UNDERGRADUATE CATALOG
2000-2002

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Telecommunications Engineering
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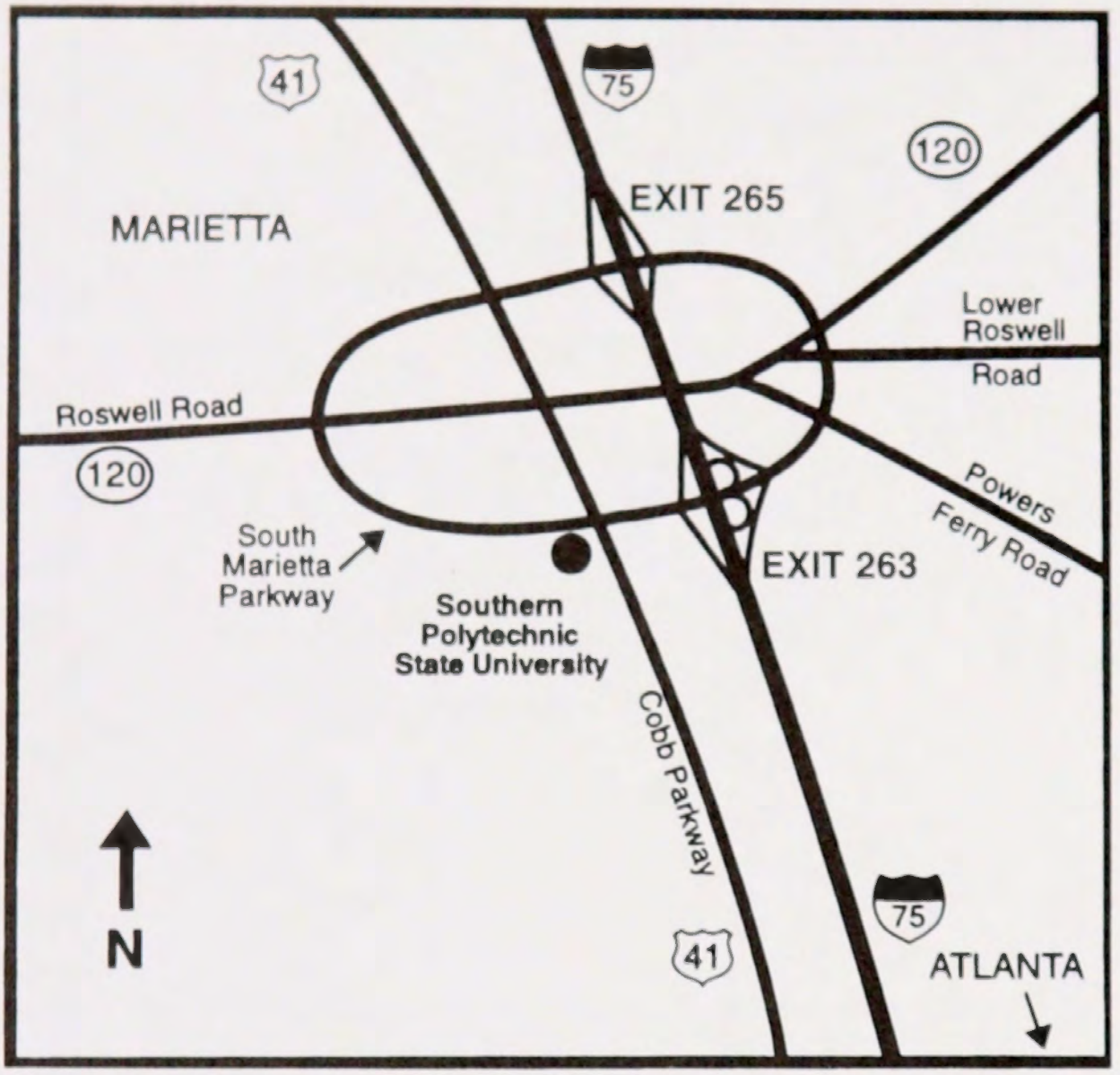
SOUTHERN POLYTECHNIC STATE UNIVERSITY



Visitors to the Campus

Southern Polytechnic State University welcomes visitors to the campus at any time. Classes are held six days a week, Monday through Friday, from 7 a.m. until 11 p.m. and Saturday, from 8 a.m. until 6 p.m. Administrative offices are open from 8 a.m. until 5 p.m., Monday through Friday. The Records Office is open until 6 p.m., Monday through Thursday.

Applicants and other persons interested in obtaining information about Southern Polytechnic State University's programs are encouraged to contact the Admissions Office regarding appointments.

UNDERGRADUATE CATALOG
2000-2002

A residential university in the University System of Georgia

1100 SOUTH MARIETTA PARKWAY
MARIETTA, GEORGIA 30060-2896

SOUTHERN
POLYTECHNIC
STATE UNIVERSITY

Directory for Correspondence

For additional information on the following topics, please address inquiries as follows:

Admissions	Director of Admissions
Alumni Affairs	Director of Alumni Affairs
Athletics	Director of Athletics
Career Counseling	Director of Career Development
Continuing Education Programs	Director of Extended University
Cooperative Education Program	Director of Career Development
Counseling Services	Director of Counseling
Credit by Examination	Director of Records
Disability Services	Disability Services Coordinator
Evening School	Director of Records
Financial Aid	Director of Financial Aid
Fraternity Affairs	Director of Student Activities
Health Services	Dean of Students
Housing	Director of Residence Life
International Program Services	Director of International Program Services
Placement	Director of Career Development
Registration	Director of Records
Student Activities	Director of Student Activities
Student Records	Director of Records
Testing Services	Coordinator of Testing
Transcripts	Director of Records
Transfer Credit	Director of Admissions
Veteran Affairs	Director of Records

For Your Information

Admissions ..... (770) 528-7281
Dean of Students ..... (770) 528-7225
Financial Aid ..... (770) 528-7290
President ..... (770) 528-7230
Records ..... (770) 528-7267
University Relations ..... (770) 528-7368
Vice President for Academic Affairs ..... (770) 528-7238
Vice President for Business and Finance ..... (770) 528-7232
Vice President for Enrollment Management and Student Services ..... (770) 528-3720

Emergency Locator Numbers ..... Day (770) 528-7225
Evening and Weekends (770) 528-7348

From outside the Atlanta Metro area (For Admissions Information Only) 800-635-3204

Southern Polytechnic State University
1100 South Marietta Parkway
Marietta, Georgia 30060-2896

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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 offices of the Records and major academic departments. It is especially important that each student note that it is his or her responsibility to keep himself or herself apprised of current graduation requirements for his or her particular degree program.

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.

Campus Safety and 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 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 department 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 college offering associate, bachelor, and master's degrees:

Associate of Science transfer program is offered in:
- General Studies

Bachelor of Applied Science program

Bachelor of Architecture program

Bachelor of Arts programs are offered in:
- Computer Science
- International Technical Communication
- Management
- Mathematics
- Physics

Bachelor of Science programs are offered in:
- Apparel/Textile Engineering Technology
- Civil Engineering Technology
- Computer Engineering Technology
- Computer Science
- Construction
- Electrical Engineering Technology
- Industrial Distribution
- Industrial Engineering Technology
- Management
- Mathematics
- Mechanical Engineering Technology
- Physics
- Surveying and Mapping
- Technical and Professional Communication

Bachelor of Science in Telecommunications Engineering Technology program

Master of Science programs are offered in:
- Computer Science
- Construction
- Engineering Technology
- Management
- Quality Assurance
- Technical and Professional Communication

Master of Science in Information Technology program

Master of Science in Software Engineering program

Southern Polytechnic State University is 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 engineering technology programs, except the Telecommunications Engineering Technology program and the program leading to the master's degree, are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

The Bachelor of Architecture program is accredited by the National Architectural Accrediting Board, Inc. (NAAB).

The Bachelor of Science program in Construction is accredited by the American Council for Construction Education (ACCE).

The Master of Science program in Management is accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

Academic Calendar

2000-2002

This is a tentative academic calendar and is subject to change. An official school calendar is published prior to the beginning of each semester.

Summer Semester 2000

May 22	(M)	Registration; New student orientation
May 23	(Tu)	First day of classes
May 29	(M)	Memorial Day holiday for students
July 4	(Tu)	Independence Day holiday
August 2	(W)	Last day of classes
August 3-5	(Th-Sa)	Final examinations
August 5	(Sa)	End of summer semester

Fall Semester 2000

August 14	(M)	Faculty reception
August 15	(Tu)	New student orientation
August 16	(W)	Registration
August 17	(Th)	First day of classes
September 4	(M)	Labor Day holiday
October 9	(M)	Columbus Day holiday for students
November 22-25	(W-Sa)	Thanksgiving holidays for students
December 6	(W)	Last day of classes
December 7	(Th)	Study break
December 8-14	(F-Th)	Final examinations
December 14	(Th)	End of fall semester
December 16	(Sa)	Commencement

Spring Semester 2001

January 5	(F)	Registration; New student orientation
January 8	(M)	First day of classes
January 15	(M)	MLK Day holiday
March 19-24	(M-Sa)	Spring break
April 30	(M)	Last day of classes
May 1	(Tu)	Study break
May 2-8	(W-Tu)	Final examinations
May 8	(Tu)	End of spring semester
May 12	(Sa)	Commencement

Summer Semester 2001

May 21	(M)	Registration; New student orientation
May 22	(Tu)	First day of classes
May 28	(M)	Memorial Day holiday for students
July 4	(W)	Independence Day holiday
August 1	(W)	Last day of classes
August 2-4	(Th-Sa)	Final examinations
August 4	(Sa)	End of summer semester

Fall Semester 2001

August 13	(M)	Faculty reception
August 14	(Tu)	New student orientation
August 15	(W)	Registration
August 16	(Th)	First day of classes
September 3	(M)	Labor Day holiday
November 21-24	(W-Sa)	Thanksgiving holidays for students
December 5	(W)	Last day of classes
December 6	(Th)	Study break
December 7-13	(F-Th)	Final examinations
December 13	(Th)	End of fall semester
December 15	(Sa)	Commencement

Spring Semester 2002

January 7	(M)	Registration; New student orientation
January 8	(Tu)	First day of classes
January 21	(M)	MLK Day holiday
March 11-16	(M-Sa)	Spring break
April 30	(Tu)	Last day of classes
May 1	(W)	Study break
May 2-8	(Th-W)	Final examinations
May 8	(W)	End of spring semester
May 11	(Sa)	Commencement

Mission Statement

Our mission at Southern Polytechnic State University is to provide the residents of Georgia with university-level education in technology, engineering technology, arts and sciences, architecture, management, and related fields.

Our history continues to be one of rapid change and adaptation. Founded in 1948 as a unit of the Georgia Institute of Technology at the request of the Georgia Business and Industry Association, The Institute, as we were first called, provided technical training in support of Georgia industry. Our mission quickly evolved to include offering associate degrees. In 1970, as Southern Technical Institute, we became one of the first colleges in the nation to offer baccalaureate degrees in engineering technology. In 1980, we became a separate senior college in the University System of Georgia. Six years later, we began offering graduate programs and changed our name to Southern College of Technology. Meeting needs articulated by our professional advisory boards, alumni, faculty, and students, we continue to evolve, improve, and broaden our degree offerings in the technological arena.

We produce academically and technically proficient graduates for the economic development of the state, region, and nation, and we seek international opportunities to participate in the teaching and transfer of technology.

To achieve our mission, we offer a flexible schedule of day and evening classes for programs at the associate, baccalaureate, and master's levels to the highly motivated students we seek to recruit and retain. We offer both degree and non-degree programs, provide opportunities for cooperative education, and engage in collaborative efforts with other institutions. We enroll a significant number of working professionals as part-time students, as well as a large number of traditional college-age students. We welcome academically prepared transfer students from community/junior colleges, technical institutes, senior colleges and universities, who are seeking a high quality technical education.

All of our programs include a strong general education course of study that integrates science, technology, and liberal arts. Our growing graduate programs introduce students to research that is industrially, technically, or applications focused.

The faculty strives for excellence in teaching and service, providing a laboratory-centered and/or professionally oriented education that fosters problem solving, ethical awareness, and a desire for lifelong learning.

At Southern Polytechnic State University, we encourage continual improvement throughout the campus and assume statewide leadership in the study and teaching of the process of continual improvement. We offer opportunities for professional development, and we work to achieve an international outlook.

We serve our community through partnerships with industry, professional organizations, government, schools, and through continuing education and public service programs. We promote activities which increase public awareness of science, technology and related fields.

In rising to the technological, scientific, and humanitarian challenges of the future, we aspire to broaden our offerings by including programs in engineering, in new and emerging sciences and technologies, and in additional technically related fields. We will enhance our reputation as a university where imagination, innovation, and application are integrated to provide leadership into the future.

Southern Polytechnic State University shares with the other colleges and universities of the University System of Georgia the following core characteristics or purposes:

- a supportive campus climate, necessary services, and leadership and development opportunities, all to educate the whole person and meet and needs of students, faculty and staff;

- cultural ethnic, racial, and gender diversity in the faculty, staff, and student body, supported by practices and programs that embody the ideals of an open, democratic, and global society;

- technology to advance educational purposes, including instructional technology, student support services, and distance education;

- collaborative relationships with other System institutions, State agencies, local schools and technical institutes, and business and industry, sharing physical, human, information, and other resources to expand and enhance programs and services available to the citizens of Georgia.

Further, Southern Polytechnic State University shares with the other State Universities and Senior Colleges of the University System of Georgia the following core characteristics or purposes:

- a commitment to excellence and responsiveness within a scope of influence defined by the needs of an area of the state, and by particularly outstanding programs or distinctive characteristics that have a magnet effect throughout the region or state;

- a commitment to teaching/learning environment, both inside and outside the classroom, that sustains instructional excellence, serves a diverse and university-prepared student body, promotes high levels of student achievement, offers academic assistance, and provides developmental studies programs for a limited student cohort;

- a high quality general education program supporting a variety of disciplinary, interdisciplinary, and professional academic programming at the baccalaureate level, with selected master's and educational specialist degrees, and selected associate degree programs based on area need and/or inter-institutional collaborations;

- a commitment to public service, continuing education, technical assistance, and economic development activities that address the needs, improve the quality of life, and raise the education level within the university's scope of influence;

- a commitment to scholarly and creative work to enhance instructional effectiveness and to encourage faculty scholarly pursuits, and a commitment to applied research in selected areas of institutional strength and area need.


POLYTECHNIC

Admission Information

Admissions 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.

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 it the student has falsified application materials.

Admission to Southern Polytechnic State University as an undergraduate student does not automatically admit the individual to the programs in the School of Architecture. Students interested in applying for these programs must first be admitted to the University and then must make a separate application to the School of Architecture. Details of the admission requirements and application deadline dates to the School of Architecture can be found in the section of this catalog which outlines degree program requirements.

Admission Procedures and Deadlines

All applications for admission to Southern Polytechnic State University must have all required credentials, including the certificate of immunizations and a $20 non-refundable application processing fee on file in the Admissions Office by the application deadline date for the semester in which the applicant plans to enroll.

The application deadline dates for each semester are as follows:

Semester	**Deadline Date**
Summer	May 1
Fall	August 1
Spring	December 1

(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.)

Unless otherwise noted for a specific admission type/category, the application file is complete and ready for review when the Office of Admissions (Southern Polytechnic State University, 1100 South Marietta Parkway, Marietta, Georgia 30060-2896) has received the following:

1. A completed Undergraduate Application for Admission to Southern Polytechnic State University;
2. A $20.00 non-refundable application processing fee (check made payable to Southern Polytechnic State University);
3. Official scores on required college entrance test (typically SAT or ACT, some applicants may also be required to have SAT II subject test scores, TOEFL scores, or Collegiate Placement Test scores);
4. Official high school and college transcripts mailed directly from those institutions;
5. A valid Certificate of Immunization (measles, mumps, rubella).

Upon acceptance and prior to enrollment, any student with a documented disability or special need must notify the Disability Services Coordinator in the Counseling Services Office of any particular accommodations required.

Admission from High School

The College Preparatory Curriculum (CPC), SAT/ACT scores, and the high school grade point are all key factors considered in freshman admissions decisions. Completion of the University System of Georgia's College Preparatory Curriculum requirements at a regionally accredited or University System recognized high school is required for freshman admission. A minimum of 16 CPC units are required in the following subject areas:

Course (Units)	Required Course Emphasis
English (4)	Literature (American, English, World) integrated with Grammar and Usage and Advanced Composition Skills
Mathematics (4)	Algebra I and II, Geometry and a fourth year to included courses such as Advanced Algebra and Trigonometry, Algebra III, Precalculus, Discrete Mathematics, Calculus, AP Calculus, Statistics, IB Mathematics, Analysis
Science (3)	Must include at least one lab course from Life Science and one lab course from the Physical Sciences
Social Science (3)	Must include U.S. History and World History
Foreign Language (2)	Must be in the same language and must emphasis speaking, listening, reading, and writing

** Two additional academic units will be required, in addition to the above 16 units, for regular admission.*

Regular Freshman Admission Standards (Full Admission)

Regular freshmen are typically applicants who will be first-time college students and who attend the University soon after completing high school.

SPSU's minimum requirements for admission as a regular freshman include the following:

1. Graduation from a regionally accredited high school or a high school accredited by the Georgia Accreditation Commission or an approved University System of Georgia agency or from a public school under the authority of the State Department of Education;
2. Completion of the 16 required CPC units, plus two additional academic units;
3. Have an academic HSGPA of at least a 2.0 and minimum scores of 500 on the SAT I Verbal (22 ACT-English) and 500 on the SAT I Math (22 ACT-Math).

Limited Freshman Admission Standards

The University System permits SPSU to admit a limited number of traditional freshman each year who do not meet all the minimum requirements listed above, but whose records are sufficiently strong enough to show promise for success at the University.

SPSU's minimum requirements for limited freshman admission include the following:

1. Graduation from a regionally accredited high school or a high school accredited by the Georgia Accreditation Commission or an approved University System of Georgia agency or from a public school under the authority of the State Department of Education;
2. Completion of the 16 required CPC units;
3. Have an academic HSGPA of at least a 2.0 and minimum scores of 450 on the SAT I Verbal (19 ACT-English) and 450 on the SAT I Math (19 ACT-Math).

A freshman applicant may apply as early as the end of his or her junior year in high school. After the receipt of the application, $20 non-refundable application processing fee, official high school transcript through the junior year with senior subjects indicated, official SAT/ACT scores, and the certificate of immunization, the Admissions Office will notify the applicant of his or her admission status.

Alternatives for Home School Applicants and Others

Applicants, including home school students, who have not completed the prescribed units of the CPC from a regionally accredited or University System recognized high school may validate the CPC in an alternative way. This alternative is designed to give the student the ability to demonstrate proficiency in courses preparatory to college. The alternative approach for handling exceptions for home school and other students waives the high school graduation requirement, the academic grade point requirement, and the Carnegie Unit requirements of the CPC in exchange for satisfactory performance on additional standardized tests (specific SAT II subject exams) which validate high school completion and college preparedness. The applicants must also meet SAT I requirements.

Applicants who have not completed the CPC at an accredited high school must achieve designated scores on the following SAT II Subject Tests in order to demonstrate College Preparatory Curriculum proficiency. The seven required SAT II Subject Tests are: English Writing, Literature, MATH IC or MATH IIC, American History and Social Science, World History, Biology, and Chemistry or Physics.

Students must also demonstrate proficiency in a foreign language at the level of two years of high school study by taking and passing appropriate assessment tests on campus.

Please contact the Admissions Office for additional details.

Joint Enrollment/Early Admission of High School Students/ Postsecondary Options

Southern Polytechnic State University recognizes the need to provide academically talented high school students with opportunities for acceleration of their formal academic programs. A joint enrollment student continues his/her enrollment in high school as a junior or senior and enrolls in courses for college credit. An early admission student enrolls as a full-time college student following completion of the junior year in high school.

Postsecondary Options (PSO) is a joint enrollment program designed for juniors and seniors in Georgia public high schools. Under the PSO regulations, students simultaneously receive high school Carnegie unit credit(s) and college credit hours. Under the PSO program, partial or full tuition for classes taken by the student at Southern Polytechnic State University is paid for with funds generated by the Quality Basic Education funding formula. Interested students should contact their high school counselor.

To be considered for joint enrollment or early admission, the admission requirements are 1) minimum scores of 500 on the SAT I Verbal (22 ACT-English) and 500 on the SAT II Math (22 ACT-Math), 2) minimum academic high school

GPA of 3.0, 3) be on track for completion of CPC requirements by the end of their senior year in high school, 4) written recommendation of the high school counselor or principal, and 5) written consent of the parent or guardian (if student is a minor). With the exception of English and social studies and/or mathematics taken by students with qualifying SAT/ACT scores, a college course may not be used to fulfill the University System of Georgia's CPC requirements. Joint enrollment students participating in the PSO program must submit the appropriate PSO voucher to the SPSU Cashier's Office to cover partial or full tuition charges.

Students who do not necessarily meet all of the above criteria but, who demonstrate very high academic abilities through their SAT performance may be permitted to enroll in appropriate college courses. Specifically, students with a score of at least 700 on the SAT I verbal (31 ACT-English) may be permitted to enroll in courses that require advanced verbal ability. Students with a score of at least 700 on the SAT I Math (31 ACT-Math) may be permitted to enroll in courses that require advanced mathematics ability. Student with a total scores of 1370 on the SAT I (31 ACT-Composite) may be permitted to enroll in appropriate courses.

Advanced Placement Opportunities

Southern Polytechnic State University welcomes students who have pursued accelerated academic course work while in high school or through recognized national standardized programs. Such programs include College Board's Advanced Placement (AP), International Baccalaureate (IB), and College Level Examination Program (CLEP).

College Level Examination Program (CLEP)

Students may receive college credit for certain courses based on scores on the College Level Examination Program offered by the College Entrance Examination Board. The criteria for credit awarded under this program are as follows:

CLEP Exam	Minimum Score Required	SPSU Course for which credit is given	Credit Hours
American Government	50	POLS 1101*	3
American History	50	HIST 2111 or 2112*	3
College Algebra	50	MATH 1111	3
English Composition (Essay Edition)			
General Exam	500	ENGL 1101	3
English Literature	50	ENGL 2120	3
General Psychology	50	PSYC 1101	3
Introductory Calculus	50	MATH 2253	4
Introductory Micro/ Macro Economics	50	ECON 1101	3
Trigonometry	50	MATH 1113	4
Western Civilization	50	HIST 1011 or 1012 or 1013	3

** In order to receive credit for HIST 2111 or 2112, or POLS 1101 and satisfy the constitution requirement for graduation, the student must also complete HIST 2911 with a grade of "C" or better.*

Advanced Placement Program

Students may receive college credit for certain courses based on scores of the Advanced Placement (AP) Exam as follows:

AP Exam	Minimum Score Required	SPSU Course for which credit is given	Credit Hours
American Government	3	POLS 1101*	3
AB Calculus Test	3	MATH 1111, 1113, and 2253 or 2240	10 or 11
BC Calculus Test	3	MATH 1111, 1113, 2253 or 2240, 2254	14 or 15
Computer Science A	3	CS 1301	4
Computer Science AB	3	CS 1301,1302	8
English-Language/ Composition	3	ENGL 1101	3
English-Language/ Composition	5	ENGL 1101, 1102	6
English-Literature/ Composition	3	ENGL 1101	3
English-Literature/ Composition	5	ENGL 1101, 1102	6
United States History	3	HIST 2111*	3
United States History	5	HIST 2111, 2112*	6

** In order to receive credit for HIST 2111 or 2112, or POLS 1101 and satisfy the constitution requirement for graduation, the student must also complete HIST 2911 with a grade of "C" or better.*

Official results must be sent directly from the Admissions Testing Board of the College Board to SPSU for credit to be awarded.

