Assurance	3 hours
QA 6611	Statistical Process Control	3 hours
QA 6613	Linear Regression Analysis	3 hours
QA 6630	Technical Training Methods	3 hours
QA 6640	Quality Cost and Supplier Evaluation	3 hours
QA 6650	Quality Systems Design	3 hours
QA Electives	Select 2 6000-level graduate electives with a QA prefix	6 hours
QA Research	Select one of the following courses	3 hours
QA 7403	Graduate Seminar	
QA 7503	Research in Quality	
QA 7603	Applications in Quality	
TOTAL FOR PROGRAM		33 hours

Note: A grade of "C" or better is required for each course.

Graduate Green Belt Certificate

This certificate is designed for students with an undergraduate degree form an accredited institution and two years work experience in the field. Coursework completed in the certificate program will be entered on the student's official transcript as regular academic coursework counting for graduate credit. Admission in the Certificate program does not necessarily qualify students for full admission to the MSQA program.

Students with an insufficient undergraduate statistics background may be asked to complete QA5000, Statistical Concepts in Quality Assurance before beginning the statistical requirements of the certificate.

QA 6602	Total Quality	3 hours
QA 6610	Statistics for Quality Assurance	3 hours
QA 6611	Statistical Process Control	3 hours
QA 6650	Quality Systems Design	3 hours

In addition, students must pass a Green Belt qualifying exam at the end of their coursework to earn the Graduate Green Belt Certificate.

Note: A grade of "C" or better is required for each course.

Quality Assurance Graduate Courses

QA 5000
Statistical Concepts for Quality Assurance
3-0-3
Students will learn basic statistical concepts including exploratory data analysis, probability distributions, confidence intervals and hypothesis tests. Analysis using Excel and Minitab will be introduced.

QA 6600
Methods of Analysis
3-0-3
A study of the analytic processes required to identify, document, define, and measure requirements and limitations for any operating system. Class work will focus on identifying, describing, and measuring existing manufacturing and service systems. Methods available for system improvement will be investigated.

QA 6602
Total Quality
3-0-3
A study of the functions and responsibilities of the quality organization. TQM concepts, quality function deployment, and the tools for continuous improvement are analyzed for sequence of use and application. Emphasis is placed on design and performance aspects of a system-wide quality assurance function.

QA 6610
Statistics for Quality Assurance
3-0-3
Descriptive statistics for discrete and continuous variables, probability distributions, confidence intervals and hypothesis testing, elementary control charts for variables and attributes, the design of acceptance sampling plans, analysis of variance, and regression and correlation analysis.

QA 6611
Statistical Process Control
Prerequisite: A course in statistics, such as MATH 2260 or QA 6610
3-0-3
The application of advanced statistical methodologies to the analysis and solution of quality and management problems, including probability theory, control charts, sampling, regression analysis, and design of experiments. The focus is on statistical process control and related quality technologies.

QA 6612
Design of Experiments
Prerequisite: QA 6610
3-0-3
Analysis of statistical experimental design strategies, and planning of experiments for the best strategy and objectives. The use of existing computer application packages will be stressed.

QA 6613
Linear Regression Analysis
Prerequisite: QA 6610
3-0-3
In this course, students will learn linear regression analysis techniques to include first order and polynomial modeling, use of indicator variables, variance stabilizing transformations, multi-collinearity diagnostics and residual analysis. The connections among ANOVA, design of experiments and regression will be emphasized. Statistical software will be used to analyze problems.

QA 6615
Applied Systems Reliability
Prerequisite: QA 6612
3-0-3
Analysis of appropriate probabilistic models for system reliability, including the exponential, Weibull, normal, and lognormal distributions, life prediction techniques, reliability test program plans, failure mode and effect analysis, Markov models, and maintainability concepts.

QA 6620
Inspection Systems Design
Prerequisite: QA 6610
3-0-3
Understanding inspection systems, measurement principles, and limitations. Included are acceptance sampling plans such as ANSI Z1.4, ANSI Z1.9, Dodge Romig, and stipulated risk, chain, sequential, and continuous plans.

QA 6630
Technical Training Methods
3-0-3
Adult learning theory, the development and management of training programs, presentation techniques, instructional aids, and assessment will be investigated.

QA 6640
Quality Cost and Supplier Evaluation
Prerequisite: QA 6602
3-0-3
A detailed analysis of cost reductions involved in continuous improvement. Supplier evaluation, including quality audits, is reviewed to establish capability. The concept of partnerships is explored.

QA 6650
Quality Systems Design
Prerequisite: QA 6602
3-0-3
The development of the quality organization, systems, and procedures necessary for effective participation in world markets. Creating and documenting methods and procedures are stressed.

QA 6660
Six Sigma Black Belt Concepts
Prerequisite: QA 6602 or QA 6612
3-0-3
A study and review of the Six Sigma Black Belt body of knowledge, including the DMAIC Methodology, Enterprise – wide deployment, project management, the lean enterprise and design for Six Sigma.

QA 6712
Quality Systems Simulation
Prerequisite: QA 6611
3-0-3
The application of simulation to quality systems. Topics covered include fundamental simulation modeling techniques, random sampling procedures and methods of estimating performance measures from simulation outputs. Emphasis will be upon hands-on simulation of various quality systems using PC-based simulation languages.