International Baccalaureate Program

Students may receive college credit for certain courses based on scores of the International Baccalaureate Exam as follows:

Subject Taken at the Higher Level	Minimum Score Required	SPSU Course for which credit is given	Credit Hours
American History	4	HIST 2111, 2112	6
Biology	4	BIOL 2107K or 2108K	4
Biology	5	BIOL 2107K, 2108K	8
Chemistry	5	CHEM 1211K, 1212K	8
English	4	ENGL 1101	3
Foreign Language	5	Free Elective	3
Mathematics	4	MATH 1111, 1113, and 2253 or 2240	10 or 11
Mathematics	5	MATH 1111, 1113, 2253 or 2240, 2254, and four additional credit hours based on exam content	18 or 19
Physics	5	PHYS 1111K, 1112K or PHYS 2211K, 2212K	8

Admission from Other Colleges

Transfer applicants for admission are students who have earned college credit elsewhere at regionally accredited collegiate institutions and wish to transfer to SPSU to pursue a degree. Students planning to transfer from another college must make arrangements for each college previously attended to forward a com-

plete official transcript to the Office of Admissions at SPSU. Official transcripts are required, regardless of the applicant's wished concerning transfer credit, and must be mailed directly from the sending institution to the Office of Admissions at SPSU.

All admissions deadlines cited earlier apply to transfer applicants. All of the documents cited earlier and required for a complete application file apply to transfer applicants with the following exceptions:

- High school transcripts are generally not required for applicants with 30 or more semester hours of acceptable transfer credit. (All college transcripts are required, however.)
- SAT I or ACT scores are generally not required for applicants with 30 or more semester hours of acceptable transfer credit.

Transfer Admissions

Transfer Freshman Admissions Standards

Applicants with fewer than 30 semester hours of acceptable transfer credit will be considered under the following policies:

1. Applicants must meet the same admissions requirements identified earlier for freshman admitted from high school.
2. Applicants must have completed and exited all required remedial courses at their previous institution.
3. Applicants must not be on dismissal from their previous institution.
4. Applicants must have at least a 2.0 cumulative college GPA.

Transfer Admissions Standards for Sophomores and Upperclassmen

Transfer applicants with sufficient transferable hours to be classified as a sophomore, junior or senior at SPSU will be considered under the following policies:

1. Applicants must have completed and exited all required remedial courses at their previous institution.
2. Applicants must not be on dismissal from their previous institution.
3. Applicants must have at least a 2.0 cumulative college GPA.

Transfer Credit

Students participating in the University System of Georgia Core Curriculum Program at system institutions may transfer to Southern Polytechnic State University with little or no loss of credit. In addition, pre-engineering technology curricula are available at several University System of Georgia colleges. A student graduating from these curricula or a student graduating from any ABET (Accreditation Board for Engineering and Technology) accredited associate degree program may transfer to Southern Polytechnic State University with little or no loss of credit provided the student does not change majors.

The basic policy regarding the acceptance of courses by transfer is to allow credit for college level courses completed with a grade of "C" or better in accredited programs provided the courses correspond in time and content to courses offered at Southern Polytechnic State University. An official transcript, requested by the student, must be on file in the Office of Admissions before credit will be awarded.

A grade of "D" is acceptable for Core Curriculum courses taken from a University System of Georgia institution with the exception of ENGL 1101, MATH 1111, and MATH 1113 which require a grade of "C". Students completing U.S. History or American Government out-of-state must complete HIST 2911 with a grade of "C" or better to receive transfer credit for HIST 2111 or 2112, or POLS 1101.

The specific credit for work completed at other institutions is recommended by the appropriate department head and approved for transfer by the Records Office. The total amount of recommended credit shall not exceed that allowed by the

Records Office. Allowance of transfer credit by the Records Office does not mean necessarily that all approved credit will be applied toward a specific Southern Polytechnic State University degree. The amount of transfer credit that may be applied toward a degree will be indicated and controlled by an evaluation of transfer credit prepared in the Office of Admissions.

Southern Polytechnic State University reserves the right to test the proficiency of any student in coursework transferred from another institution when such coursework was not taken as part of the University System of Georgia Core Curriculum Program. Therefore, Southern Polytechnic State University reserves the right to disallow transfer credit in such coursework if the student cannot demonstrate acceptable proficiency.

The total amount of transfer credit acceptable to Southern Polytechnic State University is subject to the university's regulations related to the residency requirements applicable to the degree sought.

Core Curriculum

Principles Across the Core that are Common to All Institutions

Each Institution's core curriculum shall:

1. Encourage the development of written and oral communication skills and critical thinking within the broader academic context.
2. Permit opportunities for interdisciplinary learning.
3. Include offerings that reflect the special characteristics of the institution.
4. Feature international components that increase global awareness and introduce the student to different cultural perspectives.
5. Include an informed use of information technology.
6. Employ pedagogy designed to increase intellectual curiosity and to initiate a continuing interest in the subject matter.
7. Feature courses that are challenging and rigorous and provide learning experiences that distinguish a field.
8. Introduce the methods used by technical and scientific professionals such as the evaluation of empirical data, problem recognition, problem definition, the application of scientific principles, and logical problem solving.
9. Be cohesive and provide entry to both specialized studies in the student's chosen field and remaining courses (whether upper or lower division) in the institution's general education curriculum.
10. Be designed with the assumption that students have met all admissions standards to the institution (with appropriate academic support provided for those who have not).

Curriculum Framework for the Common Core

A. Essential Skills (9 hours)

The following courses shall have common course numbers throughout the University System. Each course in this section (**A**) shall be three semester hours:

English Composition I
English Composition II
College Algebra (or) Mathematical Modeling (or another course approved by the Undergraduate Council)

More advanced mathematical courses may be required for certain majors and/or institutions with the approval of the Undergraduate Council.

Transfer: Course-by-course. Any higher-level course or more advanced requirements must apply equally to native and transfer students.

B. Institutional Options (4-5 hours)

Courses approved by the Undergraduate Council which address institution-wide general education outcomes of the institution's choosing. Examples include, but are not limited to, global issues, oral communication, information technology, critical thinking, wellness, geography, and foreign languages.

Transfer: If **B** is completed, the receiving institution must accept this area in its entirety. If it has not been completed, the receiving institution must require the student to take additional course work to complete the necessary hours. However, this area is not to exceed a total of seven semester hours at all institutions. Receiving institutions must accept any approved course in this area whether or not the course exists at the receiving institution.

C. Humanities/Fine Arts (6 hours)

Courses which address humanities/fine arts learning outcomes and which have been approved by the Undergraduate Council. Interdisciplinary courses are acceptable.

Transfer: If **C** is completed, the receiving institution must accept this area in its entirety. If it has not been completed, the receiving institution must require the student to take additional course work to complete at least six semester hours. However, this area is not to exceed a total of eight semester hours at all institutions. Receiving institutions must accept any approved course in this area whether or not the course exists at the receiving institution.

D. Science, Mathematics, and Technology (10-11 hours)

Courses approved by the Undergraduate Council which address learning outcomes in the sciences, mathematics, and technology. These need not be sequential courses. Interdisciplinary courses are acceptable.

Students complete one of two options:

Option I - Non-Science Majors

1. A four-hour laboratory or a three or four-hour non-laboratory course, and
2. A four-hour laboratory course.
3. Three additional credit hours in mathematics, science, or technology.

Option II - Science Majors

1. Two four-hour laboratory courses.
2. Three additional credit hours in mathematics, science, or technology.

Transfer: Course-by-course. Receiving institutions must accept any approved course in this area. If **D** is completed, the receiving institution must accept this area in its entirety.

E. Social Sciences (12 hours)

Courses approved by the Undergraduate Council which address learning outcomes in the social sciences including, but not limited to, history and American government. Interdisciplinary courses are acceptable. If credit course work is used to satisfy the U.S./Georgia history and constitutions requirement, course(s) shall be part of this area.

Transfer: If **E** is completed, the receiving institution must accept this area in its entirety. If it has not been completed, the receiving institution must require the student to take additional course work to complete at least twelve hours. How-

ever, this area is not to exceed a total of fourteen semester hours at all institutions. Receiving institutions must accept any approved course in this area whether or not the course exists at the receiving institution.

F. Courses Related to the Program of Study (18 hours)

Lower-division courses related to the discipline(s) of the program of study and courses which are prerequisite to major courses at higher levels. The Undergraduate Council will develop guidelines for acceptable courses in this area after appropriate consultation with faculty in the relevant disciplines.

Transfer: Course by course. If **F** is completed, the receiving institution must accept this area in its entirety.

Listed below are Southern Polytechnic State University core-curriculum courses and the credit hours for those courses.

Area A			**Hours**
Essential Skills (9 hours)			
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1111	College Algebra	3
	or		
MATH	1113	Precalculus	*4
		(Required for students majoring in architecture, computer science, engineering technology, management, mathematics, and physics)	
Area B			
Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2
Area C			
Humanities/ Fine Arts (6 hours)			
Take one from each of the following two groups:			
Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	
Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D
Science, Mathematics, and Technology (11 hours)

Take any two courses from the following for a total of 8 hours: 8

ASTR	1000K	Introduction to the Universe
BIOL	2107K	Biology Principles I
BIOL	2108K	Biology Principles II
CHEM	1211K	Principles of Chemistry I
CHEM	1212K	Principles of Chemistry II
PHYS	1111K	Introductory Physics I
PHYS	1112K	Introductory Physics II
PHYS	2211K	Principles of Physics I
PHYS	2212K	Principles of Physics II

Take one from the following group:

MATH	1113	Precalculus	3-4*
MATH	2240	Survey of Calculus	
MATH	2253	Calculus I	

Area E
Social Sciences (12 hours)

Take one from each of the following four groups:

American Context: 3

HIST	2111	U.S. History I
HIST	2112	U.S. History II
POLS	1101	American Government

(All satisfy the legislative requirement for U.S. Constitution and Georgia History)

World History: 3

HIST	1011	World Civilization: Ancient
HIST	1012	World Civilization: Medieval
HIST	1013	World Civilization: Modern

Behavioral Sciences: 3

ECON	1101	Introduction to Economics
PSYC	1100	Contemporary Issues in Psychology
PSYC	1101	Introduction to General Psychology

Cultures and Societies: 3

ANTH	1102	Introduction to Anthropology
ES	1100	Ethnic Studies
GEOG	1101	Introduction to Human Geography
POLS	2401	Global Issues
RELG	1200	World Religion

*The additional hours in Areas A and D carry over to Area F or general degree requirements.

Area F
Courses Related to the Program of Study (18 hours)

Apparel/Textile Engineering Technology

CHEM	1211K	Principles of Chemistry I	4
CS	1113	BASIC Programming	3
EG	1210	Survey of Engineering Graphics	2
ENGL	2010	Technical Writing	3
IET	2227	Industrial Statistics	4
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

Architecture

DFN	1001	Design Foundation I	4
DFN	1002	Design Foundation II	4
DFN	2003	Design Foundation III	4
DFN	2004	Design Foundation IV	3
DFN	2211	Introduction to Structures	3

Civil Engineering Technology

CET	2160	Civil Graphics and Computer Aided Drafting	4
CS	1113	BASIC Programming	3
	or		
CS	2123	C Programming	
	or		
CS	2143	FORTRAN Programming	
ENGL	2010	Technical Writing	3
MATH	2254	Calculus II	4
PHYS	2211K	Principles of Physics I	4

Computer Engineering Technology

ECET	1100	Circuits I	4
EG	1210	Survey of Engineering Graphics	2
ENGL	2010	Technical Writing	3
MATH	2254	Calculus II	4
MATH	2335	Numerical Methods I	3
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

Computer Science

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
CS	2224	Computer Architecture and Assembly Language	4
MATH	2254	Calculus II	4
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

Construction

ACCT	2101	Accounting I	3
CET	2200	Introduction to Structures	4
CNST	2000	Construction Graphics	*4
IET	2227	Industrial Statistics	4
SURV	2200	Construction Measurements	4
		Excess from Precalculus - Area A	1

**The additional two hours from this course shown in general degree requirements.*

Electrical Engineering Technology

EG	1210	Survey of Engineering Graphics	2
ENGL	2010	Technical Writing	3
MATH	2254	Calculus II	4
MATH	2306	Ordinary Differential Equations	3
PHYS	1111K	Introductory Physics I	4
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

General Studies

18 hours of lower division courses from the following:

Humanities	3-9
Mathematics or Science	0-8
Social Sciences	3-9
Any course approved in Areas C-F	0-9

Industrial Distribution

CHEM	1211K	Principles of Chemistry I	4
	or		
PHYS	1111K	Introductory Physics I	
CS	2123	C Programming	3
EG	1210	Survey of Engineering Graphics	2
ENGL	2010	Technical Writing	3
IET	2227	Industrial Statistics	4
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

Industrial Engineering Technology

PHYS	1112K	Introductory Physics II	4
CS	2123	C Programming	3
EG	1210	Survey of Engineering Graphics	2
ENGL	2010	Technical Writing	3
IET	2227	Industrial Statistics	4
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

Management

ACCT	2101	Accounting I	3
ACCT	2102	Accounting II	3
ECON	2105	Macro Economics	3
ECON	2106	Micro Economics	3
MGNT	1115	Introduction to Management	3
MGNT	2201	Introduction to Computer Applications	3
		Excess from Precalculus I - Area D	1

Mathematics

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
MATH	2254	Calculus II	4
MATH	2255	Calculus III	4
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

Mechanical Engineering Technology

CHEM	1211K	Principles of Chemistry I	4
CS	2123	C Programming	3
ENGL	2010	Technical Writing	3
MATH	2254	Calculus II	4
MATH	2306	Ordinary Differential Equations	3
		Excess from Precalculus - Area A	1

Physics

MATH	2254	Calculus II	4
MATH	2255	Calculus III	4
PHYS	2211K	Principles of Physics I	4
PHYS	2212K	Principles of Physics II	4
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

Surveying and Mapping

CET	2160	Civil Graphics and Computer Aided Drafting	4
CS	1113	BASIC Programming	3
	or		
CS	2123	C Programming	
	or		
CS	2143	FORTRAN Programming	
ENGL	2010	Technical Writing	3
MATH	2254	Calculus II	4
PHYS	1111K	Introductory Physics I	4

Technical and Professional Communication

ENGL	2000	Business Communication	3
ENGL	2010	Technical Writing	3
		Mathematics	6
		Science or Computer Science	3
		Computer Programming	3

Telecommunications Engineering Technology

EG	1210	Survey of Engineering Graphics	2
ENGL	2010	Technical Writing	3
MATH	2254	Calculus II	4
MATH	2260	Probability and Statistics I	3
PHYS	1111K	Introductory Physics I	4
		Excess from Precalculus - Area A	1
		Excess from Calculus I - Area D	1

Additional Transfer Guidelines

Provided that native and transfer students are treated equally, institutions may impose additional reasonable expectations such as a grade of "C" in English Composition.

For students who transfer after completing the core curriculum at a System institution, receiving institutions may require that these students complete the requirements as specified for native students; however, the total number of hours required of the transfer student for the baccalaureate degree shall not exceed the number of hours required of native students for the same major field.

Special Admission Categories

SPSU has a number of special categories other than those for freshman and transfer applicants.

Nontraditional Freshman Admission Standards

Nontraditional freshman are those students who have not attended high school or college within the previous five years and have earned fewer than 30 transferable semester hours of credit and who hold a high school diploma from an accredited secondary school or a GED certificate which satisfies the minimum requirement of the State of Georgia.

Applicants eligible for review in this category are exempted from the SAT/ACT and College Preparatory Curriculum requirements, however, all other admission requirements must be met. These students will be required to take the Collegiate Placement Examination prior to admission for admission screening purpose.

Admissions of Students with Non-U.S. Academic Credentials Admissions of Students Whose First Language is Not English

Admissions of Students whose secondary education was completed outside of the United States system of education may be considered for admission with 1) acceptable foreign credentials and 2) English language proficiency as described below:

- Foreign Credentials as Criteria for Academic Admissibility of Freshman
  Academic performance as described by a certificate, diploma, or other documents deemed generally equivalent to U.S. college preparatory studies. Official or certified true copies of all secondary school records, with a certified English translation is required. (The University reserves the right to require foreign credentials to be evaluated by an approved professional foreign credential evaluation service at the expense of the applicant.)

- Foreign Credential as Criteria for Admissibility of Transfer
  Academic performance equivalent to a 2.0 transfer grade point average from all colleges/universities previously undertaken by the student. Official or certified true copies of all secondary school records, with a certified English translation is required. (The University reserves the right to require foreign credentials to be evaluated by an approved professional foreign credential evaluation service at the expense of the applicant.)

- English Language Proficiency Requirements for students whose first language is not English and whose language of instruction throughout secondary school was not in English

English Proficiency and Freshmen:

Non-native speakers of English may be exempted from the SAT requirements; however, must take the TOEFL (Test of English as a Foreign Language) and the CPE (Collegiate Placement Exam). A minimum score of 550 on the paper TOEFL or 213 on the computer TOEFL, and a minimum score of 75 on all areas of the CPE are required. The CPE is given on the campus of SPSU.

English Proficiency and Transfer Students:

Students who are non-native speakers of English, who transfer from institutions of higher education outside of the U.S. where English was not the language of instruction and have less than 30 semester hours of college credit may be exempted from the SAT requirements; however, must take the TOEFL (Test of

English as a Foreign Language) and the CPE (Collegiate Placement Exam). A minimum score of 550 on the paper TOEFL or 213 on the computer TOEFL, and a minimum score of 75 on all areas of the CPE is required. The CPE is given on the campus of SPSU.

Students who are non-native speakers of English, who transfer from institutions of higher education outside of the U.S. where English was not the language of instruction and have at least 30 semester hours of college credit must take the TOEFL. A minimum score of 550 on the paper TOEFL or 213 on the computer TOEFL is required.

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 to show ability to meet the financial obligations of tuition, fees and living expenses before and I-20 and 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.

Transient Students

Transient students are those students attending Southern Polytechnic State University for a limited period of time, usually one semester, and who are expected to return to their previous college at the beginning of the next semester. Transient credit earned at Southern Polytechnic State University may not be applied toward the residency requirement.

A transient applicant must submit to the Admissions Office (1) an application, (2) a transient letter from the Registrar of his or her college, (3) a certificate of immunization, and (4) a $20 nonrefundable application processing fee (check made payable to Southern Polytechnic State University). **A transient letter is good for one semester only.**

It is the responsibility of the transient applicant to determine from his or her previous college the course he or she should take on the SPSU campus.

Although not required by the Admissions Office, a transient applicant should obtain a copy of his or her previous college work for the use of his or her SPSU faculty advisor.

The application, transient letter, and the certificate of immunization must be in the Admissions Office at least 10 working days before the registration date of the semester in which the student plans to attend as a transient student.

Post-Baccalaureate/Non-Degree

The non-degree category exists for those students who have previously earned a baccalaureate degree from a regionally accredited institution and who wish to enroll in undergraduate courses for personal or professional reasons instead of degree completion. Students applying for this non-degree status must submit an application for admission, the $20 non-refundable application processing fee (check made payable to Southern Polytechnic State University), an official transcript from the institution that awarded the initial degree, and the certificate of immunization. Students who are admitted under this category and later decide to pursue a degree must furnish official transcripts from all colleges and meet transfer admission requirements.

Audit Students

Persons not seeking a degree from Southern Polytechnic State University yet wishing to gain knowledge from courses taught here may apply for admission as audit students.

An audit student is required to file an application form along with a $20 nonrefundable application processing fee (check made payable to Southern Polytechnic State University) and submit official proof of graduation or official copy of scores on the GED test as well as a certificate of immunization. An auditor will receive grades of "V" and will not receive transferable credits. In order to become a regular student, auditors must meet regular entrance requirements. An audit student may not change to regular student status after beginning a course as an auditor. The audit grade "V", may never be used as a basis for gaining credit in any course.

Audit applications, required credentials, and the certificate of immunization must be in the Admissions Office at least 10 working days before the registration date of the semester in which the student plans to attend.

Other Admission Requirements

Reserved to every institution of the University System of Georgia is the right to require any applicant for admission to take appropriate intelligence and aptitude 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 and to reject any applicant who fails to meet such tests satisfactorily.

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.

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 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:

(a) must present a birth certificate or other comparable written documentation of age to the Records Office at the time of registration,
(b) must meet all University System and Southern Polytechnic State University admission requirements,
(c) will have all usual student and institutional records maintained, and
(d) must meet all University System, Southern Polytechnic State University, and legislated degree requirements if they are degree-seeking students.

Readmission

Students who have an absence of two or more consecutive semesters of matriculation at Southern Polytechnic State University and who are not academically suspended must be approved by the Records Office for readmission before being eligible for registration. An application for readmission, together with any pertinent supporting information, must be submitted to the Records Office by the same semester deadline dates as required by new students. A student who has been academically suspended must seek reinstatement before being eligible for registration. Please refer to Reinstatement under Academic Regulations. Students

granted readmission must re-enter the same academic department in which they were last enrolled.

In addition, students who were granted admission for only one semester as transients must be approved for readmission by the Admissions Office and submit an updated transient letter indicating continued good standing at the home institution before they will be permitted to register for a subsequent semester or a future semester.

Undergraduate Certificate Program Admission Requirements

Applicants must have earned a high school diploma or GED and must have been out of high school for at least five years or have earned 30 college credit hours from an accredited college with a minimum grade point average of 2.0.

Students applying for any of the undergraduate certificate programs must submit the following to the Admissions Office prior to the registration term:

(a) an application for certificate program admission, along with a $20 nonrefundable application processing fee (check made payable to Southern Polytechnic State University),
(b) an official high school transcript or official GED scores, if high school graduation date is over five years ago, or official college transcripts from all colleges attended, and
(c) the certificate of immunization.

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 appeals process.

Fulfillment of CPC Deficiencies

Enrolled students who are admitted and have College Preparatory deficiencies in Natural Science, Social Science, and Foreign Language must complete one additional course in each area of deficiency. These requirements also apply to transfer students who have not completed 30 or more hours of college level core curriculum credit with a 2.0 or better average. Non-traditional freshmen are exempted from CPC requirements.

The following courses can be used to satisfy CPC requirements:

Natural Science	ASTR 1000K, BIOL 2107K, BIOL 2108K, CHEM 1211K (MATH 1111 is a prerequisite), PHYS 1111K (MATH 1113 is a prerequisite), or PHYS 2211K (MATH 2253 is a prerequisite) with a grade of "C" or better.
Social Science	Any Social Science course listed in Area E of SPSU's core curriculum with a grade of "C" or better.
Foreign Language	FREN 1001 or 1002, GRMN 1001 or 1002, or SPAN 1001 or 1002 with a grade of "C" or better.

If students have CPC requirements, they must enroll in course(s) to satisfy the requirements immediately upon entering Southern Polytechnic. The only exemptions are: The student is taking one or more prerequisites for the CPC require-

ment or the needed course is not offered. Students must complete all CPC deficiencies before they earn 20 hours in the University System. Otherwise, students may not register at Southern Polytechnic for other courses, unless they also register for the appropriate deficiency course(s). Credit is awarded for CPC courses and counted in total hours earned for the purpose of student classification and reporting but CPC credits cannot be used to satisfy core curriculum or degree requirements. Grades for CPC courses are included in semester and cumulative grade point averages.

Sources for Test Scores and Required Forms

SAT I and II Tests:	College Entrance Examination Board Box 6200 Princeton, NJ 08541 or register online at http://www.collegeboard.org SPSU's Institutional Code: 5626
ACT Tests:	American College Testing Program P.O. Box 414 Iowa City, Iowa 52243 or register online at http://www.act.org SPSU's Institutional Code: 0865
Undergraduate Admission Application & Immunization Certification Forms:	SPSU Office of Admissions 1100 South Marietta Parkway Marietta, GA 30060 or on SPSU's Website: http://www.spsu.edu
TOEFL Exams:	TOEFL Services Educational Testing Services P.O. Box 6151 Princeton, NJ 08541, USA or http://www.toefl.org SPSU's Institutional Code: 5626
Joint Enrollment/PSO Forms:	High School Counselor's Offices

Registration Procedures

Eligibility

Registration for classes is held on the first day of the term. Students who have received an official letter of acceptance or readmission to Southern Polytechnic State University and returning students not on suspension or dismissal may register. Classes begin the day following registration.

An applicant will not be approved for academic advisement and/or registration until formally accepted by the Director of Admissions nor will he or she be permitted to attend classes until registration has been completed.

Drop/Add and Late Registration

Students may amend their class schedules and/or late register during the drop/add period.

Student Course Schedule

Upon completion of registration or a change of registration, students can print a copy of their schedule of courses. Students should keep the schedule as part of their permanent records.

Registration Bulletin

Detailed information and instructions concerning registration may be found in the registration bulletin. Students are urged to become knowledgeable of, and to follow, these instructions explicitly. It should be understood that any deviation from the prescribed procedure may result in unnecessary delays in registration or errors in the resulting schedule.

Registration Errors

It is the student's responsibility to follow the proper procedures for registration or changes to registration and to verify that his or her schedule of classes is correct. The Records Office cannot be held responsible for errors resulting from the student's failure to execute the proper procedure or verify his or her own schedule. Any problems experienced at registration or as a result of registration should be reported immediately to the Records Office.

Matriculation

Enrollment for the term is not complete until the student has properly completed registration and paid all fees. Registration for students not paying fees by the date specified in the registration bulletin will be canceled for non-payment.

Financial Information

Important Note: Actual fees for each term is posted on the web at http://www2.spsu.edu/bulletin/general1.html#fees .

Student Fees

Matriculation and Non-Resident Tuition fees are established annually by the Board of Regents of the University System of Georgia. All undergraduate students enrolled at the university are required to pay a matriculation fee. Undergraduate students who are not legal residents of Georgia are also required to pay non-resident tuition. Applicable Matriculation and Non-Resident Tuition is due on the day of registration or no later than the "deadline to pay" date published each term in the Registration Bulletin.

The Student Activity, Athletic, Wellness Center, and Health fees are recommended annually by the university and must be approved by the Board of Regents. All students enrolled regardless of residency status, are required to pay a student activity fee, a Wellness Center fee, an athletic fee, and a health service fee. A full description of the programs and services funded by these fees is included in the *Student Handbook*, which is available from the Student Activities Office. Applicable Student Activity, Athletic, Wellness Center and Health Fees are due on the day of registration or no later than the "deadline to pay" date published each term in the Registration Bulletin.

Other non-mandatory fees such as vehicle parking, laboratory and special course fees, etc., are established by the university and approved by the President. All fees and other charges are subject to change without prior notice; however, the university will make every effort to communicate changes as they occur.

All matriculation charges, board, room rent, or other charges are subject to change at the end of any academic term.

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, and credit cards. Visa, MasterCard, and American Express are accepted on campus in the Business Office and the University Bookstore. Debit cards issued under the *HONOR* system (ATM) are also accepted.

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 and non-resident fees 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. Students who pay residence hall fees after the official drop/add period will be assessed a non-refundable late payment fee of $45.

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 thirty three percent in addition to the original debt owed to the University.

Delinquent Accounts

All delinquent debts and/or obligation 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 thirty three 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 Records Office. **A student who partially withdraws after the official drop/add period does not receive a refund.**

The refund schedule is established by the Policies of the Board of Regents of the University System of Georgia. 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 made to financial aid and scholarship recipients will first be applied to the financial aid program.

Vehicle Parking

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.

Graduation Fee

Every student receiving a degree must pay a graduation fee of $25. The final due date for payment of this fee is published in the registration bulletin.

International Student Health Insurance

Southern Polytechnic State University requires international students on F-1 and J-1 visas to have adequate medical insurance coverage for illness or accidental injury before permitting them to register for classes or continue enrollment at SPSU. By contacting SPSU's Office of International Programs, students may purchase a policy from the University or provide proof of alternate coverage of a comparable policy.

The University will automatically charge International Student Insurance on their registration bill unless prior waiver has been received in the Fiscal Affairs Office from the Office of International Programs.

Regents' Requirement for Georgia Residence Classification

A person's legal residence is his or her permanent dwelling place. It is the place where he or she is generally understood to reside with the intent of remaining there indefinitely and returning there when absent. There must be a concurrence of actual residence and of interest to acquire a legal residence.

Because the overwhelming proportion of financial support for the operation of the public institutions of higher education in Georgia comes from the citizens through the payment of taxes, the determination of whether a student is classified as a resident or a nonresident of the state is a significant matter. The fees paid by resident students cover only about one-fourth of the total cost of their education in the University System. Therefore, Georgia taxpayers are contributing three-fourths of the necessary funds to provide quality education for the citizens of the state.

Students are responsible for registering under the proper residency classification. Any student classified as a nonresident who believes that he or she is entitled to be reclassified as a legal resident may petition to the Records Office for a change of status.

To insure timely completion of required processing, prior to registration, a student/applicant requesting a change of residence classification for a specific term should file the "Petition for Georgia Residence Classification" and all supporting documentation no less than 20 working days prior to registration for that term. Final determination of Georgia residence classification prior to the final date for fee payment cannot be guaranteed for petitions received after the deadline date. If the petition is not filed by the deadline date, it must be filed no later than 2 weeks after the term begins in order for the student to be considered for reclassification for that term. If the petition is granted, reclassification will not be retroactive to prior terms.

Legal residents of Georgia as well as certain categories of nonresidents may be enrolled upon payment of resident fees in accordance with the following Regents' regulations:

1. (a) If a person is 18 years of age or older, he or she may register as an in-state student only upon showing that he or she has been a legal resident of Georgia for a period of at least twelve months immediately preceding the date of registration.
   (b) No emancipated minor or person 18 years of age or older shall be deemed to have gained or acquired in-state status for tuition purposes while attending any educational institution in this state, in the absence of a clear demonstration that he or she has in fact established legal residence in this state.
2. If a person is under 18 years of age, he or she may register as an in-state student only upon showing that his or her supporting parent or guardian has been a legal resident of Georgia for a period of at least twelve months immediately preceding the date of registration.
3. If a parent or legal guardian of a minor changes his or her legal residence to another state following a period of legal residence in Georgia, the minor may continue to take courses for a period of twelve consecutive months on the payment of in-state tuition. After the expiration of the twelve month period, the student may continue his or her registration only upon the payment of fees at the out-of-state rate.
4. In the event that a legal resident of Georgia is appointed as guardian of a nonresident minor, such minor will not be permitted to register as an in-state student until the expiration of one year from the date of court appointment, and then only upon a proper showing that such appointment was not made to avoid payment of the out-of-state fees.

5. Aliens shall be classified as nonresident students; provided, however, that an alien who is living in this country under an immigration document permitting indefinite or permanent residence shall have the same privilege of qualifying for in-state tuition as a citizen of the United States.
6. Waivers: An institution may waive out-of-state tuition for:
   (a) nonresident students who are financially dependent upon a parent, parents or spouse who has been a legal resident of Georgia for at least twelve consecutive months immediately preceding the date of registration; provided, however, that such financial dependence shall have existed for at least twelve consecutive months immediately preceding the date of registration;
   (b) international students, selected by the institutional president or his authorized representative, provided, however, that the number of such waivers in effect at any time does not exceed one percent of the equivalent full-time students enrolled at the institution in the fall term immediately preceding the term for which the out-of-state tuition is to be waived; (Institutions are authorized to approve an additional one percent for special cases such as superior out-of-state students in selected programs and/or additional international students.)
   (c) full-time employees of the University System, their spouses, and their dependent children;
   (d) full-time teachers in the public schools of Georgia or in the programs of the State Board of Technical and Adult Education and their dependent children. Teachers employed full-time on military bases in Georgia shall also qualify for this waiver;
   (e) career consular officers and their dependents who are citizens of the foreign nation which their consular office represents, and who are stationed and living in Georgia under orders of their respective governments. This waiver shall apply only to those consular officers whose nations operate on the principle of educational reciprocity with the United States;
   (f) military personnel and their dependents stationed in Georgia and on active duty unless such military personnel are assigned as students to System institutions for educational purposes.

Financial Aid

Purpose and Philosophy

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 which may be granted seldom meets all the student's educational expenses.

The primary responsibility for financing an education rests with the student and his or her family. The family of the applicant is expected to make a maximum effort to assist the student with college expenses. The student also has a responsibility to contribute to his or her college expenses through such sources as savings and summer earnings.

Eligible students receive financial aid from funds provided to the institution by the federal and state governments, community organizations, and local industries. In most cases, the aid package is a combination of a grant, scholarship, loan and/or employment.

The Student Financial Aid Office serves more than 3000 students each year. Over ten million dollars is awarded to these students to assist them in meeting educational costs and in furthering their education.

Steps to Apply for Financial Aid

To be considered for any need-based financial aid awarded by the Student Financial Aid Office, a student must be accepted for enrollment. However, freshmen or transfer students should not wait to be admitted to the university before applying for financial aid.

Transfer and readmitted undergraduate students must have financial aid transcripts sent to the Student Financial Aid Office from each college they previously attended.

All applicants for aid (new and returning students) must complete the Free Application for Federal Student Aid (FAFSA), which is available at the Student Financial Aid Office.

Although applications are processed until all federal funds are expended, students who apply by the March 15 deadline have a greater chance of receiving 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, each year, is required 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 from 8 a.m. to 6 p.m., Monday thru Thursday, and 8 a.m. to 4 p.m. Friday, at 770/528-7290 or 800/635-3204, or email at finaid@spsu.edu.

Types of Financial Aid

The Federal Pell Grant

The Federal PELL Grant is the "foundation" of the total financial aid program. All undergraduate aid applicants must apply for a PELL Grant. Pell Grants are awarded to students who show a financial need and do not require repayment. Students desiring the PELL Grant should submit a Free Application for Federal Student Aid (FAFSA) no later than March 15 preceding the academic year in which they would like to receive funds.

Campus Based Aid

Campus based aid includes the following programs:

The Federal Supplemental Educational Opportunity Grant (FSEOG) is a grant assistance; therefore, repayment is not required. Only undergraduate students with financial need qualify. The number of Supplemental Grants available each year is limited. The Free Application for Federal Student Aid should be submitted as early as possible, and no later than March 15 preceding the academic year in which funds are desired.

The Federal Work Study Program (FWSP) provides part-time employment to students who show a financial need. The FWS positions are normally on campus; and, work schedules are arranged around the student's class schedule. The FAFSA should be submitted no later than March 15 prior to the academic year in which funds are desired.

The Federal Perkins Loan, formerly the National Direct Student Loan (NDSL) is a loan program which allows eligible students to borrow funds for educational expenditures. The amount a student may borrow depends on their financial need (as determined by the Office of Education). The funds are repaid at an annual interest rate of five percent upon graduation or withdrawal from school. The loan amount may not exceed $4,000 per year of college and an aggregate of $20,000 as an undergraduate student. Graduate students may borrow $6,000 per year and a total of $40,000, including undergraduate loans. The FAFSA should be filed no later than March 15 preceding the academic year in which funds are desired.

State Aid

The William D. Ford Federal Direct Loan Program, of which the U.S. Department of Education is the lender, includes the Direct Stafford Loan (Subsidized and Unsubsidized) and the Direct Loan Programs for Parents (PLUS).

The Federal Direct Stafford Loan Program is unique in that it offers loan assistance to students who demonstrate financial need (*Subsidized*) as well as loan assistance to students with no demonstrated financial need (*Unsubsidized*). When a student qualifies for the *Direct Subsidized Stafford Loan*, the federal government pays the interest while (s)he is enrolled at least half-time. Students who qualify for the *Direct Unsubsidized Stafford Loan* are responsible for interest that accumulates while (s)he is enrolled.

Depending on financial need, the maximum that a student may borrow from the combined Subsidized and Unsubsidized Stafford Loan Program is:

Class	Dependent	Independent
Freshman	$2,625	$6,625
Sophomore	$3,500	$7,500
Junior/Senior	$5,500	$10,500

The total undergraduate loan amount is $23,000.

New borrowers who receive the first loan on or after July 1, 1994, may expect a variable interest rate capping at 8.25%. Students who currently have a 7%, 8%, 9%, or 8/10% Stafford Loan may expect the interest rate on additional Stafford student loans to be variable.

Applicants for a Direct Stafford student loan must submit a Free Application for Student Aid (FAFSA) approximately three months prior to the period they expect to use the loan funds.

The Federal Direct PLUS Loan Program enables parents with good credit histories to borrow funds for each child who is enrolled at least half-time and is a dependent student. The *yearly loan limit* is the student's cost of education minus any estimated financial aid (s)he is eligible to receive. The *interest rate*, for PLUS loans first disbursed on or after July 1, 1994, will be variable, but will not exceed nine (9%) percent. PLUS borrowers must begin repaying the loan within 60 days after the last loan disbursement, unless the lender agrees to allow the borrower to defer the loan payment.

Applications for the PLUS loan programs are available in the Office of Scholarships and Financial Aid.

The HOPE Scholarship Program provides financial assistance to students attending Georgia post-secondary institutions who achieve academic excellence throughout their high school studies. HOPE scholarships are used to pay tuition and a book allowance at public and private colleges and universities in Georgia, as well as technical institutes. HOPE scholarships at public colleges may only be applied to any tuition amounts not covered by federal grants such as the Federal Pell Grant and the Federal Supplemental Education Opportunity Grant.

To be eligible for HOPE, a student must be a Georgia resident, (a) graduated from a Georgia High School in 1993 or later and earned at least a "B" average (80 in the college preparatory track and 85 in all other tracks), or (b) must have a cumulative 3.0 grade point average at the time he/she attempts/attempted 30/60/90 semester hours in college.

HOPE for students already in public college or returning to public college: Students who graduated from high school before the HOPE program began in 1993, or students not academically eligible for a HOPE scholarship immediately after high school graduation, may be eligible for a HOPE scholarship after attempting 30 or 60 hours of study if they have a 3.0 cumulative grade point average.

The applicant will be required to complete a Free Application for Federal Student Aid (FAFSA), or the HOPE Alternative Application.

Institutional Loan Programs

Emergency Loan Funds

The Marietta Rotary Club, the Marietta Lions Club, the Marietta Civitan Club, the Kiwanis International Club, the Optimist Club, and other generous friends of the university have established funds of varying amounts which are used for emergency loans only. Loans may be granted to any enrolled student and will bear no interest. Except in very unusual circumstances, loans will not exceed $50 and must be repaid within ten working days.

Short-Term Loans

Information regarding the Short-Term Loan Program can be obtained from the Office of Scholarships and Financial Aid.

Outside Sources of Aid

The Ty Cobb Scholarship was established by the late Tyrus R. Cobb for the purpose of assisting capable, deserving and needy residents of Georgia in completing their college education. Scholarships are granted to undergraduate students beyond the freshman year. Ty Cobb recipients must maintain full time enrollment and may apply for renewal of the scholarship annually. The application and supportive documentation deadline is June 1.

The Georgia Wine & Spirits Wholesalers of Georgia Foundation Scholarship is designed to recognize Georgia residents who attend a postsecondary institution in the University System of Georgia. Selection is based on academic achievement and financial need as established by the Department of Education. Consequently, the Free Application for Federal Student Aid should be submitted. Contact Scholarship Coordinator between July 1 and July 15 for deadline.

The Georgia Engineering Foundation Scholarship/Loan Program provides financial assistance to undergraduate and graduate students who are enrolled in an engineering or engineering technology degree program. The scholarships are awarded competitively to worthy students, and the loans are awarded to students who have a financial need. Applicants must be U.S. Citizens and legal residents of the State of Georgia. The application deadline is September 1, and applications may be obtained from the Office of Scholarships and Financial Aid. Other supporting data (letters of recommendation, transcripts) must also be submitted by the September 1 deadline.

The Industrial Distribution Scholarships are available to students enrolled in the Technical Sales and Distribution Option of the Industrial Engineering Technology degree program and who maintain a cumulative GPA of at least 2.50. One of these scholarships was established specifically for Florida residents, while the others are open to all state residents. Selection is made by the Industrial Engineering Technology Department, and the application deadline is July 31. Recipients must maintain full time enrollment, and the maximum award amount is $500 per year.

Textile Scholarships are awarded to students enrolled in the Apparel/Textile Engineering Technology program and who maintain a cumulative GPA of at least 2.00. Applications should be made in the ATET Department no later than July 31. Recipients must maintain full time enrollment for an award amount of $400 per term. Textile scholarships are funded by corporations within the Georgia Textile Manufacturers Association.

ATET Scholarships are available to students enrolled in the Apparel/Textile degree programs. Selection is based on academic achievement, and application must be made through the ATET Department. Yearly award amounts normally vary from $250 to $2,500.

The Fred and Drucilla Beck Kiwanis Scholarship is available to full-time undergraduates who are deserving of recognition for their academic achievements and their strong commitment to service in the community. To apply students must complete the SPSU General Scholarship Application by March 15 each year. Scholarship applications are in the Office of Scholarships and Financial Aid.

The Gilbert Scholarship is established to assist needy and worthy students beyond the freshman year who are enrolled in the Construction or Civil Engineering Technology degree program. Recipients of the Gilbert Scholarship must demonstrate financial need and show academic achievement. Applicants must complete and submit the Financial Aid Form (FAF) to the College Scholarship Service in Princeton. Recipients must maintain a minimum grade point average of 2.50. Other variables considered include activity in professional societies, social organizations, and other student activities. The award amount is $500.

The Harry P. Leu Foundation Grant is awarded to worthy students pursuing a degree in Industrial Distribution. Recipients must be residents of the state of Florida and maintain a minimum grade point average of 2.00. The minimum award is $500. For further information, please contact the IET Department at (770) 528-7243.

The PCEA Golden Hammer Scholarship is established by the Atlanta Chapter of the Professional Construction Estimators Association. This scholarship is awarded to students in good standing at the sophomore or junior level and enrolled in the Construction degree program. Preference will be given to above average students. Applications and additional information are available in the Office of Scholarships and Financial Aid.

Maintaining Eligibility for Financial Aid

As of October 6, 1983, federal regulations required the college to establish policies to measure whether students applying for financial aid are in good academic standing and making satisfactory academic progress toward completion of their degree programs.

A more detailed description of the policy is available in the Office of Scholarships and Financial Aid.

Payment for Noncredit Courses

For a student to receive financial aid funds for remedial work, the coursework must be necessary for the student to pursue the eligible post secondary program. Students **may not** receive financial aid funds to pay for courses which they audit.

Student Affairs

An important goal of the student affairs program is student participation and student leadership development. Responsible student participation contributes to the positive environment of the campus and facilitates the accomplishment of the stated purposes of Southern Polytechnic State University. The student affairs areas at Southern Polytechnic State University include student housing, student activities, the student center, student health services, recreational sports and athletics, student counseling, minority student affairs, placement, career services, and cooperative education. The Dean of Students, assisted by a professional staff, is responsible for providing these services and activities for students.

Emergency Locator Service

Emergency assistance in locating a student is provided by the Office of the Dean of Students (770-528-7225) during normal school hours, from 8:00 a.m. until 5:00 p.m., Monday through Friday. The University Police Department will provide emergency assistance in locating students on weekends and after 5:00 p.m. on weekdays (770-528-7348).

Student Housing

Southern Polytechnic State University has two air-conditioned residence halls that provide space for approximately 436 students - 60 women and 376 men. All rooms are occupied by two students. Single room contracts are not usually available unless medically-required, and then only as space permits.

In addition to providing a convenient and economical "home" on the campus, the residence halls also meet the student's physical needs of shelter, comfort and attractive surroundings. Living in the residence halls contributes to the educational development of each student through exposure to other students of varied backgrounds, experiences, and personal philosophies. Harmonious living, broadened horizons, and increased human understanding are all desired results of the residence experience.

The Residence Life program is supervised by the Director of Residence Life who is assisted by professional staff and paraprofessional student staff. The primary function of the residence staff is to create and maintain a desirable environment for all residents.

Application

All new students who have applied for admission to Southern Polytechnic State University and who have requested information about on campus housing will be sent a Residence Hall application. As space in the residence hall is limited, it is important to make requests for on-campus housing early. The completion and return of the Residence Hall application with a $75 deposit, sent to the Business Office, indicates a request for housing. **It does not guarantee housing.** When the completed form and deposit have been received, a notification of housing status will be sent by Residence Life.

All new student assignments are made from a "waiting list." The waiting list is comprised of the Residence Hall applications once they have been received and dated by the Business Office and forwarded to Residence Life. The latest dated form is placed at the bottom of the waiting list, thereby ensuring that the student with the oldest request for housing is assigned the next available space in the halls.

New Student Assignments

When housing space is available to those on the waiting list, the Residence Life Office will send a residence hall contract for completion. This contract must be returned by the date specified at the top of the contract to ensure a reservation of space.

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

Deposit Refund

Students may request a refund of their security deposit up to the time a contract has been offered for the academic term for which they are requesting housing. Deposits are refunded once a contract is fulfilled and if on-campus housing is no longer desired. The deposit is forfeited if the contract is broken.

Student Health Services

Limited out-patient services for minor illnesses are provided by the school nurse who is on duty Monday through Friday in the clinic located in the Recreation and Wellness Center. 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 sickness 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 which are covered for any student paying the Student Health Fee.