QA 6722
Human Factors in Quality Assurance
Prerequisite: QA 6600 or QA 6602
3-0-3
A comprehensive survey of human factors theory, research, and applications which are of particular relevance to quality assurance. Emphasis will be placed on operator constraints in the design of work processes, workplaces, and instrumentation.

QA 6763
Software Quality
3-0-3
The Personal Software Process (PSP) is a technology that brings discipline to the practices of individual software engineers, dramatically improving the quality, predictability, and cycle time for software-intensive systems. PSP makes engineers aware of the processes they use to do their work and the performance of those processes. The course covers quality assessment, cost estimation, configuration management, software performance measures, proof of correctness, validation and verification, and management of the total quality environment for software.

QA 6901-6903
Special Topics in Quality
1 to 3 hours
Students may arrange to study and perform independent research on a topic approved by a graduate faculty member. An appropriate research paper will be required and the student may be required to make an oral presentation to faculty, graduate students, and/or quality professionals.

QA 7403
Graduate Seminar
Prerequisites: QA 6602, QA 6611 or consent of the department head
3-0-3
The course is designed to cover various topics within the field of quality assurance which are not taught in other courses. These topics might include acceptance sampling, risk analysis, regression analysis, SPC training methods, and others.

QA 7503
Research in Quality
Prerequisites: QA 6602, QA 6611 or consent of the department head
3-0-3
This course is designed to guide the student in a thorough and in-depth written examination of one or more topics relevant to the application of quality assurance. Emphasis is placed upon students using both traditional and electronic means to perform the research.

QA 7603
Applications in Quality
3-0-3
This course is designed to guide the students through a thorough and in-depth application of quality principles in the workplace environment. Emphasis will be on the application of the principles and measurable outcomes.

Software Engineering

Offering the Master of Science Degree

Masters Program in Software Engineering

Software engineering represents the fastest growing segment of software professionals -- men and women who solve problems and issues in the development of mission-critical software to meet the needs of business and industry.

At Southern Polytechnic, our Software Engineering students are ahead of the game, learning real-time strategies and procedures that will give them a competitive edge in the market.

Our Master of Science in Software Engineering Program is designed for working professionals who want to earn a professional degree part-time in the evening and on weekends.

Accepted students have at least one year of full-time experience in software development and/or maintenance. Typically, students are working professionals in metro Atlanta with at least a bachelor's degree; however, students who lack a formal degree or previous coursework in Software Engineering or Computer Science may transition into the program.

Thirty-six hours of coursework are required for successful completion of the program. Students who do not have a degree in Computer Science or Software Engineering are accepted provisionally into the program, and must complete a series of prerequisite courses in addition to the 36-hour requirement.

A graduate certificate is also available to students with a bachelor's degree in Computer Science or a closely related field who wish to advance into leadership positions. Applicants must have at least one year of work experience in the computer software field. Participants enroll in two classes per semester for three semesters.

The Master of Science in Software Engineering program is designed to meet the high demand for a professional degree in Software Engineering within the context of a non-traditional audience (working professionals who attend part-time at night or on weekends). Although no specific undergraduate major is required, applicants must have a baccalaureate degree from an accredited school.

Admission Procedure

Applicants for admission to the Master of Science in Software Engineering program must submit the following to the Admissions Office:

- An application for admission to the program,
- An official transcript from each college the applicant has attended
- A certificate of immunization.
- An official copy of scores from the "General Test" of the Graduate Record Examination (GRE)
- A statement of purpose in seeking this degree
- Three recommendation forms completed by former or current supervisors, professors, or professional colleagues
- Documentation of at least one year of software project-related work experience (or comparable co-op work)

International students should refer to the International Students sub-section for additional admission requirements.

In addition to having a baccalaureate degree from an accredited college/university and documentation of at least one year of software project-related work experience (or comparable co-op work), one of the following must be met for a student to be considered for this MS program at Southern Polytechnic State University:

Basic

- Undergraduate GPA of 3.0 or better (out of a possible 4.0) or the equivalent
- Submission of official GRE scores meeting the current admission profile; if GMAT has ALREADY been taken recently, official GMAT scores may be considered.

Advanced
The candidate for admission has already earned a recognized Masters or doctor's degree in a closely related, quantitative field of study (e.g., engineering, physics, chemistry, mathematics), or a baccalaureate degree with a GPA of 3.0 or better in Computer Science, Computer Engineering, or Software Engineering from a recognized college/university. GRE is strongly recommended if the degree is not from the United States.

Alternative
A student holding a baccalaureate degree from an accredited school who does not meet the criteria for Basic or Advanced categories may be admitted upon convincing the faculty of the School of CSE of extraordinary alternative qualifications (e.g., lengthy and distinguished employment in the computer field) that would predict the likelihood of success in completing the MS program.

Graduate Certificate Program Admission Requirements
Applicants must have earned a baccalaureate degree from an accredited college. Students applying for any of the graduate certificate programs must submit the following to the Admissions Office prior to the registration term:

- An application for graduate certificate program admission, along with a $20 nonrefundable application processing fee (check made payable to Southern Polytechnic State University),
- An official college transcript showing degree earned date, and
- The certificate of immunization

Software Engineering
The Master of Science in Software Engineering program at Southern Polytechnic State University has the primary objective of meeting the high demand for a professional degree in Software Engineering within the context of a non-traditional audience (working professionals who can only attend part-time at night or on weekends).