Student Counseling Services

The Counseling Services Office, located in the Student Center, offers a variety of services to students, including help with personal/emotional, career, and academic concerns, as well as disability services.

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 and emotional issues.

Part of the career development process involves increasing our self-understanding in such areas as our values, life goals, interests, and skills. The Counseling Services Office helps 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.

Many students find university work more difficult than they expected and find that it strains their abilities. The Counseling Services Office assists students with academic skills in the following areas: stress management, overcoming test anxiety, test-taking strategies, academic motivation, and enhancing memory by understanding learning style.

The Counseling Services Office makes available to students a variety of tests that are adjunctive to counseling services. With the student's consent, these instruments are used by counselors 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, dealing with the blues, 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.

Disability Services

The Disability Services Coordinator, who is a counselor in the Counseling Services Office, 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.

Student Responsibility

A student at Southern Polytechnic State University who has a disabling condition and needs academic accommodations has a responsibility to voluntarily identify him/herself as having a disability by scheduling an appointment with the Disability Services Coordinator as soon as possible.

Specific Learning Disability

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

- be conducted by a qualified psychological examiner;
- be recent (within three years);
- include, at minimum, a full-scale intelligence test, a standardized individual achievement test, and psychoeducational tests relevant to the problem area;
- be approved by the Counseling staff and/or the Regents Center for Learning Disorders; and,
- bear evidence that the student is not achieving commensurate with his/her age and ability level in one or more of the areas listed below:
  - Oral expression
  - Listening comprehension
  - Written expression
  - Basic reading skill
  - Reading comprehension
  - Mathematics calculation
  - Mathematics reasoning

The individual student will be responsible for all related examination fees. A student who suspects a learning disability, but who does not have proper documentation, is **strongly** advised to contact the Counseling Services Office for appropriate referrals.

Special services and considerations are available, under the Americans with Disabilities Act (ADA) and through the Counseling Services Office, to any learning disabled student at Southern Polytechnic State University. All such services are implemented on an individual basis. Resource programs and aids also include the Learning Resources Center, the central Computer Labs, the math help sessions, and the general faculty.

Campus Accessibility/Accommodations

Southern Polytechnic State University makes its programs and activities accessible to disabled students. However, many Southern Polytechnic State University buildings are not barrier-free; it may be necessary to relocate classes and other activities. Any student with mobility limitations wishing to participate in a program in an inaccessible building should contact the Counseling Services Office or the person responsible for the activity to request that appropriate arrangements be made.

Affirmative Action

The Rehabilitation Act of 1973, Section 504, provides that "no otherwise qualified handicapped individual in the United States, as defined in Section 7(6), shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

The Americans with Disabilities Act (ADA)

The Americans with Disabilities Act of 1990 gives civil rights protection to individuals with disabilities that are like those provided to individuals on the basis of race, sex, national origin, and religion. It guarantees equal opportunity for individuals with disabilities. Southern Polytechnic State University strives for compliance with ADA.

Campus Life

Housing

Accessible on-campus housing is available for students with disabilities. Contact the Director of Housing as early as possible to discuss the nature of the disability and the type of accommodation needed.

Medical

The school nurse is on duty daily in the clinic in the Recreation and Wellness Center. Students with a physical disability are urged to introduce themselves to the nurse at the beginning of their first term at Southern Polytechnic State University.

Campus Tours

Campus tours for mobility-limited, visual-, and hearing-impaired students are offered on an individualized basis, as needed. Contact the Secretary to the Vice President for Enrollment Management to schedule.

Parking

Special parking permits are issued through the University Police Office. Documentation of the disability is needed to qualify for a permit. Parking places for the disabled are available throughout the campus.

Student Center

The upper level of the Student Center is accessible to mobility-limited students. An elevator connects the upper level with the lower level, which houses the cafeteria, bookstore, lockers, and post office.

Registration

On a case by case basis, students with a disability may advance-register on a first-priority basis with the assistance of the Disability Services Coordinator. Early registration enables students with a disability to schedule their classes with consideration for items such as class location or transit time between buildings.

Library

The librarians will work individually with mobility-limited and sensory-limited students to make the services of the library available. Students with a disability wishing to use the library should contact the Reference librarian. Services needed by visual- or hearing-impaired students may be requested from the Library Director.

Career Services

Placement

The Southern Polytechnic State University Career Services Office provides placement assistance for graduates and students seeking full-time or part-time employment. Career Services 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 by the Career Services Office include assisting in resume preparation, resume referral and campus interviews. In addition, the Career Services Office maintains employer and occupational information as well as a part-time and temporary job opportunities listings.

Some of the employers who recruit at Southern Polytechnic State University are Scientific-Atlanta, Bell South, Hewlett Packard, Georgia Department of Transportation, Lockheed Martin, Milliken and Company, Shaw Industries, Johnson Controls, Southwire Company, Lockwood-Greene, Springs Industries, and TDK.

Students are encouraged to make use of the Career Services Office as early as possible during their stay at Southern Polytechnic State University. 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 Services 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 placement is also offered through the Career Services Office. Employment opportunities are posted through the Career Services web page.

Cooperative Education

Southern Polytechnic State University offers its students the opportunity to gain valuable work experience related to their academic majors through a university-work sponsored cooperative education program. The co-op plan is provided on an optional alternating-term basis in most bachelor degree programs. Co-op is founded on the principle that learning takes place through practical experience as well as through academic achievement. In addition, co-op helps students in their career decision making process and provide substantial support for education expenses.

Students wishing to apply for the co-op program must have completed at least 24 semester hours of academic credit toward their degree, be in good academic standing with the university, have and maintain a minimum 2.00 scholastic average (many industries require higher scholastic averages) and be willing to participate in no less than three alternating co-op work assignments. Co-op students are required to follow all guidelines set forth by the Career Services Office as well

as rules and regulations of the university. In addition to university requirements, students must meet any additional company co-op requirements. Students unable to maintain university or company co-op requirements are usually given one probationary term to correct deficiencies before being withdrawn from the co-op program.

A co-op program can be started with industry in a number of ways: student contact, university referral, or industry initiation. The university Career Services Office refers students to employers after they have been accepted as a co-op applicant, however, acceptance as a co-op applicant does not guarantee a student's employment in a co-op position. The employer has the final decision regarding offering co-op employment. Upon acceptance of a co-op position, the student is expected to remain with that company for a minimum of three co-op work terms.

Co-op salaries are determined by the employer and normally increase with job responsibilities. Board and lodging during work terms are the responsibility of the student, but in most cases co-op employers can provide assistance in locating suitable accommodations. Students with metro-Atlanta co-op assignments may live in Southern Polytechnic State University residence halls. In addition, students with local co-op work assignments are eligible to participate in all extracurricular, intramural, and health service activities on campus with the payment of the regular student athletic, activity, and health fees. Although no credit is awarded, co-op students are viewed by the university as active, continuing full-time students during their periods of approved work experience for insurance and financial aid purposes.

Although no commitment is made by either the student or employer for full-time employment upon completion of the co-op program, many Southern Polytechnic State University co-op students are offered career employment with their co-op employers. Satisfactory completion of both requirements for graduation and co-op guidelines make an undergraduate student eligible to receive recognition for participation in the co-op program on his or her Southern Polytechnic State University diploma and academic record. Students interested in the co-op program should contact the Career Services Office.

The Student Center

Southern Polytechnic State University's Student Center includes food service and dining areas, a 500 seat theater for films, concerts, lectures, and entertainment productions, and bookstore and post office operations. Also provided are offices for the Department of Student Activities, Student Support Services, computers offering internet and e-mail access, a large recreation room, and additional meeting rooms, lounges, and TV/video viewing areas.

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, and fraternity/sorority offices are located here. The Student Center is where the Southern Polytechnic State University community comes together to eat, meet, relax, and be entertained.

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 a freethrow contest. In addition to the intramural sports program, the department offers a club sport program, a wellness program, special events, and an outdoor

recreation program. The outdoor recreation program sponsors various adventure trips throughout the year and a camping equipment rental program.

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, selectorize, and cardiovascular equipment highlights the facility. To go along with the weight room, the facility boasts a large multipurpose gym that holds 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 room/shower, 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 their flag football, soccer, and softball leagues. Also included in the complex are 9 tennis courts and a half-mile jogging trail. The Southern Polytechnic Tennis Team uses the tennis courts for matches and practice.

Athletic Facilities

The Athletic Gymnasium is home to the Southern Polytechnic Runnin' Hornets Basketball Team. The Athletic Department offices are located in the Athletic Gymnasium.

The Walter Kelly, Jr. Field is home to the Southern Polytechnic Baseball Team.

General Information

Evening Classes

The scholastic work at Southern Polytechnic State University is offered in a continuous program from 7 a.m. to 11 p.m. daily. Once granted admission to the university, students may schedule courses at any time of the day or evening. There is no difference in entrance criteria, curricula, or degrees awarded to evening school students. All subjects, day and evening, are organized, taught, and supervised by the Southern Polytechnic State University staff, faculty, and administration.

Prospective students who desire to study in the evening should be guided by the academic requirements as stated in the catalog. All correspondence, admission papers, and other requirements should be sent to the Admissions Office.

Many of the curricula offered at Southern Polytechnic State University in the daytime may be studied and completed in the evening. These curricula include Civil Engineering Technology, Computer Engineering Technology, Computer Science, Construction, Electrical Engineering Technology, Industrial Engineering Technology, Management, Mechanical Engineering Technology, and Surveying and Mapping.

A schedule of courses offered each term is available upon request about two weeks prior to the beginning of the term. A copy may be obtained from the Records Office or major department.

The Office of Admissions/Records is open Monday through Thursday until 6 p.m. during the term.

Continuing Education

The Office of Continuing Education, a unit of Extended University, is responsible for all non-credit instruction sponsored by the university. The primary mission of Continuing Education is to sponsor professional development programs which extend and complement the university's curriculum. Professional development seminars and workshops encompass each of the disciplines represented on campus, while additional programs and workshops are custom designed for business, industry, and government. In addition, Continuing Education also offers an extensive schedule of computer training programs to the general public.

Cross Registration

Southern Polytechnic State University as a member of the Atlanta Regional Consortium for Higher Education (ARCHE) participates in the cross registration program among ARCHE member institutions. The purpose of cross registration is to provide opportunities for enriched educational programs by permitting students at any ARCHE institution to take courses at any other member institution. Cross registration may be pursued only for courses for which the student has met the prerequisites and not offered at the home institution for the given term. Applications and additional information about cross registration can be obtained from the Records Office.

Computer Resources

The University's computing infrastructure includes enterprise-scale servers, networked business-class work stations, open access labs, and discipline-specific (departmental) labs, as well as the campus network that connects all these parts together and to the rest of the world via PeachNet and the Internet.

There is an open access lab in Building H, room 244, which houses PC's running Windows, Unix terminals, and laser printers, including e-mail and internet access. For more information on general resources available to SPSU students, visit: http://www2.spsu.edu/itus/students.htm. Students will also find other computer labs on campus that are provided for students enrolled in specific academic programs or courses.

Every student may open a university e-mail account supported by a campus server. To activate an e-mail account, a student must meet these requirements: be currently enrolled at Southern Polytechnic State University as an active student; complete registration for classes for the current term; have a picture ID (SPSU student ID preferred). New accounts may be requested in H-244 after tuition and fees have been paid for the first term of enrollment.

Center for Instructional Technology

The Center for Instructional Technology, a unit of the Extended University, is located in the Library annex and features a state-of-the-art multimedia authoring lab and technology rich smart classrooms. The authoring lab is scheduled for open student access.

The Library

The Lawrence V. Johnson Library collection consists of some 110,000 cataloged volumes. Also cataloged are more than 1,500 periodical and serial titles. Other formats include various microforms, U.S. Geological Survey maps for the State of Georgia, CD ROM's, and a circulating reserve collection of texts and tests.

The automated library union catalog, GALILEO Interconnected Libraries (GIL), lists materials held by libraries throughout the State of Georgia. Materials from these and other libraries nationwide may be obtained through the Interlibrary Loan service in Reference.

The Library also provides another service, GALILEO, an initiative funded by the University System, to allow access to online databases, including full text and full-image files. Through GALILEO, faculty and students have access to more than 100 indexing and abstracting services, and the Internet. Housed in the library is the Electronic Gallery, a collection of videotapes, videodiscs, and CD Rom's for teaching art appreciation.

The 60,000 square foot building complements the campus with its unusual shape and floor plan which accommodates seating for 400 persons. Following the topography, a series of step-down trays separate stack areas and convenient ramps provide ease of access to the library's resources for the disabled. A spacious second floor features large and small group study rooms, ample study carrels, open stacks, and reading areas. Centered under a two-story skylight, a glass walled gallery accommodates flexible exhibits as well as serving as the reception hall for the campus. Additional information about services offered at the Johnson Library may be accessed at http://www.spsu.edu/library/library.html.

The Library owns an art collection containing representative works of 19th and 20th Century American artists and the Alan and Louise Sellars Collection of Antique Tools. A collection of 19th Century architectural artifacts has been incorporated into the building, which also features a bell tower rising sixty feet above the Library, with a set of Swiss-made custom-cast bells.

Learning Resources Center

The Learning Resources Center (LRC) provides opportunities for individualized assistance to all Southern Polytechnic students. Academic assistants help students with core courses in English, math, and physics.

The LRC also offers Regents' Test preparation instruction and assistance with English as a Second Language. The LRC maintains student academic enrichment as its primary mission and challenges students to improve their skills.

To accommodate the diversity of students attending Southern Polytechnic, the LRC is open Monday through Friday with day and evening hours.

Distance Learning Program

Southern Polytechnic State University offers selected classes to students at distant sites via the state's two-way interactive compressed video system or via the Internet.

Southern Polytechnic State University is committed to providing appropriate student development services to all enrolled students including those who may be participating in distance learning programs. Typically, access to these services is consistent with the unique nature of distance learning. Phone, fax, e-mail, and the Internet are the primary modes for service delivery. Initially, every enrolled student receives a printed copy of the University's Student handbook (an electronic Student handbook is also available on the University's web site), and this handbook outlines the various services available. Phone numbers, fax numbers, and e-mail addresses are also available to participating students. University service personnel are responsive to requests for assistance they receive through these various media, and they are open to explore alternative ways of providing help.

Advising and mentoring activities are the primary responsibility of the faculty participating in distance learning programs. Other assistance is provided by personnel in each of the functional areas which include counseling services, career services, disability services, and financial aid. Several campus-based activities are funded by separate mandatory fees which are not charged to students participating in distance learning programs. These activities include social and cultural events, student organizations, recreational sports, health and wellness programs, housing/resident life and intercollegiate athletics. The activities are appropriately not available at off-campus locations.

The Bookstore

The Southern Polytechnic State University bookstore is located on the lower level of the Student Center. Textbooks, used books, software, reference books, school supplies, engineering supplies, calculators, clothes, greeting cards, health and beauty aids, and many other items are available there. The bookstore is open from 8:30 a.m. to 6:00 p.m. Monday and Thursday, 8:30 a.m. to 7:00 p.m. on Tuesday and Wednesday, and 8:30 a.m. to 4:00 p.m. on Friday.

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.

University Relations

Southern Polytechnic State University's efforts to solicit support from business, industry, graduates, and community leaders are organized and coordinated through the University Relations Office.

Southern Polytechnic State University Alumni Association, Inc.

The alumni association is a nonprofit organization dedicated to organizing graduates and former students in order to promote the interest and welfare of Southern Polytechnic State University. The association publishes Southern Polytechnic Today, provides alumni services, conducts the Call-A-Thon, organizes special alumni events, and serves as the focal point to develop alumni contributions of time and money to assist Southern Polytechnic State University.

Southern Polytechnic Athletic Association, Inc.

The association is active in promoting Southern Polytechnic State University intercollegiate activities through fund raising, advertising efforts, and special events. As a nonprofit organization, the corporation's membership is open to all individuals who donate to the annual fund campaign for the benefit of Southern Polytechnic State University.

Southern Polytechnic State University Foundation, Inc.

In September of 1976, the Board of Directors of the alumni association established the Foundation, whereby funds, property, and other types of financial assistance — primarily from business, industry, corporations, other foundations, and individuals — could be channeled to Southern Polytechnic State University for support and development of educational, cultural, social, civic, and professional endeavors.

The purposes of the Foundation are to provide academic and institutional support, provide scholarships, endowments, research grants, and in various ways to promote the cause of higher education at Southern Polytechnic State University.

The officers and board of trustees, who are empowered to administer donations to the foundation, are distinguished business and civic leaders from the community and the state at large.

Public Relations

The Public Relations Office is responsible for internal and external communications such as publicity, media relations, alumni and campus publications, audio visual and promotional materials, and special events. Activities are geared to enhancing awareness and support of the university among many audiences, including the public, students and families, alumni, community leaders, and business and industry. Public Relations also serves the institution — its faculty, staff, and students — in planning and implementing programs and in disseminating information about activities and accomplishments of faculty, staff, and students.

Honor Society

Superior scholastic achievement in engineering technology is recognized by membership in the Tau Alpha Pi National Honor Society. The original chapter of this society was founded on the Southern Polytechnic State University campus, and its members have not only demonstrated high academic achievements, but have also maintained various leadership positions in campus organizations.

International Programs and Services

The Office of International Programs and Services provides programs, services, and information to the University's international student body and faculty. The Office conducts international student orientations for foreign nationals. The Director serves as the liaison with immigration services and provides advisement on immigration matters, insurance, employment, practical training, travel regulations, and community involvement. Advisement is provided to the International Student Association.

The Office serves in an advisory capacity for the promotion and development of international exchange and education abroad programs for students, faculty, and administrators.

Veterans Programs

The veteran or reservist planning to further his or her education using veterans benefits at Southern Polytechnic State University should apply for admission as any other student. Then, prior to enrollment (preferably at least one month before entering the university) he or she should complete the Veterans Application for Program of Education or Training (VA Form 22-1990) and submit the form to the Southern Polytechnic State University Office of Veteran Affairs. At the same time, the prospective student may be required to furnish copies of one or more of the following: proof of discharge (DD Form 214) or NOBE (DD Form 2384), marriage license, dependent children's birth certificates, or other documents needed to define an individual's eligibility.

Eligibility for Veterans Administration benefits has no direct relationship to the institution. The payment of VA funds are directly between the student and the Veterans Administration. The institution serves only as a source of certification and information to the Veterans Administration.

Southern Polytechnic State University has established the Office of Veteran Affairs to serve veterans and dependents of deceased or disabled veterans by certification, information, and referral. It is the responsibility of the veteran to keep the Veteran Affairs Office informed of their enrollment status any time it changes.

Registration for Professional Engineer

To protect public safety each state establishes laws to license engineers involved in projects affecting public health, safety, and life. The registration process involves written examination, professional work experience, and professional recommendations.

Although it is not the goal of Southern Polytechnic State University to offer programs to prepare an individual to become a registered engineer, it is possible for an engineering technology graduate to become registered in Georgia and some other states. The requirements for registration as a professional engineer vary from state to state with some states not allowing engineering technology graduates to become registered. Students considering registration as a professional engineer should contact the faculty advisor for further information.

Retention Data

Demographic data regarding student retention at Southern Polytechnic State University and the number and percentage of students completing each program of study is available upon request from the Office of Institutional Research and Planning.

Georgia Youth Science and Technology Center

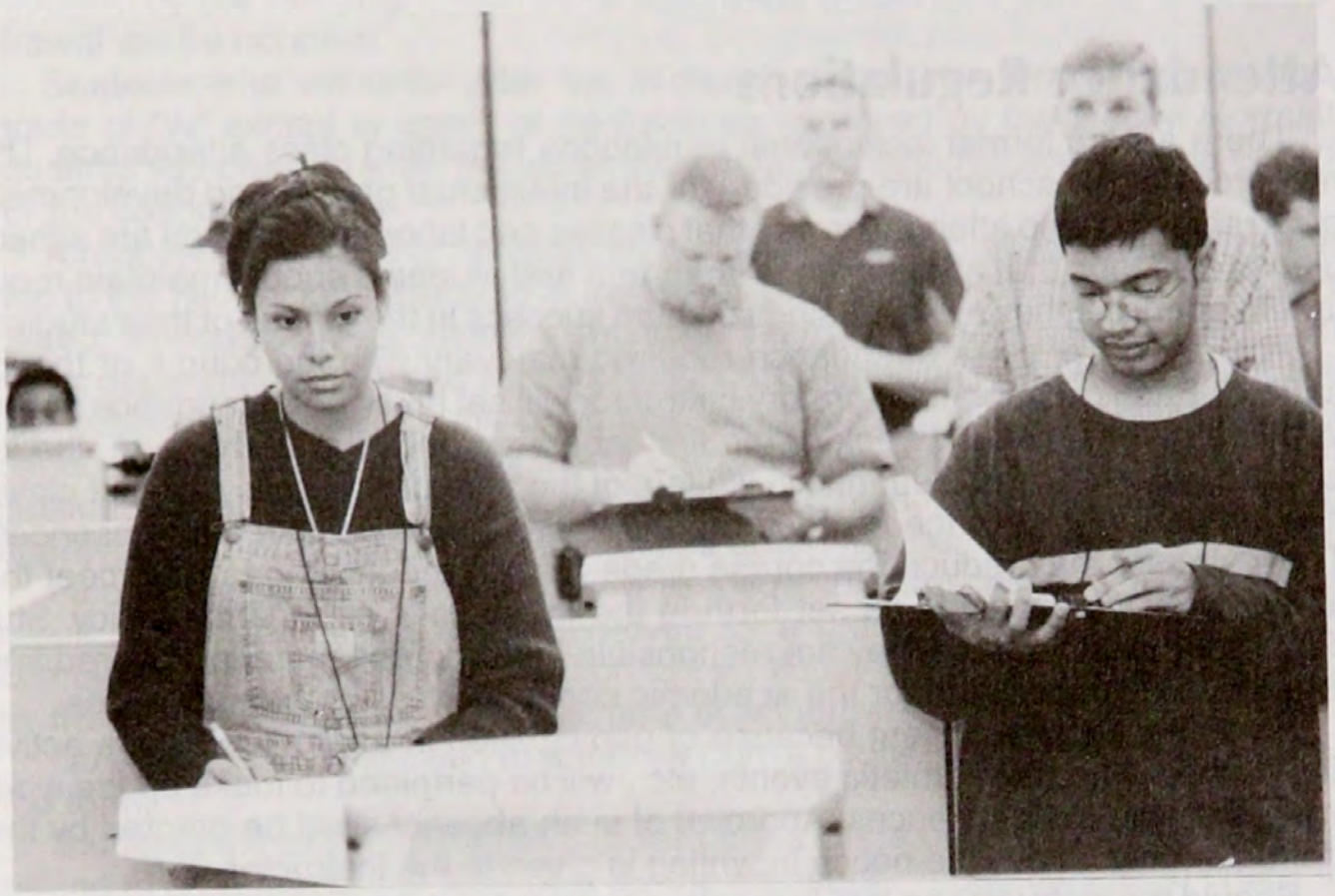
The goal of GYSTC is to promote interest and enthusiasm in the science and technology disciplines, particularly among elementary and middle school students and teachers in Georgia. The center encourages and supports students to prepare for advanced education and careers in science and technology. GYSTC is headquartered on the campus of Southern Polytechnic State University and through its state board of directors receives guidance from the University System of Georgia, the Georgia Department of Education, the Georgia Department of Adult and Technical Education, and representatives from private industry and government. The center is charged with providing support services to regional GYSTC laboratories established across the state, which provide hands-on exhibits, demonstrations, science and technology camps and courses for students and teachers. Over 470,000 students, 100,000 teachers and 50,600 parents, school administrators and others have benefited from GYSTC programs, since its inception in 1989.

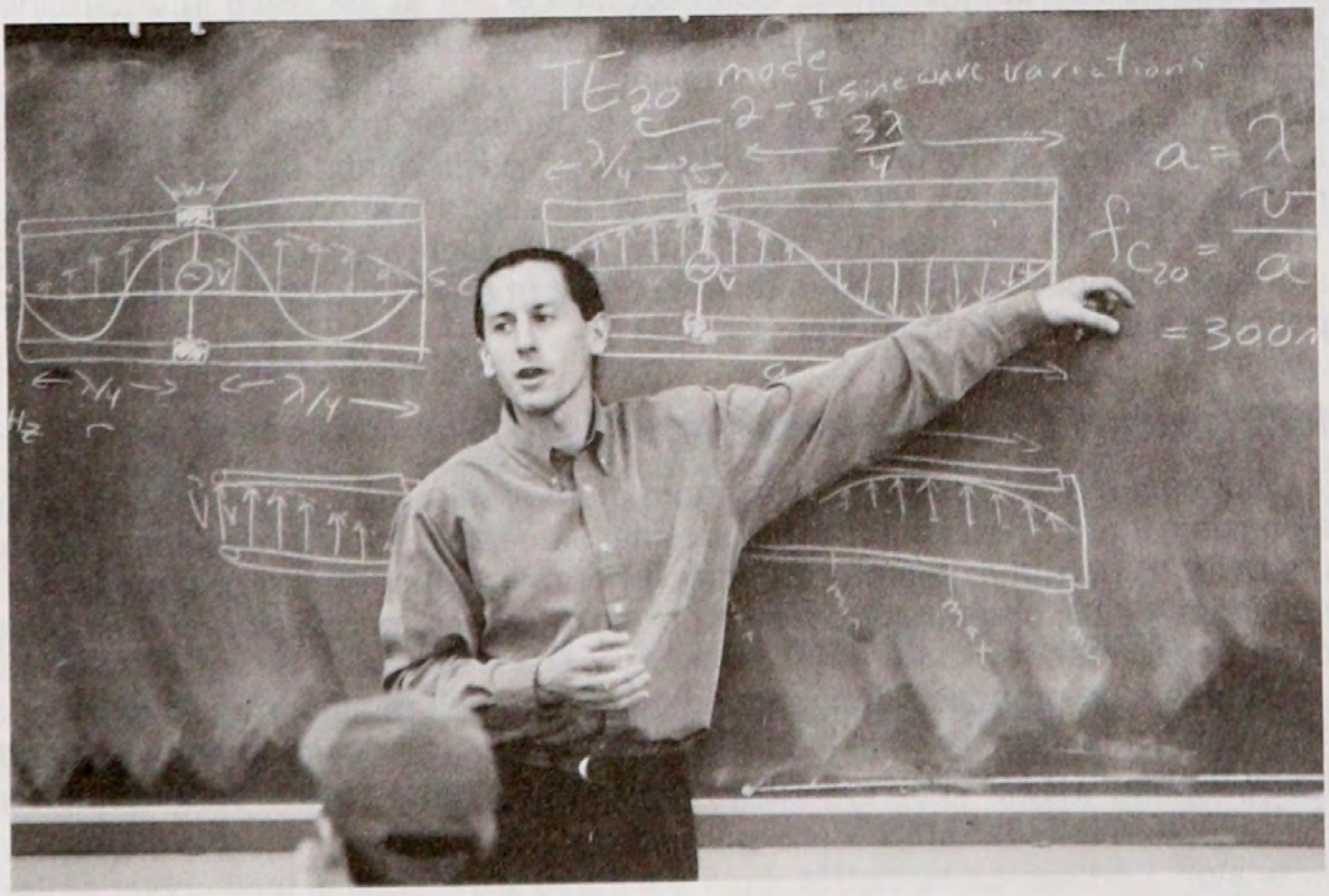
GYSTC operates the only NASA Educator Resource Center in the state. Multimedia materials in science, math, and technology are made available to all educators free of charge and cover a wide area of disciplines from pre-K through post-secondary. The NASA-ERC disseminates these resources to the educational community through the Resource Center on the Southern Polytechnic State University campus as well as the regional GYST Centers.

Center for Quality Excellence

The Center for Quality Excellence (CQE) helps local and regional businesses become more successful competitors in the global marketplace. The CQE assists organizations (private and public) with implementing Total Quality Management concepts and methodologies, Continuous Improvement Tools, Team Building strategies, Customer Focus systems, and Quality Standards such as ISO 9000, QS 9000, and Malcolm Baldridge criteria.

The CQE is a full-service information, training, and development resource center offering public seminars, customized, on-site training programs, and consulting services. Members of the CQE have access to unique resources and special discounts on workshops. Call (770) 528-7417 for additional information or check the CQE website at http://cqe.spsu.edu.

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Academic Regulations

Attendance Regulations

There are no formal institutional regulations regarding class attendance. The resources of the school are provided for the intellectual growth and development of the students who attend. The fact that classes and laboratory periods are scheduled is evidence that attendance is important and students should maintain regular attendance if they are to attain maximum success in the pursuit of their studies.

The degree of class attendance required may vary with the course or the instructor. Each classroom/laboratory instructor will set his or her attendance policy. Within the first calendar week or the first laboratory meeting of the term, the instructor will inform the students, in writing, of the attendance policy for that class. It is the prerogative of the instructor to determine grade penalties for absences. The instructor may reduce the course grade of any student who fails to meet the attendance requirements as set forth in the instructor's attendance policy. Students should understand they are responsible for all course material covered and that they are responsible for the academic consequences of their absences.

Students who are absent because of participation in approved college activities such as field trips, athletic events, etc., will be permitted to make up the work missed during their absences. Approval of such absences will be granted by the instructor only if advance notice in writing is given to the 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 minutes waiting period no notification to remain is given, students may leave without penalty.

Auditing Classes

Students can audit courses. Such courses count at full value in determining the number of credit hours for which the student is enrolled. No academic credit is granted for courses scheduled on an audit basis, and students are not permitted to change to or from an auditing status except through the regular procedure for schedule changes. The grade for auditing is "V" (visited) and this grade should at no time be changed to a "W" on the basis of the auditor's attendance in the course. The grade of "V" will have no effect upon the student's scholastic average and students will not be permitted to receive credit at any future date for their participation in a course as an auditor.

Maximum Credit Hour Schedule

Students may register for a maximum of 18 credit hours in the fall and spring semesters and 14 credit hours in the summer semester. Students desiring to schedule over 18 (to a maximum of 21) credit hours in fall or spring or over 14 (to a maximum of 16) credit hours in summer must receive permission of their major department head.

Students on probation or continued probation may register for a maximum of 13 credit hours. Students limited to 13 credit hours who desire to schedule additional hours (to a maximum of 18 in fall or spring) must secure permission from their major department head.

Withdrawal From Classes

Students desiring to withdraw from one or more classes before the end of the midpoint of the term must secure a Request to Withdraw form from the Records Office. After completing the form, and returning the completed form to the Records

Office, the student will be given a grade of "W" in the course(s). In cases where the student is no longer on campus, a signed written request from the student received by the Records Office on or before the prescribed date for official withdrawal will be honored.

Students who withdraw after the midpoint of the term are not eligible for a grade of "W" except in cases of hardship as approved by the faculty. Normally, students withdrawing after the withdrawal deadline date receive a grade of "WF" for the course(s).

A request for a grade of "W" past the deadline date is properly made on a Petition to the Faculty form available at the Records Office. The petitions must be completed, signed by the student's instructors, instructors' department head(s), and major department head, and bear sufficient documentation to support the hardship. The petition is reviewed by the Undergraduate Student Status Committee and students are advised in writing by the Records Office as to the action taken on the petition. Students should not assume that petitions requesting a grade of "W" will be approved until notification of the committee action has been received.

Incomplete petitions and/or failure to follow the prescribed procedures may result in the student not being approved for a grade of "W". The date that the completed withdrawal form or Petition to the Faculty (if later approved) is received by the Records Office is the official date of withdrawal.

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 amounts of refunds (if any) available. **No refund will be given to a student who partially withdraws from the university.**

Progress Reports

Instructors will provide academic feedback as the course progresses. Each course will have a portion of the cumulative class grade reported to the student prior to the midpoint of the total grading period. Prior to the midpoint of the total grading period, all assigned and "turned in" graded class assignments and examinations will be graded and available to the student. 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.

Final Examinations

The faculty of a department will determine which courses in their department will include a final exam. In addition to course objectives and standards for evaluating students, the final-exam requirements will be distributed to students for each course.

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/she will be given the grade of "Incomplete" until such time as he/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 head and then to the appropriate school dean, and, if necessary, to the Vice President for Academic Affairs. Removal of a student

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

Major

A baccalaureate degree program must require at least 21 semester hours of upper division courses in the major field and at least 39 semester hours of upper division work overall.

Concentration

A concentration is a specialty track taken in the discipline. A specialty track is identified by the department and approved by the faculty. It consists of at least 12 semester hours in the discipline of which at least 6 hours must be at the upper division.

Change of Major

Students who desire to change their major degree program may do so by completing the required form available at the Records Office. Completed forms require the signature of the proposed department head and are submitted to the Records Office for processing.

A request for deletion of previous major courses for graduation scholastic average and hours purposes must be submitted on a Petition to the Faculty form and approved by the faculty.

Grading System

The following are used to specify the level of performance in academic courses and are computed into the semester and cumulative grade point averages.

A Excellent

B Good

C Satisfactory

D Passing

F Failure

This grade ("F") is assigned for a student whose scholastic performance is unsatisfactory. If the course is a required course or if the student desires credit for the course, the course must be repeated.

For subjects including both 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.

A grade of "F" is assigned also if a student is removed from class under the provisions of the section on Academic Dishonesty.

WF Withdrawal After Deadline

Withdrawn officially after the midpoint of the term. A grade of "WF" in a course is counted in the student's scholastic average as a failing grade.

The following symbols are approved for use in the cases indicated, but are not included in the calculation of the semester or cumulative grade point averages.

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 is in residence. Otherwise, the Records Office shall convert the "I" into an "F". If at the end of the third term of non-attendance following the term the "I" has not been removed then the course must be repeated if a required course. The "I" grade remains on the student's record, but is not reflected in the student's scholastic average.

V Audit

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

Withdrawn officially 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.

Cumulative Grade Point Average

The cumulative grade point average generally 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". Only courses scheduled at Southern Polytechnic State University are considered 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.

The cumulative grade point average may not include courses for which a grade of "C" or better has been earned previously at Southern Polytechnic State University.

Quality Points are assigned as follows:

For each credit hour with a grade of

A	four points
B	three points
C	two points
D	one point
F	zero points
WF	zero points

Grade Changes

Grades which 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. Grade changes must be initiated by the instructor. Grades included in this provision are "A", "B", "C", "D", "S", "U", and "F".

Repeat Courses

A student may not repeat, for cumulative grade point purposes, at Southern Polytechnic State University any courses (except on an audit basis or as approved

by the Undergraduate Student Status Committee) in which a grade of "C" or better has been earned. A student may not use the same course more than once in satisfying graduation requirements.

Credit by Examination

Student evaluation by standardized and/or departmental examinations may be used as a basis for awarding credit for certain courses. These evaluations are available only to currently enrolled students. A fee will be assessed before the evaluation.

The student must first check with the appropriate department head about the applicability of the credit by examination for the course and then submit a request for credit by examination form to the department. The business office must validate the form before it is submitted to the department. After the evaluation, the department head will make his or her recommendation for credit to the Records Office. The student is notified in writing by the Records Office of the action taken.

For further information on credit by examination, contact the appropriate department head or the Records Office.

Credit for Courses Completed More than Ten Years Prior to Graduation

Work completed more than ten years prior to the date of graduation may be credited toward the degree only (1) with the approval of the student's major department head and the head of the department in which the course is taught and subject to the approval of the faculty, or (2) if the student's enrollment at Southern Polytechnic State University has been continuous since the course was taken.

Classification of Students

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.

A student is classified at the end of each term by the Records Office on the basis of the number of credit hours earned toward graduation. The credit hours include all coursework for which the student has earned college level credits at Southern Polytechnic State University plus any transfer credits accepted by Southern Polytechnic State University.

Classification	Credit Hours Earned
Freshman	0-29
Sophomore	30-59
Junior	60-89
Senior	90 and above

Full-time Students

Undergraduate students enrolled for 12 or more credit hours are considered as full-time students.

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.

Academic Standing

It is required that each undergraduate student maintain a cumulative grade point average of 2.00 in order to graduate.

Dean's List

Students that have earned 12 or more hours with a scholastic average of 3.50 or better for the current term and who are not subject to any disciplinary action shall be on the Dean's List, which is published each term.

Dean's Merit List

Students that have earned 9 or more hours with a scholastic average of 3.50 or better for the current term and who are not subject to any disciplinary action shall be on the Dean's Merit List, which is published each term.

Good Standing

A student eligible to enroll at Southern Polytechnic State University is in good standing.

Academic Probation

A student whose cumulative grade point average falls below 2.00 will be placed on academic probation.

A student on probation may register for a maximum of 13 credit hours unless approval of the student's major department head is granted to schedule additional hours (to a maximum of 18).

Continued Probation

A student whose cumulative grade point average remains below 2.00 for two or more consecutive terms of enrollment, but whose term average is 2.00 or higher, may continue enrollment on probation. A student on continued probation may register for a maximum of 13 credit hours unless approval of the student's major department head is granted to schedule additional hours (to a maximum of 18).

Academic Suspension

A student whose semester grade point average is below 2.00 and whose cumulative grade point average is below 2.00 for at least two consecutive terms of enrollment shall be academically suspended for unsatisfactory scholarship.

Transfer students admitted on "academic probation" and who do not attain the minimum scholarship requirement during their first term of attendance at Southern Polytechnic State University shall be academically suspended for unsatisfactory scholarship.

Reinstatement

A student who has been academically suspended for the first time at Southern Polytechnic State University must stay out at least one term. After a break of at least one term, the student may seek reinstatement. Reinstatement will be granted if the student files a Petition for Reinstatement no later than 20 working days prior to the beginning of the term in which the student plans to re-enroll.

A student who has been academically suspended for the second time at Southern Polytechnic State University must stay out at least one year (12 months). After a break of at least one year, the student may seek reinstatement. Reinstatement will be granted if the student's Petition for Reinstatement is approved by the faculty. Completed petitions must be filed with the Office of Records no later than 20 working days prior to the beginning of the term in which the student plans to re-enroll.

Reinstated students will be placed on probation.

A request for deletion of previous major courses for graduation scholastic average and hours purposes must be submitted on a Petition to the Faculty form and approved by the faculty.

Academic Dismissal

After a second reinstatement, a student whose semester grade point average is below 2.00 and whose cumulative grade point average is below 2.00 shall be academically dismissed. A student on academic dismissal may not apply for reinstatement.

Academic Renewal

Undergraduate students who have been readmitted or reinstated after a period of absence of five (5) calendar years or longer are eligible for academic renewal. Academic renewal for the student signals the initiation of a new grade point average to be used for determining academic standing. This provision allows degree-seeking students who earlier had experienced academic difficulty to make a fresh start and have one final opportunity to earn an associate or bachelor's degree.

Regents' Testing Program

An examination (The Regents' Test) to assess the competency level in reading and writing of all students enrolled in undergraduate degree programs leading to the baccalaureate degree in University System institutions shall be administered. The following statement shall be the policy of the Board of Regents of the University System of Georgia on this examination:

The formulation and administration of the Regents' Test shall be as determined by the Chancellor.

Each institution of the University System of Georgia shall assure the other institutions, and the System as a whole, that students obtaining a degree from that institution possess literacy competence, that is, certain minimum skills of reading and writing. The Regents' Testing Program has been developed to help in the attainment of this goal. The objectives of the Testing Program are: (1) to provide System-wide information on the status of student competence in the areas of reading and writing; and (2) to provide a uniform means of identifying those students who fail to attain the minimum levels of competence in the areas of reading and writing.

Students enrolled in undergraduate degree programs leading to the baccalaureate degree shall pass the Regents' Test as a requirement for graduation. Students must take the Test in their first semester of enrollment after earning 30 credit hours if they have not taken it previously. (Institutions may not prohibit students who have earned at least 30 credit hours from taking the test for the first time.) At an institution's discretion, students may be permitted to take the test during a semester in which they are not enrolled.

Each institution shall provide an appropriate program of remediation and shall require students who have not passed both parts of the test by the time they have earned 45 credit hours to take the appropriate remedial course or courses each semester of enrollment until they have passed both parts.

Students with 30 or more semester credit hours transferring from outside of the System or from a System program that does not require the Regents' Test should take the test during their first semester of enrollment in a program leading to the baccalaureate degree. Those who have not passed before their third semester of enrollment are subject to the remediation requirements.

A student holding a baccalaureate or higher degree from a regionally accredited institution of higher education will not be required to complete the Regents' Test in order to receive a degree from a University System institution.

General Rule
0-30 Hours Earned

Students who have earned 30 or fewer hours may attempt both sections of the Regents' Test. Students are encouraged to complete ENGL 1101 and 1102 early in their college curriculum and to attempt the Regents' Test as soon as possible after the completion of these courses.

30-44 Hours Earned

Unless the requirement has been met previously, it is **mandatory** for students to attempt the section(s) of the test not completed the next time it is offered.

45 or More Hours Earned

Unless the requirement has been met previously, students who have not passed both sections of the test are required to schedule remediation each semester for the section(s) not passed. It is **mandatory** for students to attempt the section(s) of the test not completed the next time it is offered. When either the essay or reading section is passed, the students' records are updated accordingly and remediation for that section is no longer required. (Students who have not completed the Essay section of the Test are required to enroll in RGTE 0199. Students who have not completed the Reading section of the Test are required to enroll in RGTR 0198.)

Transfer Students

Unless the requirement has been met previously, students transferring into Southern Polytechnic State University with credit for ENGL 1101 and 1102 should take the Regents' Test during their first term of attendance.

Students transferring from within the University System of Georgia are required to follow the Regents' Testing Program Policies as stated in the section above.

Schedule Changes

Prior to registration the most recent Regents' Test results are reported. Students who advance registered for remediation and pass a section of the test may alter their schedules accordingly at the first available registration period after the results are posted.

Frozen Status

Students must first enroll for required remediation and then other courses may be scheduled as desired. Once enrolled in RGTE 0199 and/or RGTR 0198, students may not withdraw from RGTE 0199 and/or RGTR 0198 as long as other courses are scheduled.

Transient Authority

Permission to attend another institution as a transient student will neither be authorized nor recognized if the transient term does not include the remediation that normally would be required by Southern Polytechnic State University. Any exception to this procedure must be approved by the Regents' Testing Program Coordinator prior to the transient term and students must obtain written permission from SPSU's Coordinator prior to attempting the Regents' Test on another campus.

Non-native Speakers of English

Regents' Testing Program procedures apply to all students; however, students who have been classified as non-native speakers of the English language by the Regents' Testing Program Coordinator are required to pass the alternate version of the Regents' Test.

Graduation Requirements

Catalog for Graduation Evaluation

A student may elect to be evaluated for graduation from any catalog in effect during the time of enrollment provided the enrollment has been continuous.

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. Students desiring further information on the selection of an appropriate catalog may contact their major department head or the Records Office.

General Requirements

A student is eligible for graduation when he or she (1) has satisfactorily completed the required number of hours specified by the curriculum of the program of study in which he or she is specializing, (2) has achieved the necessary scholastic average, (3) has paid all required fees, fines, and other financial obligations owed the college, and (4) has filed with the Records Office the official "Petition of Admission to Candidacy for a Degree." In addition, to receive an associate or bachelor degree the student must be certified as competent in reading and writing the English language-through the University System Regents' Testing Program and must satisfactorily pass an examination on the history of the United States and the history of Georgia, and upon the provisions and principles of the United States Constitution and the Constitution of Georgia, as required by the State of Georgia and the Board of Regents of the University System of Georgia. (Credit for U.S. History or American Government satisfies this constitution requirement). In addition to the above requirements, students in some departments who seek the baccalaureate degree also must satisfy the requirements of the comprehensive evaluation.

Graduation Petitions

A student must submit a formal petition for "Admission to Candidacy for a Degree" to the Records Office no later than the end of the fourth week of the term preceding the expected final term in residence. (This is interpreted to mean the previous term in residence, preceding the final term in residence. All fall-semester petitions for students not in school summer should be made in the spring semester of that year; and, all co-op students should petition the term before the work term. Students are encouraged to petition early if they feel they have reached eligibility to petition).

To be a candidate for either an associate or baccalaureate degree, a student must have passed all courses required for the degree, have a cumulative scholastic average of at least 2.00, and have merited the recommendation for the degree by the faculty and the President of Southern Polytechnic State University.

Residency Requirement

To receive an associate or bachelor degree from Southern Polytechnic State University, a student must earn at Southern Polytechnic State University a minimum of 25% of the credit hours required in the degree program.

No student may be considered as a candidate for a degree unless the final 20 credit hours required for an associate degree, the final 30 credit hours required for a BS degree, and the final 60 credit hours required for the B.Arch. degree are earned in residence at Southern Polytechnic State University. To obtain a second bachelor degree from Southern Polytechnic State University, a student must complete all required courses for the degree and earn credit for a total of at least 30 hours in excess of the requirements for any previous Southern Polytechnic State University degrees earned. Requirements for a dual major are spelled out under the various curricula.

No academic course work completed as a transient student at Southern Polytechnic State University may be applied as a part of the residency requirement for obtaining a degree.

Honors

For graduation "summa cum laude," the minimum scholastic average is 3.90. For graduation "magna cum laude," the minimum scholastic average is 3.70. For graduation "cum laude," the minimum scholastic average is 3.50. For graduation with honor, with high honor, or with highest honor, a candidate must have a minimum of 40 hours in residence for the associate degree and a minimum of 60 hours in residence for the bachelor's degree.

Courses in a Minor

To receive a minor, a student must complete at least six hours of the upper division requirements for the minor at Southern Polytechnic State University. Transfer credit may be used to satisfy the other requirements for the minor.

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 will not be given certificates based on the completion of courses in a certificate program.