Software Engineering has emerged nationally as a specialized area of computer science that emphasizes solving the problems and complex issues associated with developing and maintaining mission-critical software to meet the needs of business and industry. It uses the life-cycle concept from traditional engineering with an emphasis on specification, design, and implementation but calls on the focused application of computer science concepts rather than those of traditional engineering.

The position "software engineer" has become a common job title for software developers in business and industry and represents the fastest growing segment of software professionals.

Students accepted for the program must document at least one year of software project-related work experience (or comparable co-op work). The typical student is:

- A working professional in metro Atlanta
- With at least a bachelor's degree
- And the other usual credentials expected for acceptance to a graduate program

However**, it is not necessary** that students have a formal degree or specific previous coursework in software engineering or computer science since a transition path is available.

The requirements for earning the degree are 36 hours of graduate work as designated below. **Only grades of 'C' or better may be applied to meet the degree requirements** (including transition coursework). An overall GPA of 3.0 ("B") or better is required over all graduate coursework attempted**. A maximum of 2 'C's at the level of 6000 or above may be applied** if offset by the same number or more of 'A's at the level of 6000 or above.

Students applying to the program who do not have a degree in Computer Science or Software Engineering may be accepted provisionally. Upon acceptance, the admissions committee will evaluate the student's transcripts. If the committee determines necessary prerequisite courses the student must take before being fully admitted into the Masters Program, the student will be admitted with Provisionally Matriculated status.

Degree Requirements for the Master of Science program in Software Engineering

SWE 6623	Software Engineering I	3 hours
SWE 6633	Software Project Management	3 hours
SWE 6723	Software Engineering II	3 hours
SWE 6743	Object-Oriented Analysis and Design	3 hours
SWE 6763	Software Metrics and Quality Management	3 hours
SWE 6883	Formal Methods in Software Engineering	3 hours

Software Engineering Option: Select one of the options listed below 18 hours

TOTAL FOR THE PROGRAM 36 hours

Project Option

SWE Electives Select 5 electives at the 6000 level with an SWE, CS or IT prefix.

- At least 2 electives must be from SWE
- No more than 1 elective can be from IT
- Electives must be approved by the department 15 hours

SWE 7903 Software Engineering Capstone (Project) 3 hours

Thesis Option

SWE Electives Select 4 electives at the 6000 level with an SWE, CS or IT prefix.

- At least 2 electives must be from SWE
- No more than 1 elective can be from IT
- Electives must be approved by the department 12 hours

SWE 7903 Masters Thesis 6 hours

Transition Courses

The following transition courses may be required for provisional acceptance students. These courses may not be used to satisfy degree requirements.

CS 5123	Advanced Programming and Data Structures	3 hours
CS 5153	Database Systems	3 hours
CS 5183	Object-Oriented Programming	3 hours
CS 5223	Computer Architecture	3 hours
CS 5243	Operating Systems	3 hours
CS 5423	Mathematical Structures for Computer Science	3 hours
SWE 1301	Software Development I	4 hours

The required prerequisite courses are listed on the student's provisional acceptance letter and are required to make up deficiencies in the student's academic background. Upon completion of the prerequisite courses **with a grade of "B" or better**, the student will be fully admitted into the MSSWE program and be eligible to register for regular Masters (6000 level) coursework. None of the prerequisite courses (5000 level) will count towards the Masters Program.

Graduate Certificate in Software Engineering

The Graduate Certificate in Software Engineering prepares practitioners to advance into leadership positions.

Applicants should have:

- A bachelor's degree in Computer Science or a closely related field (or a bachelor's degree with professional competence and knowledge equivalent to a Computer Science degree)
- At least one year of software project-related work experience (or comparable co-op work)

The focus is on sharpening capabilities to function effectively in software engineering teams producing higher quality software.

SWE 6623	Software Engineering I	3 hours
SWE 6633	Software Project Management	3 hours
SWE 6723	Software Engineering II	3 hours
SWE Electives:	Select 3 electives from the list below	9 hours
CS 6153	Advanced Database Systems	
CS 6323	Human Factors	
CS 6353	Computer Graphics and Multimedia	
IT 6643	Issues in Information Management	
SWE 6343	User Interface Design and Implementation	
SWE 6743	Object-Oriented Analysis and Design	
SWE 6763	Software Metrics and Quality Management	
SWE 6883	Formal Methods in Software Engineering	

Software Engineering Graduate Courses

SWE 6343
User Interface Design and Implementation
Prerequisite: SWE 6623
3-0-3
This course covers the major frameworks, methods, and approaches to designing, engineering, implementing, and testing user interfaces. It covers user and usability requirements gathering, task analysis, user-interface design, implementation of the user interface, and evaluation with respect to requirements and the users' tasks. Illustrative design and implementation projects are completed throughout the term.

SWE 6623
Software Engineering I
Prerequisite: CS 5123/3424
3-0-3
This course covers the initial phases of the software-development life cycle. Topics include planning, requirements analysis, requirements specification, and design. A number of techniques for performing analysis and design are explored and applied in a major project.