Transcript Request

Students desiring transcripts must direct their request in writing to the Records Office. There is no fee for transcripts. All transcripts will include the entire academic record, and no partial or incomplete record will be issued as a transcript. Though transcripts are normally issued promptly, requests should be made several days before the document is required, particularly at the beginning or end of a semester. A transcript will not be issued when the record shows financial indebtedness to the institution.

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 Records Office. Students may not attend Southern Polytechnic State University and another institution concurrently for transfer purposes without prior authorization from the Records Office.

Exceptions to Academic Regulations

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

Appeals Procedure

Students requesting exceptions and/or appeals to academic policies and procedures should adhere to the following guidelines:

1. Matters not requiring Petitions to the Faculty include academic advisement, scheduling, etc., where only clarifications are required; students should discuss such matters first with the instructor, academic advisor, and/or department head who may refer them to someone else.
2. Matters requiring Petitions to the Faculty include requests for exceptions to policies published in the catalog or operating procedures; examples include requests for reinstatement, ten-year credit, receiving a grade of "W" past the last withdrawal date, etc. Students should complete a Petition to the Faculty form when they feel the academic policies and procedures have not been applied fairly or appropriately to them.
3. When it is determined that a Petition to the Faculty is in order, the student should complete the form and secure the proper signatures as required by the department head and/or appropriate faculty.
4. If the petition is approved, the matter should be resolved. If the petition is refused, and the student feels that he or she has grounds for appeal, the following steps are followed:
   (a) The student should discuss the petition with the Director of Records to determine the basis for refusal and to be informed of the appeals procedures and additional information that may be desirable and/or required.
   (b) Upon written request for appeal to the Records Office, all related information is forwarded to the Vice President for Academic Affairs for review. The Vice President may approve or refuse the appeal.
   (c) If the Vice President refuses the appeal, upon written request to the Vice President, the student may appeal to the President.
   (d) The President may approve or refuse the appeal. If the President refuses the appeal, upon written request to the President, the student may appeal to the Board of Regents.
5. To appeal a grade, a student must present clear evidence that a grade was assigned by some criteria other than an evaluation of academic performance. Check with the Records Office for the procedure to follow.

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.

Student records will be considered under the categories academic or nonacademic. The following indicates the types of records maintained, the official responsible for maintenance, and the person(s) with access to those records.

I. Academic: Those educational records which specifically pertain to or reflect the student's academic program, admission to, and progress within that program.
   A. Academic Department Office:
      1. Maintenance-academic department head
      2. Access-departmental faculty and staff
      3. Record Types
         (a) Departmental academic record card (unofficial)

(b) Departmental copies of class rolls
(c) Advisement copies of transcripts of previous college work
(d) Instructor's daily class record
(e) Co-op records and report
(f) Credit by examination results
(g) Scholarship records and correspondence
(h) Correspondence pertaining to the student's academic program and academic standing
(i) Recommendation correspondence submitted to an employer or agency on behalf of the student

B. Records Office:
1. Maintenance-Records Office
2. Access-Director of Admissions, Records Office, President, Vice President for Academic Affairs, Deans, Vice President for Enrollment Management and Student Services, Dean of Students, and related staffs
3. Record Types
(a) Admission records including high school and college transcripts, SAT or ACT scores, and any other information submitted by or on behalf of the students for admission purposes
(b) Official permanent academic record
(c) Official class rolls
(d) Correspondence between the student and the institution pertaining to the student's academic program and academic standing

II. Nonacademic: Those educational records which do not pertain to the student's academic program or academic standing
A. Business Office:
1. Maintenance-Vice President for Business and Finance and staff
2. Access-Vice President for Business and Finance and staff, Director of Records and staff, President, Vice President for Academic Affairs, Deans
3. Record Types
(a) Statement of student current fee accounts with the institution
(b) Record of student financial indebtedness to the institution
(c) Correspondence with the student regarding financial status
(d) Correspondence with institutions and agencies which financially sponsor students (See exceptions).

B. Office of the Dean of Students:
1. Maintenance-Dean of Students
2. Access-Dean of Students and staff, President, Vice President for Academic Affairs, and Deans
3. Record Types
(a) Student current address information
(b) Student current academic schedule
(c) Disciplinary action files
(d) Correspondence with the student concerning disciplinary action

C. Financial Aid Office:
1. Maintenance-Director of Financial Aid
2. Access-Director of Financial Aid and staff, Vice President for Enrollment Management and Student Services, Dean of Students, President, Vice President for Academic Affairs
3. Record Types
(a) Parents/Students Confidential Statement (See exceptions)
(b) Records of awards of financial assistance to students
(c) Financial assistance record of student indebtedness to the institution
(d) Correspondence with the student

D. Office of Veteran Affairs Coordinator:
   1. Maintenance-Veteran Affairs Coordinator
   2. Access-Veterans Affairs Coordinator, Director of Records and staff, President, Vice President for Academic Affairs
   3. Record Types
      (a) Records filed verifying veteran or veteran-dependency status
      (b) Record of student VA certification

E. Career Center:
   1. Maintenance-Director of Career Development
   2. Access-As authorized by student
   3. Record Types
      (a) Resumes filed by students
      (b) Copies of student authorization to release grade statement to co-op employers

F. University Police Department:
   1. Maintenance-Director of University Police
   2. Access-Director of University Police and staff, President, Vice President for Academic Affairs, Dean of Students
   3. Record Types
      (a) Official police reports

III. General: Except as precluded in the Rights and Privacy Act, each student's records as listed above are open for inspection and review by that particular student. The student also has the right to request an interpretation and explanation of material included in the record, and will be given copies of the material upon request. Access to these records will be granted to the student within a reasonable period of time, but in no case will that period of time exceed 45 days after the request for access has been made.

IV. Challenges: Should the student believe that the record contains inaccurate, misleading, or otherwise inappropriate information, he or she may desire to challenge the content of the record. In that event the following procedure shall be followed:
   A. Challenges to student records should be initiated by the student concerned and directed in writing to the Records Office.
   B. The challenge should contain a description of the specific record in question, the official responsible for maintaining the record, and the reason for challenging the contents of the particular record.
   C. Challenges will be submitted to the Vice President for Academic Affairs for review. The student initiating the challenge may request to appear before the Vice President when the challenge is considered.
   D. The decision of the Vice President will be made within a reasonable period of time and forwarded to the student in writing. The decision of the vice president will also be transmitted to the president.

V. Exceptions: The following are exceptions within the Rights and Privacy Act which should be noted by students.
   A. Access:
      1. Students do not have access to the financial records of parents of students.
      2. Students do not have access to letters of recommendation placed in the records prior to January 1, 1975.
      3. The personal records of instructional, supervisory, and administrative personnel which are not accessible or revealed to any other person except a substitute are not open for review and inspection by students.
      4. The professional records of the institution's medical staff are not open for review and inspection by students; however, these records can be

personally reviewed by a physician or other appropriate professional of the student's choice.

B. Release of Information: Certain information may be released without the prior written consent of the student and includes information to:
   1. School officials within the institution who are not specifically listed with standard access but who have been determined by the institution to have a legitimate educational need
   2. Authorized federal and state authorities including state educational agencies
   3. Accrediting organizations who need information for their accrediting functions
   4. Parents of a dependent student as defined by the Internal Revenue Code of 1954 after presentation of proper evidence of that dependency
   5. Officials with a lawful judicial order or subpoena provided the institution notifies the student of the order or subpoena prior to the institution's compliance
   6. Appropriate persons in connection with an emergency when the information is necessary to protect the health or safety of a student or other persons
   7. Agencies, sponsoring agencies, and institutions in connection with a student's application for or receipt of financial aid

VI. Destruction of Records: The complete academic record of all matriculating students will become permanent records of the institution. Following the third continuous term of nonenrollment 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.

VII. 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 Records Office in writing. The following may be included as "directory information" unless notification is received to the contrary:

Student's name, address, telephone listing, email address, date and place of birth, major field of study, class schedule, current enrollment status, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student.

VIII. Policies and procedures: Specific policies and procedures for the maintenance of student records according to the Board of Regents of the State of Georgia and the test of the Family Educational Rights and Privacy Act of 1974 are available for review in the Records Office.

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.

Student Life Regulations

I. Student Conduct Code

A student enrolling at the Southern Polytechnic State University assumes an obligation to conduct himself or herself in a manner compatible with the university's function as an educational institution.

Actions considered unacceptable to the institution and subject to discipline fall into the categories of academic dishonesty and non-academic misconduct.

A. Academic Dishonesty:

Academic dishonesty is an act or acts on the part of or in behalf of any student, which does or could improperly distort students' grades or other student academic records.

1. No student shall receive or attempt to receive unauthorized assistance in the preparation of any laboratory reports, examinations, essays, themes, term papers, or similar requirements to be submitted for credit as part of a course or to be submitted in fulfillment of a university requirement.
2. No student shall knowingly give, or attempt to give, unauthorized assistance to another in such preparation.
3. No student shall sell, give, lend, or otherwise furnish to any unauthorized person any material which can be shown to contain questions or answers to any examination scheduled to be given at any future date or time in any course of study offered by the university, excluding questions and answers from tests previously administered.
4. No student shall take or attempt to take, steal, or otherwise procure in an unauthorized manner any material pertaining to the conduct of a class, including tests, examinations, grade change forms, grade rolls, roll books, laboratory equipment, etc.
5. No student shall submit any material which is wholly or substantially identical to that created or published by another person without giving appropriate credit (plagiarism). When direct quotations are used, they should be indicated, and when the ideas of another are incorporated into a paper, they must be appropriately acknowledged.
6. No student shall submit false claims of credit for work which has not been submitted by the claimant.
7. No student shall willfully falsify a written or verbal statement of fact to a member of the faculty so as to obtain unearned academic credit.
8. No student shall forge, alter, or misuse any university document relating to the academic status of the student.
9. No student shall willfully disrupt the normal classroom activity.

B. Non-academic Misconduct:

Non-academic misconduct includes the following specifically prohibited acts whenever, unless otherwise stated, such acts occur on university-owned or controlled property:

1. Alcoholic Beverages:
   (a) Consumption or possession of alcoholic beverages unless authorized by the Dean of Students.
   (b) Intoxication made manifest by disorderly conduct, including fighting, boisterousness, rowdiness, obscene or indecent conduct or appearance, or vulgar, profane, lewd or unbecoming language.

2. Drugs: Use, possession (without valid medical or dental prescriptions), manufacture, furnishing, sales, or any distribution of any narcotic or dangerous drug controlled by law. (This provision is not intended to regulate alcoholic beverages, which are covered by Section I-B-1.)
3. Disorderly Conduct:
   (a) Breach of the peace or obstruction or disruption of teaching, administration, disciplinary procedures, or other university activities, including its public-service functions or other authorized activities.
   (b) Physical assault, or the threat of physical assault including sexual assault, on or in university property, or at functions sponsored by the university or any recognized university organization.
   (c) Intentionally harassing another person. Harassing behavior includes, but is not limited to, threatening, intimidating, verbally abusing, impeding, telephoning, following, or persistently bothering or annoying or any other behavior which has the purpose or effect of interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive work or academic environment. Harassment may represent, but is not limited to, acts based on sex, race, religion, national origin, disability or sexual orientation.
   (d) Refusal to vacate a building, street, sidewalk, driveway, or other facility when directed to do so by any properly identified faculty, administrator, or staff personnel while they are in the performance of their duties.
   (e) Failure to comply with instructions, directions or requests of any properly identified faculty, administrator, or staff personnel acting in the performance of their duties.
   (f) Lewd, indecent or obscene conduct or expression.
   (g) The abuse or unauthorized use of sound amplification equipment indoors or outdoors. (Use of sound amplification equipment must be approved in advance by the Dean of Students or his authorized representative.)
   (h) Attempting to enter any event sponsored or supervised by the university or any recognized university organization without proper credentials for admission, i.e., ticket, identification card, invitation, or other reasonable qualifications for admission.
   (i) Rollerblading activity within twenty feet of any roofed structure and skateboard activity occurring outside restricted areas (see the Student Handbook for the designated areas set aside for skateboard activity).
4. Hazing: Any act which tends to occasion or allow physical or mental suffering in connection with rites or ceremonies of induction, initiation, or orientation into university life or into the life of any university group or organization.
5. Damage to Property: Malicious or unwarranted damage or destruction of items of university property, items rented, leased or placed on the campus at the request of the institution, or items belonging to students, faculty, staff, guests of the university or of student groups.
6. Entry or Use of University Facilities:
   (a) Unauthorized entry into any university building, office or other facility.
   (b) Unauthorized use of any university telephone facility or of any other university facilities.

(c) Possessing, using, making or causing to be made any key or keys for any university facility without proper authorization.
(d) Unauthorized use of the password or account number of another student or faculty member to gain access to the computer or computer output. (This includes but is not limited to, any knowing and willing use of fraudulent means to process computer programs and obtain access to computer files.)

Under the terms of the Georgia Computer Systems Protection Act, anyone accessing, attempting to access or abetting the access of a computer, computer system, or computer network for any scheme to defraud or for the purposes of obtaining money, property, or services by false or fraudulent pretenses, representations, or promises is guilty of a crime. Upon conviction, these persons may face a fine of not more than two and one-half times the amount of the fraud or theft, a prison term of not more than 15 years, or both.

The act also outlaws certain accesses, alteration, damage, or destruction of any computer, computer system, computer network, computer software program or data. Convicted offenders will be fined not more than $50,000, face a prison term of not more than 15 years, or both.

Under the terms of this law, it is the responsibility of the Office of Information Technology to report any violations involving computer systems for which they are responsible.

7. False Information and Record Falsification:
   (a) Furnishing false information to any university official, or on any university document (including the Application for Admission), or offering a false statement in any university disciplinary hearing.
   (b) Forgery, alteration, or misuse of any university document, record, or identification.
8. Student Delinquencies - Financial Records, Property: Failure to remit, return, or submit financial obligations, property, or records of the university, within the time prescribed by the university.
9. Theft:
   (a) Taking, attempting to take, or keeping in his/her possession, items of university property, items rented, leased, or placed on the campus at the request of the institution, or items belonging to students, faculty, staff, guests of the university, or student groups.
   (b) Selling a textbook not his/her own without the permission of the owner. The sale, or attempted sale, of a textbook not one's own will be regarded as prima facie evidence of theft. Textbooks found should be turned in to lost and found at the University Police Department.
10. Gambling: Playing of cards or any other games of skill or chance for money.
11. Safety:
    (a) Intentionally false reporting of a fire or that a bomb or other explosive has been placed in any university building or elsewhere on the university property.
    (b) Tampering with fire-fighting equipment, safety devices or other emergency or safety equipment.
    (c) Setting an unauthorized fire.

(d) Possession of unauthorized fireworks, firearms or other projective propelling devices, ammunition, or dangerous weapons or materials. (Fireworks are defined as any substance prepared for the purpose of producing visible or audible effect by combustion, explosion, or detonation.)
(e) Unauthorized sale, possession, furnishing, or use of any incendiary device or bomb.

12. Any form of unauthorized solicitation in the residence halls, student center, parking lot, or elsewhere on campus.
13. Residence: Violation of rules governing residence in university-owned or controlled property.
14. Violations of the Student Motor Vehicle Regulations (Violations fall within the jurisdiction of the Southern Polytechnic State University Police Department.)
15. Complicity (Shared Responsibility for Infractions):
    (a) Knowingly acting in concert with any other person to perform an unlawful act or violate a university regulation or policy.
    (b) Students are responsible for the conduct of their guests on or in university property and at functions sponsored by the university or any recognized university organization.
16. Repeated violations of the published rules or regulations of the university, which cumulatively indicate an unwillingness or inability to conform to the standards of the university for student life.
17. Off-campus violations of the Student Conduct Code where there is a clear and present danger of interference with the normal operations of the university or where there is evidence of substantial embarrassment to the university or where there is substantial evidence of either violent behavior toward another person or persons or the illicit sale or distribution of any dangerous drug controlled by law.

II. Disciplinary Administration

A. Disciplinary Procedures:

1. All alleged acts of **student misconduct** (except violations of motor vehicle regulations) may be reported to the Dean of Students who is the principal administrator to enforce university disciplinary measures pertaining to student conduct violations. Cases involving charges of alleged misconduct must be carefully documented in writing and substantial evidence must be presented to help prove the alleged offense. In matters of alleged **academic dishonesty** or classroom disruption, a faculty member either:
    (a) Reserves the right and judgment to privately handle individual student cases. The corrective action to be taken may include a grade penalty or removal from the course with the assigned grade of "F". The faculty member will review the facts and circumstances and then discuss the circumstances with the student before taking final action. In the event the student cannot be reached, he/she will be given the grade of "Incomplete" until such time as he/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 head, and then to the appropriate school dean, and, if necessary, to the Vice President for Academic Affairs.

    When an appeal for academic dishonesty violation reaches the office of the Vice President for Academic Affairs, the Vice

President may choose to refer the appeal to the Academic Dishonesty Appeal Committee for its review and recommendation before making a final decision. Such a referral to this committee is not required.

The Academic Dishonesty Appeal Committee shall be composed of four faculty members and four students. One faculty member from each of the four schools shall be recommended by the Dean of each school and appointed by the Vice President for Academic Affairs. The four student representatives shall be recommended by the President of the Tau Alpha Pi Honor Society and appointed by the Vice President for Academic Affairs.

A faculty member of the appeals committee shall be appointed as chairperson by the Vice President for Academic Affairs. A quorum for committee meetings shall be five and the chairperson shall vote only in the event of a tie. All normal hearing and due process procedures will be followed in all cases referred to the Academic Dishonesty Appeal Committee.

Removal of a student from a course for academic dishonesty or disruptive behavior will result in a grade of "F". This grade of "F" shall not be superseded by a voluntary withdrawal from the course and will be included in the student's cumulative grade point average calculated for graduation purposes; or

(b) The alleged academic dishonesty or classroom disruption violation may be referred to the Dean of Students (with documentation) to be handled the same as any other alleged misconduct violation. If an academic dishonesty or classroom disruption case is referred to the Dean of Students, the faculty member must reserve judgment on any grade penalty until there is a determination of guilt or innocence.

2. The Dean of Students shall cause to be investigated alleged acts of student misconduct and may appoint a staff member to conduct an inquiry into alleged misconduct and recommend what further action, if any, might be initiated. When additional action is justified, the Dean of Students shall notify the accused student(s) in writing.
3. When the Dean of Students gives written notification to a student(s) for alleged misconduct, it shall contain a statement of the nature of the alleged or suspected misconduct and state the section(s) of the conduct code allegedly violated.
4. The Dean of Students or his designee will normally confer with the accused student(s) and at the conference the student(s) may (1) admit or deny the alleged violation, (2) waive further hearing and request that the Dean of Students take appropriate action, or (3) request a hearing as specified in Section 5 or 6 below.
5. Cases of misconduct which may result in suspension or expulsion normally will be referred to the Judicial Committee, which shall hear them. (This does not preclude possible legal actions by appropriate law enforcement agencies in those cases of non-academic misconduct in violation of federal, state, or local law.)
6. If the case does not involve possible suspension or expulsion, the Dean of Students may make full disposition of the case except that he may, at the request of the accused or for good cause, refer any case of misconduct to the Judicial Committee.
7. A student accused of an act of misconduct is encouraged to notify his or her parents or guardian of the charge(s). Parents or guardians may schedule a conference with the Dean of Students if they so request.

8. An accused student may continue to attend classes and other school functions until a decision is rendered. Exceptions to this will be when a student's presence may create a clear and present danger of materially interfering with the normal operations of the school or when a material threat exists to members of the campus community. In such cases, the Dean of Students may impose temporary protective measures, including interim suspension, pending a hearing. A student is not entitled to continue in class while a suspension decision is under appeal.
9. After a disciplinary decision has been made, the Dean of Students shall give written notice of the action taken to party or parties who initiated the original misconduct complaint.

B. Student/Faculty Judicial Committee:

The Judicial Committee shall consist of three members of the faculty, one of whom shall be selected by the committee as chairperson, and three students selected by the Student Government Association. The three members of the faculty are appointed for two-year terms by the President of the University. They may succeed themselves, but must be reappointed by the President.

C. Procedural Rights of the Accused:

1. A student accused of misconduct and summoned to a hearing before the Judicial Committee shall have the right to
   (a) Be accompanied by an advisor of his or her choice. The chosen advisor, however, may not actively participate in the dialog of the hearing but will be restricted to consulting and advising his or her client.
   (b) Remain silent with no inference of guilt drawn therefrom.
   (c) Question the complainant and all witnesses.
   (d) Present evidence in his or her behalf.
   (e) Call pertinent witnesses in his or her behalf.
   (f) Appeal the final disciplinary decision of the Dean of Students.

D. Hearing Procedures:

1. The Dean of Students shall set the date, time, and place of the hearing, shall notify the members of the hearing body, and shall summon all principals in the case (defendants and witnesses).
2. The Dean of Students shall notify the accused student(s) in writing at least three days before the scheduled hearing. The written notification should be by certified, return receipt mail or personal service delivery. The written notification should specify:
   (a) The date, time and place of the hearing.
   (b) A statement of the nature of the suspected misconduct of which the person is being accused, with sufficient detail to ensure opportunity to prepare for the hearing.
   (c) Names of witnesses scheduled to appear.
3. If the accused student is properly notified of a hearing but refuses to accept the certified letter or otherwise does not appear at the hearing, the Judicial Committee may proceed with the hearing in the absence of the accused student. The student may request a rescheduled hearing in the event of a verifiable conflict with the original hearing date.

4. Decisions of the committee shall be by majority vote. A quorum for the Judicial Committee shall consist of four members (two faculty and two students).
5. Any member of the Judicial Committee shall disqualify himself or herself if his or her personal involvement in the hearing is of such a nature as to prejudice the case.
6. The hearings of the Judicial Committee shall be open for cases of **student misconduct** but shall be closed for cases of **academic dishonesty**. The Judicial Committee may exclude any person who interferes with the hearing.
7. The Judicial Committee shall have the option of making a tape recording of the proceedings or maintaining a written summary outline of the proceedings. This information, when completed, shall become part of the student's disciplinary file which is maintained by the Dean of Students.
8. The chairperson of the Judicial Committee shall, within three working days, submit a written summary of the case along with the committee's recommended disciplinary actions to the Dean of Students, who will make the final decision and notify the accused in writing. The Dean of Students shall also provide written notification of the action taken to the party or parties who initiated the original misconduct complaint.

E. Disciplinary Measures:

1. Expulsion-a permanent severance of the student's relationship with the university.
2. Disciplinary suspension-a temporary severance of the student's relationship with the university. Normally, a disciplinary suspension action shall take effect immediately following notification to the student of the disciplinary action. Disciplinary suspension usually will continue for a specified period of time (not less than one term not including the term when the suspension action is initiated). A student who has been suspended shall receive a letter grade of "WF" in all courses for that term.