SWE 6633
Software Project Management
Prerequisites: SWE 6623
3-0-3
Focus on organizational and technical roles in software engineering. Emphasis on: models of software life cycle, software maturity framework, strategies of implementing software, software process assessment, project planning tools, software configuration management, managing software quality and usability, leadership principles, and professional and ethical issues. A required project combines technical and managerial techniques for assessing software design and development.

SWE 6723
Software Engineering II
Prerequisite: SWE 6623
3-0-3
This course covers the entire software development life-cycle. Emphasis is placed on advanced topics including prototyping, verification and validation, formal methods, and quality management. A major component is a group project that utilizes a Computer Assisted Software Engineering (CASE) tool to assist in the analysis, design, and implementation of a system.

SWE 6743
Object-Oriented Analysis and Design
Prerequisites: CS 5183/3663 and SWE 6623
3-0-3
This course explores the object-oriented software development process including analysis, design, and programming. Emphasis is on the object-oriented paradigm.

SWE 6753
Computer Game Design & Development
Prerequisite: CS 5123
3-0-3
Topics include graphics, multimedia, visualization, animation, virtual reality simulation concepts, methods, and tools of game design and developments using the software engineering life cycle are emphasized. A team project on a game prototype is required.

SWE 6763
Software Metrics and Quality Management
Prerequisite: SWE 6623
3-0-3
This course covers the principles of software measurement such as scaling, validity, and reliability. The various software metrics on volume, effort, quality, and cost estimation are explored. The theory and principles of software verification and validation effectiveness, and reliability models are studied. The application of these measurements to software customer satisfaction and total quality management is explored.

SWE 6783
User Interaction Engineering
Prerequisites: CS 5183/3663 and SWE 6623
3-0-3
This course follows a complete software-engineering cycle to produce software objects (classes and/or components) that support users in effective, efficient, and enjoyable interactions with computers. Class exercises and a project incorporate concepts and methods including ethnographic and user analysis; cognitive ergonomics; usability metrics and criteria; software-engineering practices, conventions, standards, and documentation; device-user action mapping; person-system function allocation; quality management systems; conceptual proto-typing; embedded systems in support of ubiquitous computing; and function-behavior analysis.

SWE 6813
Component Based Software Development
Prerequisites: CS 5123 and CS 5183
3-0-3
This course covers the concepts, foundations, and architectures of component-based software development (CBSD) and its related technologies. Component-based tools and languages, approaches for implementation of CBSD, including designing, building, assembling, and deploying reusable COTS and in-house software components are discussed in depth. The current concrete realizations of component technologies will be explored. Students will do projects focused on the life cycle of software components.

SWE 6823
Embedded Systems Analysis and Design
Prerequisite: SWE 6623
3-0-3
This project-oriented course focuses on using modern methods, techniques, and tools for specification and design of embedded systems. Topics include analytical methods, design/development methods, and notations. Performance evaluation based on modeling and simulation techniques is also covered.

SWE 6843
Embedded Systems Construction and Testing
Prerequisite: CS 5243/3243
3-0-3
This project-oriented course focuses on the use of current software building technology, testing, reliability analysis, and benchmarking. Topics include component-based development (CBD), implementation technologies, and real-time operating systems (RTOS), with emphasis on the use of measurement tools, and domain libraries. The course also covers issues in hardware/software co-design.

SWE 6883
Formal Methods in Software Engineering
Prerequisites: CS 5423 and SWE 6623
3-0-3
This course involves a study of formal methods applicable to software development with an emphasis on methods that support formal specification and verification. Such methods may include transformational techniques, logic-based formalisms, algebraic and model-based specifications, tools, etc.

SWE 6901-6903
Special Topics
Prerequisite: As determined by the Instructor and Department Chair
1 to 3 hours
Special topics selected by the Department Chair. Offered on a demand basis. A student may repeat this course with special permission.

SWE 7803
Masters Thesis
3-0-3
The thesis is designed for students wanting a research focus to their degree. The student works independently under the supervision of a designated SWE graduate faculty member on a thesis of substance in software engineering. The student will generate a formal written thesis and give a final defense of the thesis. This course may be repeated, but only 6 hours may be applied toward the degree. This course will be an alternative to SWE 7903 Software Engineering Capstone.

SWE 7903
Software Engineering Capstone
Prerequisite: Satisfactory completion of the MSSWE core (SWE 6623, SWE 6633, SWE 6723, SWE 6743, SWE 6763, and SWE 6883)
3-0-3
This course is designed for students to give a professional focus to their degree. The students work in designated teams under the supervision of the course instructor (a CSE faculty member), on a project of practical significance in software engineering. Each of the teams will deliver a final working product, generate a substantial final report, and give a final presentation on the project.

Systems Engineering

Offering the Master of Science Degree

Masters Program in Systems Engineering

In the modern engineering environment very few products function in isolation. Users in all environments have come to expect a high level of integration. Systems engineering involves the integration of multiple technologies for the solution of large-scale, complex problems. Traditional engineering specialists use methods which allow them to focus inward on details unique to their disciplines. Systems engineers look outward from the details of the technology to factors such as system integration, project scheduling, training, maintainability, management of risk, requirements verification, system validation and qualification to ensure the success of the overall product or service at hand.

Admission to the Master of Science program with a major in Systems Engineering is open to persons holding the bachelor or higher degree in engineering, engineering technology, computer science or physical science from an accredited college.

Preference in admission will be given to applicants having professional experience in a technical work environment. The admission procedure is competitive in that students will be admitted only if their academic accomplishments and work experience demonstrate that they can successfully complete the program.

Systems Engineering

The Master of Science program with a major in Systems Engineering is offered by the Department of Industrial Engineering Technology in order to meet an established need in both manufacturing and service industries. The principal goal of the Systems Engineering Graduate Program is to provide an opportunity for working professionals to acquire advanced systems engineering skills through part-time study. These professionals will learn to design, analyze and manage the implementation of complex systems for business and industry.

The Systems Engineering Graduate Program will serve to educate professionals to solve industry challenges of the 21st century. These professionals will also develop the fundamental systems engineering knowledge to assess program risks, understand requirements and develop solutions to meet the complex needs of business and technology.

The Systems Engineering Graduate Program consists of the following options:

- Graduate Certificate
- Advanced Graduate Certificate
- Master of Science Degree

SPSU also offers an MS in Systems Engineering with a Civil Concentration.

Admissions Procedure

Applicants for admission to the Master of Science Program with a major in Systems Engineering must submit the following to the Admissions Office no later than the published deadline date before the beginning of the semester in which the applicant plans to enroll:

- An application for admission to the program,
- An official transcript from each college the applicant has attended, and
- A certificate of immunization.
- An official copy of scores from the “General Test” of the Graduate Record Examination (GRE) and
- At least three recommendation forms which have been completed by former or current supervisors, professors, or professional colleagues.

International students should refer to the International Students sub-section for additional admission requirements.

Admission Criteria

Applicants shall have:

- An undergraduate degree in engineering, engineering technology, computer science, physical science or other technically orientated major from an accredited college or university,
- A minimum of two consecutive years of experience in a full-time engineering or technical professional position,
- A minimum of a 2.75 (on the 4.00 scale) undergraduate grade point average, and
- Official GRE scores meeting the current admission profile (350V and 600Q). Documentation of substantial engineering experience (more than five years) may be considered in lieu of the GRE requirement.

Admission Status

The program coordinator in conjunction with the graduate admissions committee determines the student admission status.

1. Full Graduate students have met all the criteria shown above and have been judged acceptable by the graduate programs committee.

2. Provisional students are graduate students who have not met all the criteria shown above. They are limited to designated courses, either graduate or undergraduate, during which they will be evaluated to determine their likelihood of success. Provisional students are not guaranteed full graduate status.

Degree Requirements for the Master of Science program in Systems Engineering

SYE 6005	Introduction to Systems Engineering	3 hours
SYE 6010	Managing the Technical Effort…	3 hours
SYE 6015	Systems Analysis and System Design	3 hours
SYE 6020	System Architecture	3 hours
SYE 6025	Engineering Economic Analysis	3 hours
SYE 6030	Verification Program Development & Management	3 hours
SYE Electives	Select 2 courses from the following list	6 hours
QA 6610	Statistics for Quality Assurance	
SWE 6633	Software Project Management	
SYE 6035	Modeling and Simulation	
SYE 6040	Advanced Configuration Management	
SYE 6045	Process Assessment and Improvement	
SYE 6050	Reliability and Sustainability	3 hours
SYE Workshop	Select 1 course from the following list	3 hours
SYE 6055	System Development Workshop	
SYE 6060	Systems Engineering Workshop	
Electives	Select 2 courses from the following list	6 hours
CS 5123	Advanced Programming and Data Structures	
CS 5153	Database Systems	
CS 5183	Object-Oriented Programming	
CS 6453	Simulation and Modeling	
CS 6523	Artificial Intelligence	
ECET 6102	Mechatronics	
ECET 6401	Linear Control System Analysis and Design	
ECET 6202	Embedded PC Systems	
MGNT 6001	Management Communications	
MGNT 6015	Technology and Innovation Management	
MGNT 6020	R & D Management	
MGNT 6025	Managing Professionals	
MGNT 6030	Decision Making Techniques	
MGNT 6050	Project Management	
MGNT 6090	Strategic Management	
QA 6610	Statistics for Quality Assurance	
QA 6611	Advanced Statistical Applications	
QA 6722	Human Factors Engineering	
SWE 6633	Software Project Management	
TCOM 6001	Technical Writing and Editing	
TOTAL FOR THE PROGRAM		36 hours

Note: A grade of "C" or better is required in each course to receive graduate credit.

Graduate Certificate in Systems Engineering Requirements

SYE 6005	Introduction to Systems Engineering	3 hours
SYE 6010	Managing the Technical Effort…	3 hours
SYE 6015	Systems Analysis and System Design	3 hours
SYE 6020	System Architecture	3 hours
TOTAL FOR THE CERTIFICATE		12 hours

Advanced Graduate Certificate in Systems Engineering Requirements

SYE 6005	Introduction to Systems Engineering	3 hours
SYE 6010	Managing the Technical Effort…	3 hours
SYE 6015	Systems Analysis and System Design	3 hours
SYE 6020	System Architecture	3 hours
SYE 6025	Engineering Economic Analysis	3 hours
SYE 6030	Verification Program Development & Management	3 hours
SYE Electives	Select 2 courses from the following list	6 hours
QA 6610	Statistics for Quality Assurance	
SWE 6633	Software Project Management	
SYE 6035	Modeling and Simulation	
SYE 6040	Advanced Configuration Management	
SYE 6045	Process Assessment and Improvement	
TOTAL FOR THE CERTIFICATE		24 hours

Systems Engineering Graduate Courses

SYE 6005
Introduction to Systems Engineering
3-0-3
The goal is to introduce the student to the essential principles, processes, and practices associated with the application of Systems Engineering. The applicability and use of Process Standards will be examined. Emphasis will focus on defining the problem to be solved, establishing the initial system architecture, understanding the role of system life-cycles, requirements development, and verification and validation of the realized system.