   Once the period of suspension has been completed, the student shall be eligible to register for classes following consultation with the Dean of Students. The student will return to school on automatic disciplinary probation until graduation. If a student is suspended for a period of time of more than one calendar year, that individual must follow normal procedures for readmission outlined in the university catalog.
3. Disciplinary Probation-formal written notice to the student that any further major disciplinary problems may result in suspension. Disciplinary probations may also include community service, fines, restrictions and/or restitution for the damage or destruction of property or for personal injury (medical expenses).
4. Reprimand/Warning:
   (a) Oral reprimand/warning-an oral disapproval issued to the student
   (b) Written reprimand/warning-a written statement of disapproval to the student
5. Restrictions-exclusion from participating in:
   (a) Social activities

(b) Identification card privileges

6. Fines
7. Restitution-a reimbursement for damage to or misappropriation of property; this may take the form of appropriate service or other compensation.
8. In cases where a student has been found guilty of academic dishonesty in a particular course, the faculty member may assess an additional academic penalty. Grade penalties are a faculty prerogative only and not part of the disciplinary measures to be administered by the Dean of Students.

F. Appeal Procedures:

1. An accused or an accuser who is dissatisfied with the action taken by the Dean of Students (or the Vice President for Academic Affairs, in academic dishonesty cases) may appeal the case in writing to the President of the University within five school days after notification of the action. Such appeal shall recite all reasons for dissatisfaction with the previous decision and shall normally require some evidence that procedural due process rights have been violated or that significant new evidence exists that was not considered during the original hearing. A student is not entitled to continue in class while a suspension decision is under appeal. The President, within five school days, may refer the appeal to the Faculty Council and simultaneously notify the Dean of Students (or Vice President for Academic Affairs). The appropriate Vice President shall be responsible for notifying the party or parties who initiated the original complaint that an appeal is in process. If requested, the Faculty Council shall review all facts and circumstances connected with the case and ensure that all sides of the case are adequately reviewed. Within five school days the Faculty Council shall make its findings and forward its recommendation to the President. After consideration of the committee's report, the President shall within five school days make a decision and notify the appellant in writing.
2. The accused or an accuser who is dissatisfied with the action taken by the President may appeal the case in writing to the Executive Secretary of the Board of Regents of the University System of Georgia within a period of 20 days following the decision of the President. This application for review shall state the decision complained of and the redress desired. A review by the board is not a matter of right, but is within the sound discretion of the board. If the application for review is granted, the Board, or a committee of the Board, shall investigate the matter thoroughly and render its decision thereon within 60 days from the filing date of application for review or from the date of any hearing which may be held thereon. The decision of the Board shall be final and binding for all purposes.

III. Regents' Statement of Disruptive Behavior

The following is the policy of the Board of Regents in regarding disruptive behavior in any institution of the University System. The rights, responsibilities, and prohibitions contained in this statement are incorporated as a part of these regulations.

"Any student, faculty member, administrator, or employee, acting individually or in concert with others, who clearly obstructs, disrupts, or attempts to disrupt any teaching, research, administrative, disciplinary, public ser-

vice activity, or any other activity authorized to be discharged or held on any campus of the University System is considered by the Board to have committed an act of gross irresponsibility and shall be subject to disciplinary procedures, possibly resulting in dismissal or termination of employment."

IV. Student Rights and Responsibilities

A. Student Responsibility:

Southern Polytechnic State University students bear a general responsibility to support the institution's effort to maintain a spirit of free inquiry and respect for the rights of others. This responsibility imposes a duty on students to refrain from conduct which is not consistent with the Southern Polytechnic State University Student Conduct Code and also to support the enforcement of civil laws where such enforcement is reasonably deemed necessary by responsible officials to the safety and well being of the members of the university community as well as the continued operation of the institution.

B. Right of Freedom of Association:

Students at Southern Polytechnic State University are free to organize and join associations to promote their common interests. This organization is done according to the rules constituted and set forth regarding establishing student organizations. The regulations are complete and very explicit, and place cooperative responsibility for the established organization and the protection of the rights of all students.

C. Right to Listen:

Students or properly established organizations (note regulations for establishing student organizations) are allowed to invite and to hear any person of their choosing for the purpose of hearing his or her ideas and opinions.

If the President of Southern Polytechnic State University, the Board of Regents, or an authorized designee thereof, after proper inquiry, determines that the proposed speech constitutes a clear and present danger to the ordinary operation of the university, he or she can ban the speaker.

Regulations require clearing such invitations through the Office of Student Activities for the purpose of arranging for security through the university police department, publicity through the public relations office, notification of campus organizations, and information to the President.

D. Right to Freedom of Expression:

Students at Southern Polytechnic State University have the right to express their opinions freely as a part of the educational process of the university. This includes the right to make complaints to university officials about unfair or abusive treatment, poor service or any other unacceptable behavior on the part of any university office, department or agency.

They must, however, respect the rights of others and allow them to be heard as they express their opinions. The students are expected to tell the truth and be mindful of the liability involved should what they express prove not to be fact. This freedom and right to expression is only a right as long as the expressions do not disrupt or interfere with the orderly operation of the campus.

E. Residence Halls:

Should it become necessary to inspect or have access to private quarters, the procedures listed in the Residence Hall Guidebook will be followed.

V. Sexual Assault Victim's Bill of Rights

The following rights shall be accorded, by all campus officers, administrators, and employees of Southern Polytechnic State University, to victims of campus-related sexual assaults:

1. The right to have any and all sexual assaults against them treated with seriousness; the right, as victims, to be treated with dignity; and the right for campus organizations which assist such victims to be accorded recognition.
2. The right to have sexual assaults committed against them investigated and adjudicated by the duly constituted criminal and civil authorities of the governmental entity in which the crimes occurred; and the right to the full and prompt cooperation and assistance of campus personnel in notifying the proper authorities. The foregoing shall be in addition to any campus disciplinary proceedings.
3. The right to be free from any kind of pressure from campus personnel that victims not report crimes committed against them to civil and criminal authorities or to campus enforcement and disciplinary officials; or report crimes as lesser offenses than the victims perceive them to be.
4. The right to be free from any kind of suggestion that campus sexual assault victims not report, or under-report, crimes because:
   (a) victims are somehow responsible for the commission of crimes against them;
   (b) victims were contributorily negligent or assumed the risk of being assaulted; or
   (c) by reporting crimes they would incur unwanted personal publicity.
5. The same right to legal assistance, or ability to have others present, in any campus disciplinary proceeding that the institution permits to the accused; and the right to be notified of the outcome of such proceeding.
6. The right to full and prompt cooperation from campus personnel in obtaining, securing, and maintaining evidence (including a medical examination) as may be necessary to the proof of criminal sexual assault in subsequent legal proceedings.
7. The right to be made aware of, and assisted in exercising any options, as provided by State and Federal laws or regulations, with regard to mandatory testing of sexual assault suspects for communicable diseases and with regard to notification to victims of the results of such testing.
8. The right to counseling from any mental health services previously established by the institution, or by other victim-service entities, or by victims themselves.
9. After campus sexual assaults have been reported, the victims of such crimes shall have the right to require that campus personnel take the necessary steps or actions reasonably feasible to prevent any unnecessary or unwanted contact or proximity with alleged assailants, including immediate relocation of the victim to safe and secure alternative housing, and transfer of classes if requested by the victims.
10. In addition to the above rights, students, whether sexual assault victims or not, have a right to habitability in campus housing and in campus accommodations for which the university receives any compensation, direct or indirect.

Definition: For purposes of this subparagraph, "habitability" shall mean an environment free from sexual or physical intimidation, or any other continuing disruptive behavior by persons sharing rooms or their guests, that is of such a serious nature as would prevent a reasonable person from attaining their educational goals. Substantiated violations of the above-listed habitability provisions shall be corrected by campus personnel by relocation of the complainant to acceptable, safe, and secure alternative housing as soon as practicable, unless the conditions of nonhabitability demonstrate the necessity of immediate action by campus personnel.

Victims of sexual assault can obtain assistance from University Police, the Counseling Office, Campus Nurse, Housing Office, or the Dean of Students. In addition, there are other services available in the Marietta area including:

Rape Crisis Center - 428-2666
24-hour Hotline for information, counseling, and crisis intervention sponsored by the Cobb County YWCA.

VI. Acquired Immune Deficiency Syndrome (AIDS) Policy

It is the policy of the Southern Polytechnic State University to provide academic programs, support services, and social/recreational activities to all eligible individuals. In the event that a student, faculty member, or staff member is diagnosed as having Acquired Immune Deficiency Syndrome (AIDS), or there is clinical evidence of infection with the Human Immunodeficiency Virus (HIV), they shall retain their right to these programs, services, and activities. Students and employees of the university who may become infected with the AIDS virus will not be excluded from enrollment or employment, or otherwise restricted, unless medically-based judgments in individual cases establish that exclusion or restriction is necessary to the welfare of the individual or other members of the university community.

No admissions restrictions will be applied and no effort will be made to identify a person with AIDS during the admission process.

Students with AIDS will not be denied assignment to a campus residence hall but specific decisions regarding housing assignments and roommates will be made on an individual basis utilizing medical personnel as necessary.

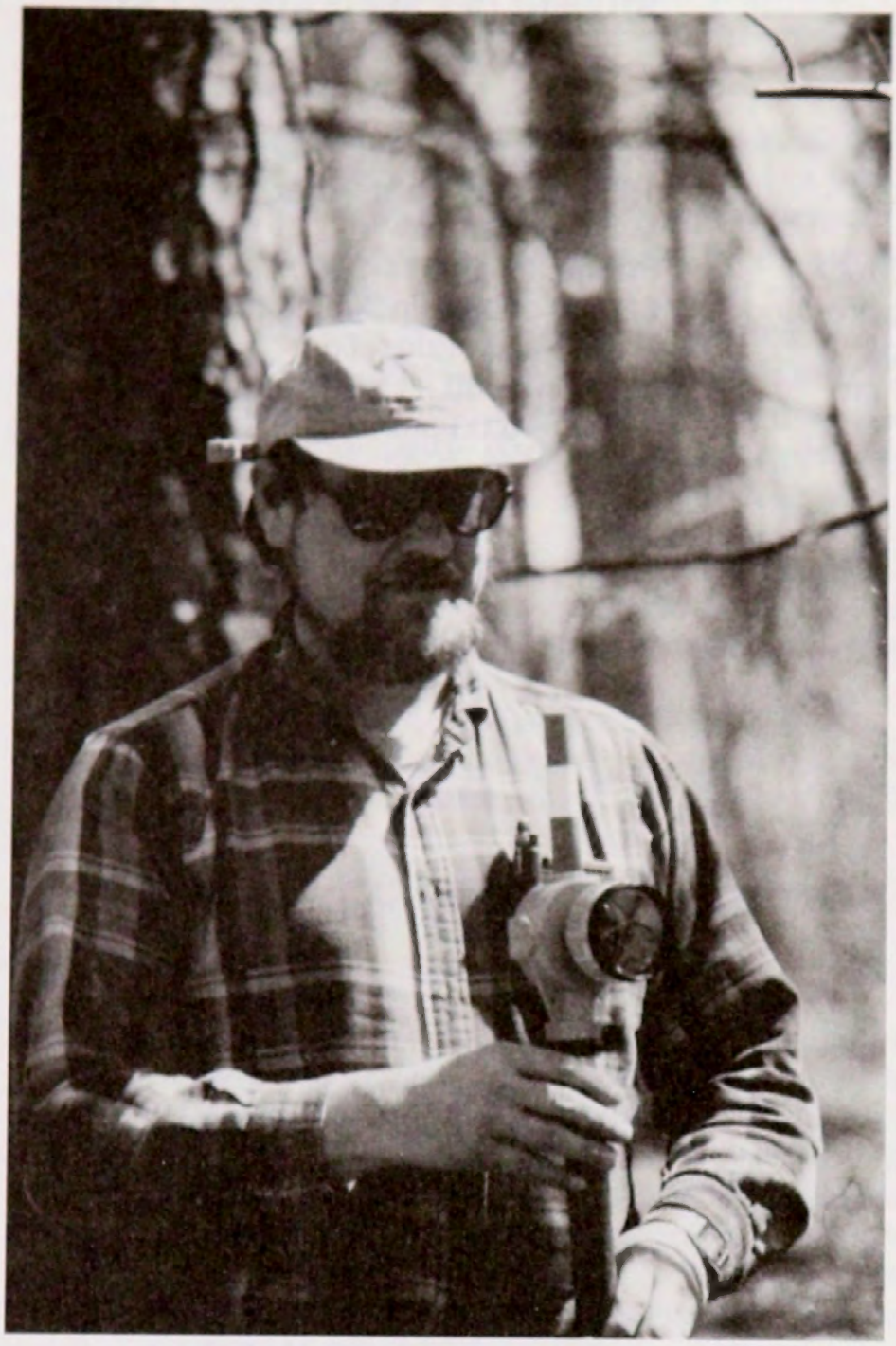
Individuals who have AIDS are expected to seek expert medical advice about their health condition and are obligated to conduct themselves responsibly in the interest of protecting others.

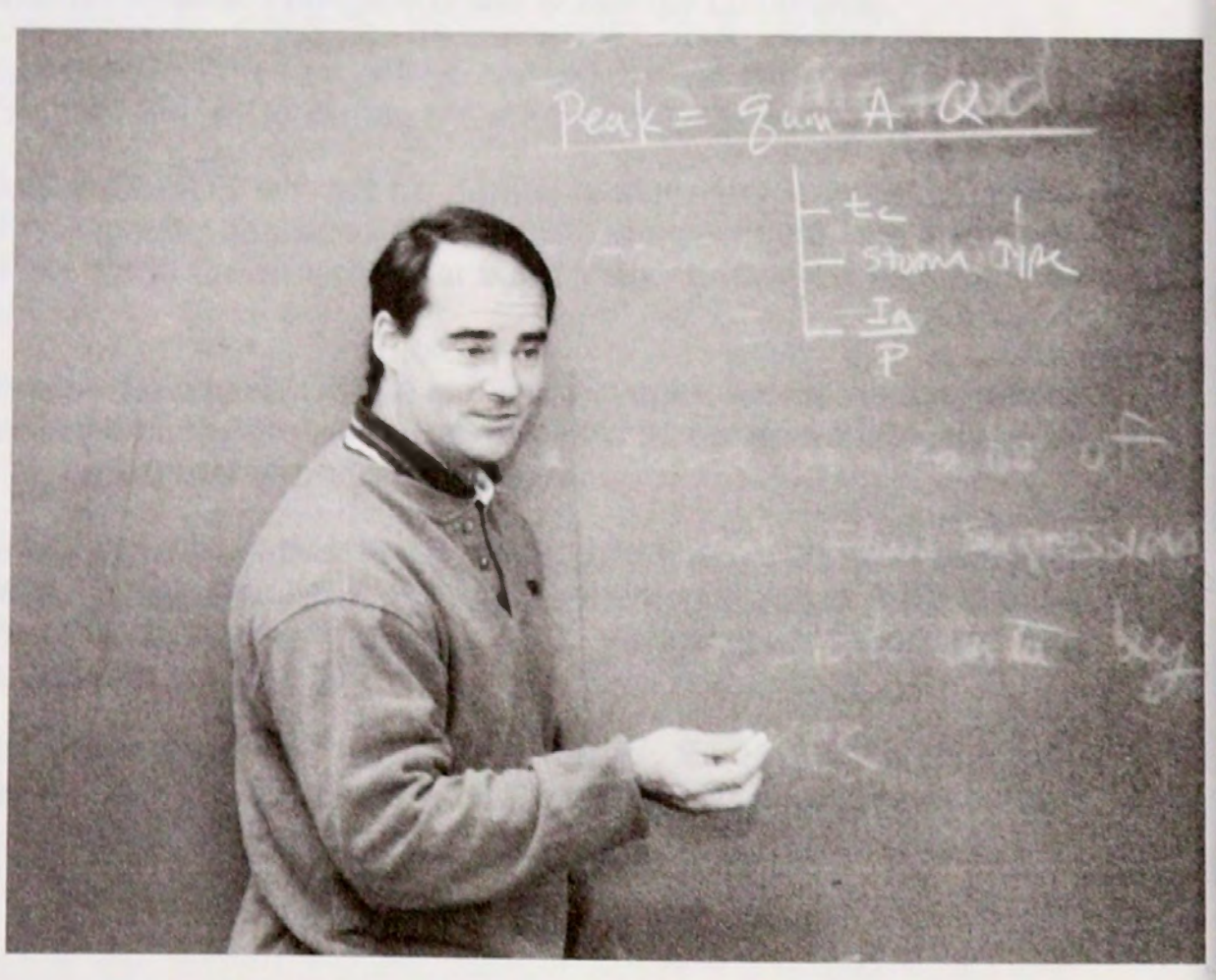
The University will conduct an ongoing education program for students, faculty, and staff regarding the transmission and prevention of AIDS in order to promote rational decision-making and to minimize confusion and fear about this disease.

The University does not have an AIDS Testing Service on campus. Individuals interested in AIDS testing can talk with the campus nurse or contact one of the following for assistance:

AID Atlanta
1438 W. Peachtree St.
Atlanta, GA
Phone: (404) 872-0600
Free service including pre- and post-test counseling
Tuesdays, 2:00 - 5:00 pm

Cobb County Health Department
1650 County Farm Road
Marietta, GA
Phone: (770) 514-2300
$20.00 charge including pre- and post-test counseling
Mon-Fri, 8:30 - 11:00 am and 1:00 - 6:00 pm

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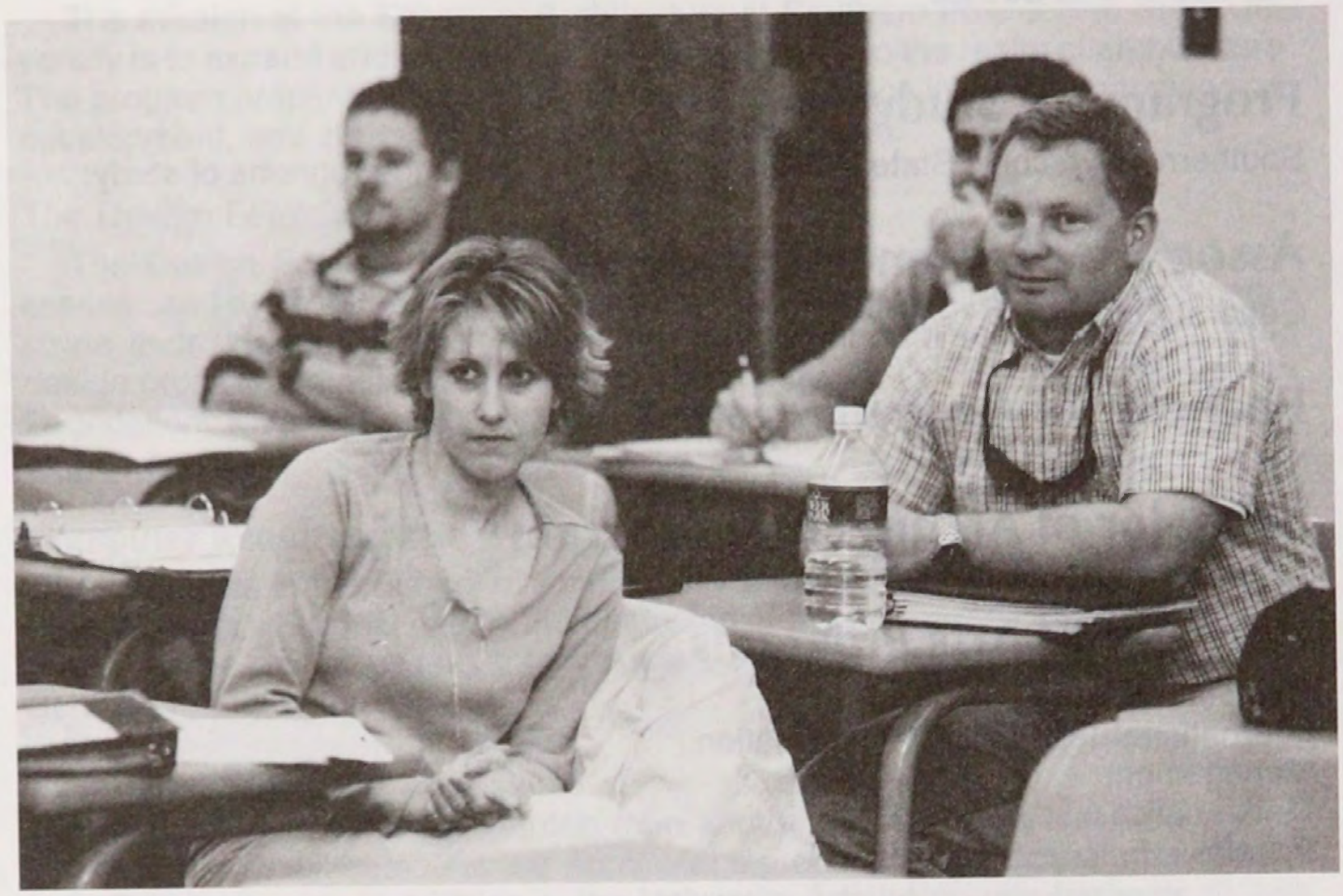


Curricula

Programs of Study

Southern Polytechnic State University offers the following programs of study:

Associate of Science Transfer Program

General Studies

Bachelor of Applied Science Program

Bachelor of Architecture Program

Bachelor of Arts Programs

Computer Science
International Technical Communication
Management
Mathematics
Physics

Bachelor of Science Programs

Apparel/Textile Engineering Technology
Civil Engineering Technology
Computer Engineering Technology
Computer Science
Construction
Electrical Engineering Technology
Industrial Distribution
Industrial Engineering Technology
Management
Mathematics
Mechanical Engineering Technology
Physics
Surveying and Mapping
Technical and Professional Communication

Bachelor of Science in Telecommunications Engineering Technology Program

In the following pages, each program of study is described, and course requirements are outlined. Detailed course descriptions are given in the next section of the catalog.

School of Architecture

The mission of the School of Architecture at Southern Polytechnic State University is to expand and extend the College mission into the realm of architecture. The program prepares students for professional practice in the design, planning, development, and stewardship of the built environment.

The Design Foundation

The Design Foundation sequence is an introduction to the issues and processes used by professional designers of the built environment. Students demonstrate their understanding of course material through exercises and simulated design projects. A basic understanding of these factors is provided in the Design Foundation, which constitutes the first two years of the Bachelor of Architecture degree program.

Computer Requirements

All students in the School of Architecture are required to have a lap top computer for their individual use by the beginning of the third year. Published requirements for the computer and software are available in the reception office of the School of Architecture.

Admission Process

All students whether transferring from another university, or first-time university students, must complete the Admissions process in the School of Architecture. This process is in addition to the University Admission requirements.

In order to be considered for admission to the Design Foundation (first year) curriculum of the School of Architecture, prospective students must contact the School of Architecture for the current year's admission standards after being formally accepted by Southern Polytechnic State University. Prospective students may receive further specific information regarding the application process and applicable dates directly from the School of Architecture. Applications for fall semester will not be accepted after May 31.

All decisions regarding acceptance into the School of Architecture are final.