SYE 6010
Managing the Technical Effort Associated with System Creation
Prerequisite: SYE 6005
3-0-3
Technical management, its relationship with project and program management, elements of successful and less than successful technical management, and the elements that should be in place prior to commitment to system creation will be reviewed. The core of this course will examine three significant aspects of managing the technical effort: effective technical planning, assessment of technical progress, and control of technical activities.

SYE 6015
Systems Analysis and System Design
Prerequisite: SYE 6010
3-0-3
An examination of the current systems analysis and system design methods used to define system boundaries, constraints, and detailed technical requirements from acquirer needs and expectations. In addition, approaches to verification of the design solution, including verification methods against the specified requirements will be examined.

SYE 6020
System Architecture
Prerequisite: SYE 6015
3-0-3
Examination of concepts and techniques for architecting systems, the establishment of a bounded and integrated structure that provides a framework for system creation, work breakdown structures, cost analysis, and subcontractor control and interface will be reviewed. A structured approach to system architecture that proceeds from a topmost “system” to an aggregation and integration of systems created in lower level development layers, both internal and external to the developer as described in the standard ANSI/EIA-632 (Processes for Engineering a System) will be explored.

SYE 6025
Engineering Economic Analysis
3-0-3
Examination of the principles and methods used in evaluating costs associated with development and realization of engineering programs. This includes engineering cost estimating for determining engineering development and total life-cycle costs, application of cost-benefit analyses and cost-effectiveness analyses in the comparison of alternative design approaches, and an examination of various engineering costing concepts such as “design-to-cost”, “should cost”, and “cost as an independent variable”.

SYE 6030
Verification Program Development & Management
3-0-3
This course will review: the establishment of criteria for planning tests, the determination of test methods, sub-system and system test requirements, and development of formal test plans to demonstrate compliance. Also examined will be methods of developing detailed test procedures for specific test conduct and acceptance test procedures for evaluating supplier products. The preparation of effective test results documentation in a fair and accurate manner will be analyzed.

SYE 6035
Modeling and Simulation
3-0-3
The use of models and simulations to validate or predict expected performance, behavior, and interaction of selected design elements in a controlled environment will be examined. This course will also present guidelines for selecting and using models and simulations on projects. Various modeling and simulation methods and tools will be examined and their value and applications probed for differing engineering development needs.

SYE 6040
Advanced Configuration Management
3-0-3
An examination of processes and methods to identify, control, audit, and track the evolution of system characteristics throughout the system life cycle will be conducted.

SYE 6045
Process Assessment and Improvement
3-0-3
This course provides an operational understanding of the differences between process standards and assessment standards where the latter provide a formal and structured means of examining a specific process or focus area to determine process capability or process maturity in an enterprise. Both EIA/IS-731-1, "Systems Engineering Capability Model", and Capability Maturity Model® Integration (CMMISM) will be examined and the strengths and weaknesses reviewed with respect to consideration of use on projects.

SYE 6050
Reliability and Sustainability
3-0-3
Concepts for reliability and sustainability (maintainability) engineering and their integration into system development will be examined. In addition, techniques for ensuring the integration of these factors into core design decisions through specified requirements will be explored.

SYE 6055
System Development Workshop
3-0-3
This workshop will require students to attend a number of intensive 2-day, weekend workshops at SPSU's Marietta campus. Students will be presented with an engineering problem statement constituting acquirer needs and expectations. Two competitive teams will be established and multi-disciplinary teamwork will be required to achieve a solution to the presented problem statement. The two student teams will demonstrate effectiveness (validation) in a head-to-head operational competition judged by SPSU and industry-experienced representatives.

SYE 6060
Systems Engineering Workshop
3-0-3
This workshop will require students to attend a number of intensive 2-day, weekend workshops at SPSU's Marietta campus. The workshop engages the student with a variety of scenarios amenable to a systems engineering approach. Early activities will include systems synthesis and systems analysis following the problem definitions. Finer grain development then will be required utilizing applicable tools learned in preceding courses. Students will work in teams gaining experience in the dynamics and synergism that can be realized in systems efforts.

Graduate Faculty Listings

Business Administration

Conn, Jennie S.
Associate Professor
B.A., Indiana University
M.B.A., Clark Atlanta University
J.D., Georgetown University

Davis, Sidney
Professor
Ph.D., Georgia State University
M.B.A., Georgia State University
B.I.E., Georgia Institute of Technology
P.E., Georgia

North, Max M.
Associate Professor
Ph.D., Clark Atlanta University
M.S., Jackson State University
B.S., Karaj College, Iran

Obeidat, Muhammad A.
Professor
Ph.D., Illinois Institute of Technology
M.S., Western Michigan University
B.S., Yarmouk University

Richardson, Ronny
Professor
Ph.D., Georgia State University
M.S., Georgia State University
M.B.A., Georgia State University
B.S., University of Southern Mississippi

Vasa-Sideris, Sandra
Associate Professor
Ph.D., Georgia State University
M.B.A., Georgia State University
M.A., University of Tennessee
B.A., University of Tennessee

Warsi, T. A.
Associate Professor
M.B.A., Atlanta University
M.A., Gorakhpur University
B.A., Agra University
B.Ed., Gorakhpur University

Computer Science

Bobbie, Patrick O.
Professor
Ph.D., University of Southwestern Louisiana
M.S., Marquette University
B.S., University of Science & Technology, Ghana

Dasigi, Venu
Professor and Department Chair
Ph.D., University of Maryland
M.S., University of Maryland
M.E.E., Philips International Institute of Technological Studies
B.E., Andhra University

Faruque, Abdullah
Associate Professor
Ph.D., Clarkson University
M.S. EE, B.S. EE, Bangladesh University of Engineering & Technology.

Guzman, Juan Carlos
Associate Professor
Ph.D., Yale University
M.S. M.Phil., Yale University
M.S., B.S., Univertidad Simon Bolivar [Venezuela]

Harbort, Robert A., Jr.
Professor
Ph.D., Emory University
M.S., Georgia Institute of Technology
B.S., Emory University
P.E., Georgia

Hung, Chih-Cheng
Professor
Ph.D., University of Alabama-Huntsville
M.S., University of Alabama-Huntsville
B.S., Soochow University

Karam, Orlando A.
Assistant Professor
Ph.D., Tulane University
M.S., Tulane University
B.S., University of Yucatan [Mexico]

Morrison, Briana B.
Assistant Professor
M.S., Southern Polytechnic State University
B.S., Tulane University

Murphy, Michael G.
Professor and Dean, School of Computing and Software Engineering
Ph.D., Louisiana State University
M.S., Louisiana State University
B.A., Florida State University

Qian, Kai
Professor

Ph.D., University of Nebraska-Lincoln
M.S., East China Normal University
B.S., Harbin Engineering College

Roth, Patricia H.
Instructor

M.S.S.W.E., Southern Polytechnic State University
B.A., Dunbarton College of Holy Cross

Rupf, John A.
Professor

Ph.D., Purdue University
E.E., Massachusetts Institute of Technology
M.S., Massachusetts Institute of Technology
M.S., Southern Polytechnic State University
B.S., University of Kansas
P.E., Kansas

Construction Management

Banik, Gouranga C.
Associate Professor
Ph.D., Iowa State University
M.S., University of Manchester (UK)
M.S., Bangladesh University of Engineering and Technology
B.S., Bangladesh University of Engineering and Technology

El-Itr, Zuhair
Associate Professor
Ph.D., Georgia Institute of Technology
M.S.C.E., Georgia Institute of Technology
B.S.C.E., American University-Beirut

Moore, Brian
Assistant professor
Ph.D., M.S. Georgia Institute of Technology
B.S. Marine Engineering, Maine Maritime Academy

Siddiqi, Khalid M.
Department Chair and Associate Professor
Ph.D., Georgia Institute of Technology
M.S., Asian Institute of Technology, Bangkok Thailand
B.S., University of Engineering and Technology, Karachi, Pakistan

Engineering Technology—Electrical

Asgill, Austin B.
Professor
PhD, University of South Florida
MSEE, University of Aston in Birmingham
MBA, Florida State University
BEngr, University of Sierra Leone
PE, Florida

Fallon, Thomas J.
Associate Professor
PhD, Georgia State University
MSEE, Georgia Institute of Technology
BSEE, Georgia Institute of Technology

Thain, Walter E. Jr
Associate Professor
PhD, Georgia Institute of Technology
MSEE, Georgia Institute of Technology
BEE, Georgia Institute of Technology

Wilcox, Daren R.
Assistant Professor
MSEE, University of Central Florida
BSEE, University of Central Florida

Zia, Omar
Professor
PhD, Warsaw Technical University
MSEE, Warsaw Technical University
BSEE, Warsaw Technical University
PE, Georgia, California, Oregon

Information Design and Communication

Barnum, Carol M.
Professor
Ph.D., Georgia State University
M.A., Georgia State University
B.A., University of North Carolina

Haimes -Korn, Kim
Associate Professor
Ph.D., Florida State University
M.A., Florida State University
B.A., Florida State University

Hopper, Keith B.
Associate Professor
Ph.D. Georgia State University
M.A., Boise State University
B.S., Boise State University

Nunes, Mark
Associate Professor and Department Chair
Ph.D., Emory University
M.A., University of Virginia
M.A., Columbia University
B.A., Columbia University

Oliver, Betty
Professor
Ph.D., University of Georgia
M.A., University of Georgia
B.A., University of Georgia

Shauf, Michele
Assistant Professor
Ph.D., University of Delaware
M.A.., University of Delaware
B.A.., University of Delaware

Smith, Herbert J.
Associate Professor
Ph.D., Kent State University
M.A., Northeastern University
B.A., Northeastern University

Information Technology

Brown, Robert L.
Lecturer
M.S., Southern Polytechnic State University
B.S., State University of New York Regents College

Halstead-Nussloch, Richard
Professor
Ph.D., University of Michigan
B.A., Macalester College

Hartfield, Fred D., Jr.
Associate Professor
Ed.S., University of Georgia
M.S., Atlanta University
B.A., Morehouse College

Peltsverger, Svetlana
Assistant Professor
Ph.D., Russian Academy of Science, Moscow
M.S., Chelyabinsk Polytechnic Institute, Russia
B.S., Chelyabinsk Polytechnic Institute, Russia

Rutherfoord, Rebecca
Professor
Ed.D., Indiana State University
M.S., Southern Polytechnic State University
M.S., Indiana State University
B.S., Indiana State University.
CDP

Vande-Ven, Susan
Instructor
M.S., Georgia Institute of Technology
M.B.A., University of Akron
B.S., Purdue University

Wang, Ju An
Professor and Department Chair
Ph.D., Beijing University of Aeronautics and Astronautics
M.S., Changsha Institute of Technology
B.S., Zhengzhou Institute of Technology

Quality Assurance and Systems Engineering

Butler, Renee
Assistant Professor
Ph.D. Georgia Institute of Technology
M.S. Georgia Institute of Technology
B.S. Georgia Institute of Technology

Frye, David C.
Lecturer
Ph.D., Georgia Institute of Technology
M.S., Georgia Institute of Technology
M.S., University of Southern California
B.A., Indiana University of Pennsylvania

Hunt, Russ
Associate Professor and Department Chair
Ph.D. University of Illinois
M.S. University of Illinois
B.S. University of Illinois

Jackson, Ken
Assistant Professor
Ph.D., Georgia Institute of Technology
M.S.I.E., Georgia Institute of Technology
M.S.M.E., Georgia Institute of Technology
B.S.M.E., Auburn University

McShane Vaughn, Mary
Assistant Professor
Ph.D., Georgia Institute of Technology
M.S., Georgia Institute of Technology
BSIE, General Motors Institute

Scherrer, Christina
Assistant Professor
Ph.D., Georgia Institute of Technology
M.S., Georgia Institute of Technology
B.S.., Georgia Institute of Technology

Solak, Senay
Instructor
Ph.D., Georgia Institute of Technology
Ph.D., Sabanci University
M.S., Georgia Institute of Technology
B.S.E.E., United States Naval Academy

Software Engineering

Duggins, Sheryl L.
Professor
Ph.D., University of Florida
M.S., University of Missouri-Columbia
B.A., University of Missouri-Kansas City

Pournaghshband, Hassan
Professor
Ph.D., University of Oklahoma
M.S., Northwestern University
B.S., University of Tehran

Thomas, Barbara B.
Professor
M.Ed., Georgia State University
B.S., Georgia State University

Tsui, Frank
Associate Professor
Ph.D., Georgia Institute of Technology
M.S., Indiana State University
B.S., Purdue University

Southern Polytechnic State University Senior Administration

Dr. LISA A. ROSSBACHER – President

Ph.D., Princeton University
M. A., Princeton University
M. A., State University of New York at Binghamton
B. S., Dickinson College

Mr. RON DEMPSEY – Executive Director of Advancement

Ph.D., Southern Baptist Theological Seminary
M.A., University of Louisville
M. Div., Southern Baptist Theological Seminary

Mr. WILLIAM GRUSZKA - Chief Information Officer

M. S., Cleveland State University
B.I.E, Cleveland State University

Dr. RON R. KOGER - Vice President for Student and Enrollment Services

Ed.D., University of Kansas
M.Ed., University of Kansas
B.S.Ed., Pittsburg State University

Mr. PATRICK B. MCCORD - Vice President for Business and Finance

M. S., Georgia College
B. A., West Georgia College

Ms. MARY T. PHILLIPS - Executive Assistant to the President

M.B.A, Samford University
B. A., Howard College (Samford University)

Dr. ZVI SZAFRAN - Vice President for Academic Affairs

Ph.D., University of South Carolina
B. S., Worcester Polytechnic Institute

President Emeritus

Dr. Steve R. Cheshier

Institutions of the University System of Georgia

Research Universities

Georgia Institute of Technology	Atlanta
Georgia State University	Atlanta
Medical College of Georgia	August
University of Georgia	Athens

Regional Universities

Georgia Southern University	Statesboro
Valdosta State University	Valdosta

State Universities

Albany State University	Albany
Armstrong Atlantic State University	Savannah
Augusta State University	August
Clayton State University	Morrow
Columbus State University	Columbus
Fort Valley State University	Fort Valley
Georgia College & State University	Milledgeville
Georgia Southwestern State University	Americus
Kennesaw State University	Kennesaw
North Georgia College & State University	Dahlonega
Savannah State University	Savannah
Southern Polytechnic State University	Marietta
University of West Georgia	Carrolton

State Colleges

Abraham Baldwin Agricultural College	Tifton
Dalton State College	Dalton
Gainesville State College	Gainesville
Georgia Gwinnett College	Lawrenceville
Gordon College	Barnesville
Macon State College	Macon
Middle Georgia College	Cochran

Two-Year Colleges

Atlanta Metropolitan College	Atlanta
Bainbridge College	Bainbridge
Coastal Georgia Community College	Brunswick
Darton College	Albany
East Georgia College	Swainsboro
Georgia Highlands College	Rome
Georgia Perimeter College	Decatur
South Georgia College	Douglas
Waycross College	Waycross