Transfer Students

Transfer students may apply for admission to the program. All transfer students coming from an NAAB accredited program may submit a portfolio for approval to the School of Architecture Admissions Committee no later than 5:00 PM on the second Friday of May for possible advanced standing in the Architecture program.

Transfer students must have a minimal transferring GPA. They must also have current, formal acceptance to Southern Polytechnic State University and meet the University requirements regarding transfer status. Prospective transferring students may receive further specific information regarding the application process and applicable dates directly from the School of Architecture. Applications for fall semester will not be accepted after June 15. All decisions regarding acceptance into the School of Architecture are final.

Architecture

(Bachelor of Architecture Degree Offered)

The Bachelor of Architecture program is a fully accredited program by the National Architectural Accrediting Board. It is a 2 plus 3 program consisting of the Design Foundation, the first two years, and the Professional Program for the last three years. The study of architecture involves good detailing and translating abstract thought. The entire program is based on integration of foremost students into an enthusiastic, practical program of study. The professional program places emphasis on enhancing the understanding of the relationship of people and their physical environment, and the synthesis of this complex information into relevant design solutions. The program is a combination of building and environmental technology, professional practice, architectural electives and a rigorous sequence of design studios geared to exceptional students.

Accreditation

The following statement is required by the National Architectural Accrediting Board to be included in all catalogs and promotional materials of accredited programs.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes two types of degrees: the Bachelor of Architecture and the Master of Architecture. A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Masters degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Professional Program

The Professional Program is comprehensive and rigorous. The Professional Program includes students who have successfully completed the two year sequence of Design Foundation and who demonstrate exceptional professional promise.

To be admitted to the Professional Program from the Design Foundation, a student should have a minimum grade point average (GPA) of 2.50 in all course work.

Special Grading Standard

All Design Foundation and Architecture courses must be taken in sequence. Students in the Architecture curriculum must achieve a minimum of 2.00 grade point average (GPA) in studio course sequence before proceeding into the next sequence of studios. Any student who fails to achieve a minimum GPA of 2.00 in a sequence must repeat all courses in which the student received a grade of "D" or "F" until his/her GPA is 2.00 or above.

Architecture students within the Professional sequence must maintain passing grades in all classes within any given semester in order to advance into the following semester. This is in addition to maintaining a GPA of 2.00.

Student Work

All student work executed in the School of Architecture becomes the property of the School and will be returned at the discretion of the faculty. The faculty also reserves the right to refuse credit for any work that was executed outside the precincts of the School or otherwise executed without coordination with the faculty.

Architecture
Design Foundation

First Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 1	3	0	3
DFN	1000	School of Architecture Orientation	2	0	2
DFN	1001	Design Foundation I	0	12	4
ENGL	1101	English Composition I	3	0	3
MATH	1113	Precalculus	4	0	4
SPCH	2400	Public Speaking	2	0	2
		Total	**14**	**12**	**18**
Second Semester					
Area E		Group 2	3	0	3
DFN	1002	Design Foundation II	0	12	4
ENGL	1102	English Composition II	3	0	3
MATH	2253	Calculus I	4	0	4
STS	2400	Science, Technology, and Society	2	0	2
		Total	**12**	**12**	**16**

Second Year

First Semester					
Area C		Group 1	3	0	3
Area C		Group 2			3
Area D		Lab Science *	3	3	4
Area E		Group 3	3	0	3
DFN	2003	Design Foundation III	1	9	4
		Total			**17**
Second Semester					
Area D		Lab Science*	3	3	4
Area E		Group 4	3	0	3
DFN	2004	Design Foundation IV	0	9	3
DFN	2111	Architecture Culture I	3	0	3
DFN	2211	Introduction to Structures	3	0	3
		Total	**12**	**12**	**16**

*In preparation for the Building and Environmental Technology courses, the School of Architecture recommends all architecture students take Physics for their laboratory science.

NOTE: For more information about Areas C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Architecture
Professional Program

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ARCH	3011	Architecture Studio I	1	9	4
ARCH	3112	Architecture Culture II	3	0	3
ARCH	3211	Building Technology I	2	0	2
ARCH	3221	Environmental Technology I	2	0	2
ARCH	3231	Architecture Practicum I	0	3	1
ARCH	3311	Contract Documents	2	0	2
ARCH	3501	Introduction to Applied Architectural Research	2	0	2
		Total			**16**
Second Semester					
ARCH	3012	Architecture Studio II	1	9	4
ARCH	3113	Architecture Culture III	3	0	3
ARCH	3212	Building Technology II	2	0	2
ARCH	3222	Environmental Technology II	2	0	2
ARCH	3232	Architecture Practicum II	0	3	1
ARCH	3241	Computer Applications in Architecture	1	3	2
		Architectural Electives			3
		Total			**17**

Fourth Year

First Semester					
ARCH	4013	Architecture Studio III	0	12	4
ARCH	4114	Architectural Theory I	2	0	2
ARCH	4213	Building Technology III	2	0	2
ARCH	4223	Environmental Technology III	2	0	2
ARCH	4233	Architecture Practicum III	0	3	1
		Architectural Electives			3
		Total			**14**
Second Semester					
ARCH	4014	Architecture Studio IV	0	12	4
ARCH	4115	Architectural Theory II	2	0	2
ARCH	4214	Building Technology IV	2	0	2
ARCH	4234	Architecture Practicum IV	0	3	1
ARCH	4312	Codes	2	0	2
		Architectural Electives			3
		Total			**14**

Architecture
Professional Program

Fifth Year

First Semester

ARCH	5015	Architecture Studio V	0	9	3
ARCH	5116	Urban Planning and Design Theory	2	0	2
ARCH	5313	Professional Practice and Ethics	2	0	2
ARCH	5593	Diploma Project Research	2	3	3
		Architectural Electives			3
		Total			**13**

Second Semester

ARCH	5999	Diploma Project	1	12	5
		Architectural Electives			6
		Total			**11**
		Degree Program Total			**152**

College of Arts and Sciences

Philosophy and Mission

The mission of the College of Arts and Sciences is to provide a broad range of knowledge, programs, and opportunities in support of the overall mission of the university. The College of Arts and Sciences emphasizes the applied nature of the disciplines within its scope inside the framework of a liberal education and strives to serve the needs of the whole student.

Serving the whole student means providing courses, programs, and activities leading to a balanced education. Towards this end undergraduate and graduate courses throughout the College of Arts and Sciences foster openness to new ideas, inquisitiveness, problem-solving and critical thinking skills, and a desire for continued learning. The college provides opportunities to students, both undergraduate and graduate, for original research, advanced training and skills, and exposure to cooperative experiences with private industry. A further part of the mission of the college is to help students develop a critical perspective on themselves and their work by providing them with an understanding of their own culture, as well as an exposure to other cultures and societies and an appreciation of the world in which they live. In general, students are active participants rather than observers; they are regarded as citizens and future leaders as well as potential masters of their disciplines.

Objectives

Among its specific objectives, the College of Arts and Sciences strives to:

- Ensure that all Southern Polytechnic State University students attain substantive knowledge and methodological skills in each of its various departments.
- Cultivate throughout the curriculum well-developed skills in synthesis, analysis, problem-solving, and evaluation.
- Strengthen every student's communication skills so that graduates can speak and write effectively.
- Encourage students to engage in independent learning, to pursue intellectual excellence, and to formulate questions and possible solutions about individuals, society, and nature within an international context.
- Provide opportunities for students to develop a better understanding of the world's diverse cultural heritage.
- Encourage a careful examination of the effects of technological change on human behavior, society, value systems and ethics.
- Provide opportunities to students for original research and exposure to cooperative experiences with private industry.

Current Offerings

The College of Arts and Sciences offers an associate degree transfer program in General Studies; discipline certificate programs in a number of fields; programs leading to either Bachelor of Arts or Bachelor of Science degrees in Computer Science, International Technical Communication, Mathematics, Physics, and Technical and Professional Communication; master's degree programs in Computer Science, Software Engineering, Technical and Professional Communication and Information Technology (offered in conjunction with the School of Management);

and undergraduate minors in Asian Studies, Computer Science, International Studies, Mathematics, Physics, Spanish, and Technical and Professional Communication.

Advising for Pre-Health Programs

The College of Arts and Sciences offers the courses needed by students seeking to apply to medical, dental, pharmacy, or veterinary school.

All of the above health oriented programs, except pharmacy, are predoctoral programs. That is, normally a student earns a baccalaureate degree before matriculation into a doctoral program at the professional school. However, in the case of pharmacy students apply for admission to a professional school after they have satisfied the prerequisite requirements for admission. Students should note that within any one field, different professional schools may vary slightly in their requirements, and thus, the student may want to consult a particular school's admission office.

Students considering any of the aforementioned programs must, from the very beginning, face the reality that admissions are very competitive. In fact, a great majority of students find, by their junior year, that they do not have the grades needed to gain admission to a professional school. This reality leaves many students with the need to consider alternative careers.

Students interested in any of the above programs should note that there are no preprofessional majors per se; for example, a predental student may choose to major in any of the programs offered by the schools of Arts and Sciences, Management, Architecture, or Technology. The choice of majors is wide open provided the student satisfies all requirements of the professional school. In addition, in the process of completing the requirements for the aforementioned programs, the student may also want to satisfy the requirements needed to earn an Associate of Science in General Studies. Students interested in one or more of the aforementioned programs are encouraged to contact the Department Head for Physics, Chemistry, and Biological Sciences.

Advising for Pre-Engineering Program

The Mathematics Department conducts a program of advisement for freshmen and sophomores who wish to begin college locally, but plan to transfer to a full engineering program later. Students who wish to participate in this program should enter as mathematics majors. They will be asked later to sign a statement that their intention is to transfer to an engineering program at another college rather than to complete a mathematics degree.

The advisors in the program will guide the students through an organized course of study which will provide a strong preparation in mathematics and science for the study of engineering and which will transfer with minimum loss of credit or time to most engineering programs.

For those students who declare the college or university to which they wish to transfer, the advisor will endeavor to obtain a catalog for that college or university and design a specific program for transfer.

Associate of Science
General Studies Transfer Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1111	College Algebra	3
	or		
MATH	1113	Precalculus	

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/ Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)

Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Take one from the following group:			3-4
MATH	1113	Precalculus	
MATH	2240	Survey of Calculus	
MATH	2253	Calculus I	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	
2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours)

Any course approved in Areas C-F	0-9
Humanities	3-9
Mathematics or Science	0-8
Social Sciences	3-9
Degree Program Total	**60**

Computer Science

(Bachelor of Arts and Bachelor of Science Degrees Offered)

The Computer Science program is concerned with the science and practice of developing and using software systems in industry and business. Software systems are used in many application areas such as information management, engineering and scientific support, and process control. They may be designed to support one user or many users and may consist of one computer or "networks" of many interconnected machines.

The baccalaureate programs in Computer Science emphasize the entire scope of computer science, ranging from basic hardware principles through the system and application software levels to the use and management of such systems. The Bachelor of Arts degree is designed for students wanting an international flavor for their study, since many opportunities are available with multinational corporations. The Bachelor of Science degree is designed for students wanting a maximum technical preparation for their career.

Both degrees require a grade of "C" or better in all CS courses applied to degree requirements.

Both degrees have Core requirements, Major requirements, and Directed Electives. The Core provides basic coursework to ensure that the graduate is well-rounded as an educated individual. The Major contains those CS courses considered fundamental to the field, regardless of any specialization. The Directed Electives provide depth beyond the Core to support the student's professional preparation.

Computer Science
Bachelor of Arts Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4
Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2
Area C Humanities/ Fine Arts (6 hours)			
Take one from each of the following two groups:			
1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)

MATH	2253	Calculus I	4
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)

Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	
2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours*)

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
CS	2224	Computer Architecture and Assembly Language	4
MATH	2254	Calculus II	4

*1 hour from MATH 1113 [A] and 1 hour from MATH 2253 [D] are counted here

Major (39 hours, including 12 hours of Area F CS courses)

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
CS	2224	Computer Architecture and Assembly Language	4
CS	2642	Computers and Society	2
CS	3123	Programming Language Concepts	3
CS	3153	Database Systems	3
CS	3244	Operating Systems	4
CS	3423	Data Structures and Algorithm Analysis	3
CS	4324	User-Centered Design	4
CS	4624	Software Engineering	4
		Project Course	4

A course at the senior level that requires a major project with substantial, sustained effort over a significant portion of the term. The course, particularly in light of the major project, represents a capstone effort on the part of the students as they call on many of their previous academic experiences in meeting the challenges of the major project. Requirements include both a carefully prepared report and an oral presentation to be delivered at the end of the term. Speech and technical writing are included among other relevant prerequisites for the course. The overall grade for the completed project represents at least one-third of the course grade. The project reports (with complete documentation) are kept by the CS Department as an example of students' exit-level work. Courses that meet this definition:

CS	4283	Real-Time Systems
CS	4354	Computer Graphics and Multimedia
CS	4554	Expert Systems
CS	4724	Software Engineering Project
CS	4804	Senior Project
CS	4904	Senior-level Special Topics [when so designated by CS Faculty]

Directed Electives (33 hours)

A&S	2023	Information and Research	2
ENGL	2010	Technical Writing	3
MATH	2260	Probability and Statistics I	3
Take one of the following:			3-4
IET	3403	Industrial Experimentation	
MATH	3261	Probability and Statistics II	
MATH	3345	Discrete Mathematics	
		Foreign Language (if not taken in the core)	3
		International Studies Minor	15
		Free Electives	3-7
		(Not including College Algebra; must be used to complete CS 2224 Computer Architecture and Assembly Language for USG transfers who have a completed Area F without the equivalent course.)	
		Degree Program Total	**120**

Computer Science
Bachelor of Science Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/ Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)

MATH	2253	Calculus I	4
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	

2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours*)

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
CS	2224	Computer Architecture and Assembly Language	4
MATH	2254	Calculus II	4

*1 hour from MATH 1113 [A] and 1 hour from MATH 2253 [D] are counted here

Major (45-47 hours, including 12 hours of Area F CS courses)

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
CS	2224	Computer Architecture and Assembly Language	4
CS	2642	Computers and Society	2
CS	3123	Programming Language Concepts	3
CS	3153	Database Systems	3
CS	3244	Operating Systems	4
CS	3423	Data Structures and Algorithm Analysis	3
CS	4324	User-Centered Design	4
CS	4624	Software Engineering	4
		Upper-level CS Electives	6-8
		Project Course	4

A course at the senior level that requires a major project with substantial, sustained effort over a significant portion of the term. The course, particularly in light of the major project, represents a capstone effort on the part of the students as they call on many of their previous academic experiences in meeting the challenges of the major project. Requirements include both a carefully prepared report and an oral presentation to be delivered at the end of the term. Speech and technical writing are included among other relevant prerequisites for the course. The overall grade for the completed project represents at least one-third of the course grade. The project reports (with complete documentation) are kept by the CS Department as an example of students' exit-level work. Courses that meet this definition:

CS	4283	Real-Time Systems
CS	4354	Computer Graphics and Multimedia
CS	4554	Expert Systems
CS	4724	Software Engineering Project
CS	4804	Senior Project
CS	4904	Senior-level Special Topics [when so designated by CS Faculty]

Directed Electives (25-27 hours)

Science 6-8

Students in the BS degree program are required to have four science-related courses subject to the following rules:

- Two lab science courses which are used to satisfy Area D of the core;
- One course in calculus-based physics, which may be used in Area D but must be taken as a directed elective if not taken in Area D;
- The remainder to make the total of four may be taken as lab sciences or as other approved courses that provide breadth and/or depth in the natural sciences or otherwise explore the scientific method; and
- Two of the four courses must be a sequence in the same discipline.

A&S	2023	Information and Research	2
ENGL	2010	Technical Writing	3
MATH	2260	Probability and Statistics I	3
MATH	3345	Discrete Mathematics	4
Take one of the following:			3-4
IET	3403	Industrial Experimentation	
MATH	3261	Probability and Statistics II	
		Free Electives (Not including College Algebra; must be used to complete CS 2224 Computer Architecture and Assembly Language for USG transfers who have a completed Area F without the equivalent course.)	3-4
		Degree Program Total	**120**

Certificate in Programming

The Certificate in Programming prepares students with post-secondary education or several years of work experience, to enter the Computer Programming field as a career change. The focus is on sharpening programming skills. The curriculum involves an on-campus lockstep program, that includes two classes per semester for three semesters (6 classes, 23 semester hours). New students may enter in the program in either the fall or spring semester. Participants are enrolled in specially scheduled sections that feature compressed scheduling. The six classes included in this program are: CS 1301, CS 1302, CS 3153, CS 4324 , CS 4624, and a Capstone Project.

Mathematics

(Bachelor of Arts and Bachelor of Science Degrees Offered)

Programs in Mathematics

The programs in Mathematics are designed to prepare the student for further study in mathematics, education, or other subjects or for employment in a variety of fields.

The program of study emphasizes an analytic approach, encouraging students to approach problems as a whole and reduce them to components which are susceptible to mathematical treatment. A substantial body of specific mathematical knowledge is included in the course of study.

The B.S. degree candidate will, through the nature of the mathematics electives and the opportunities offered by other departments, have a scientifically and technically oriented program which allows entry into many fields of science, engineering, and technology as well as education and business. The B.A. candidate will have a strong background in Mathematics and a strong international orientation.

The mathematics portion of the major under the B.S. degree consists of three components: Required Courses, Mathematics Electives, and Guided Electives. Although the Required Courses provide the bulk of the mathematics in the degree, they also provide a framework for other series of Mathematics courses to be included under Mathematics Electives and Guided Electives. Students planning to attend graduate school in Mathematics are urged to select these courses carefully in consultation with an advisor. Students planning to seek employment in business or industry should consider a minor in a related field, such as computer science. A computer science minor can be completed within the Guided Electives of the Mathematics degree.

Through the second major in Mathematics and the minor in Mathematics, students in other fields may acquire a substantial background and competence in Mathematics.

Advising for Pre-Engineering Program

The Mathematics Department conducts a program of advisement for freshmen and sophomores who wish to begin college locally, but plan to transfer to a full engineering program later. Students who wish to participate in this program should enter as mathematics majors. They will be asked later to sign a statement that their intention is to transfer to an engineering program at another college rather than to complete a mathematics degree.

The advisors in the program will guide the students through an organized course of study which will provide a strong preparation in mathematics and science for the study of engineering and which will transfer with minimum loss of credit or time to most engineering programs.

For those students who declare the college or university to which they wish to transfer, the advisor will endeavor to obtain a catalog for that college or university and design a specific program for transfer.

Mathematics
Bachelor of Arts Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/ Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)			
MATH	2253	Calculus I	4
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	

2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours*)

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
MATH	2254	Calculus II	4
MATH	2255	Calculus III	4

*1 hour from MATH 1113 [A] and 1 hour from MATH 2253 [D] are counted here

Required Courses (31 hours)

A&S	2023	Information and Research	2
MATH	2306	Ordinary Differential Equations	3
MATH	3256	Linear Algebra and Calculus	3
MATH	3312	Linear Algebra	4
MATH	3320	The Real Line	4
MATH	3321	Functions of a Real Variable	4
MATH	3345	Discrete Mathematics	4
MATH	4440	Abstract Algebra	4
MATH	4451	Applications of Mathematics	3

Mathematics Electives **8**

Any mathematics course numbered 2300 or above, excluding those for which dual credit is not allowed.

Foreign Language and International Studies Minor **18**

Guided Electives **3**

May include additional mathematics courses or other courses chosen in consultation with an advisor. May not include mathematics courses numbered less than 2000, or courses for which dual credit is not allowed.

Degree Program Total **120**

Mathematics
Bachelor of Science Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/ Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)			
MATH	2253	Calculus I	4
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	

2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours*)

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
MATH	2254	Calculus II	4
MATH	2255	Calculus III	4

*1 hour from MATH 1113 [A] and 1 hour from MATH 2253 [D] are counted here

Required Courses (31 hours)

A&S	2023	Information and Research	2
MATH	2306	Ordinary Differential Equations	3
MATH	3256	Linear Algebra and Calculus	3
MATH	3312	Linear Algebra	4
MATH	3320	The Real Line	4
MATH	3321	Functions of a Real Variable	4
MATH	3345	Discrete Mathematics	4
MATH	4440	Abstract Algebra	4
MATH	4451	Applications of Mathematics	3

Mathematics Electives **9**

Any mathematics course numbered 2300 or above, excluding those for which dual credit is not allowed.

Science Requirement

Physics 2211K and Physics 2212K must be completed. Students are urged to satisfy this requirement in Area D of the core. If this is not done, then Guided Electives must be used.

Guided Electives **20**

May include additional mathematics courses or other courses chosen in consultation with an advisor. May not include mathematics courses numbered less than 2000, or courses for which dual credit is not allowed.

Degree Program Total **120**

Second Major in Mathematics

A student completing the B.A. or B.S. degree in a field other than Mathematics may receive a second major in Mathematics at the same time to accompany that degree by completing the following courses. Note that additional courses which are the prerequisites to these courses are required by implication.

Required Courses

MATH	2306	Ordinary Differential Equations	3
MATH	3256	Linear Algebra and Calculus	3
MATH	3312	Linear Algebra	4
MATH	3320	The Real Line	4
MATH	3321	Functions of a Real Variable	4
MATH	3345	Discrete Mathematics	4
MATH	4440	Abstract Algebra	4
MATH	4451	Applications of Mathematics	3

Second Degree in Mathematics

Students who receive a degree from SPSU in a field other than Mathematics may receive a B.S. with a major in Mathematics by completing all the requirements for the Mathematics degree. The same courses may be used to fulfill requirements for both degrees, but there must be at least 30 semester hours used to fulfill the requirements for the Mathematics degree which are not used to fulfill the requirements for any other degree.

Physics

(Bachelor of Arts and Bachelor of Science Degrees Offered)

The Physics degree program is designed to prepare students for industrial employment or for graduate study in Physics or in a variety of other disciplines. Students should choose their electives in consultation with their advisor so as to meet their individual career objectives.

Students who are earning B.S. degrees in other fields at Southern Polytechnic State University may also earn a second major in Physics. The double major will provide students with the understanding of the basic science that underlies all of engineering.

Physics
Bachelor of Arts Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/ Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)			
MATH	2253	Calculus I	4
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	
2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours*)

MATH	2254	Calculus II	4
MATH	2255	Calculus III	4
PHYS	2211K	Principles of Physics I	4
PHYS	2212K	Principles of Physics II	4

*1 hour from MATH 1113 [A] and 1 hour from MATH 2253 [D] are counted here

Major (27 hours)

PHYS	3210	Intermediate Mechanics	4
PHYS	3220	Electromagnetism I	3
PHYS	3410K	Electronics Laboratory	2
PHYS	3500K	Introduction to Computational Physics	2
PHYS	3710	Modern Physics	4
PHYS	3720L	Modern Physics Laboratory	1
PHYS	4210	Quantum Physics	4
PHYS	4230	Thermal Physics	4
PHYS	4410K	Advanced Measurements Laboratory	2
PHYS	4430	Capstone Physics Project	1

Other Requirements (33 hours)

A&S	2023	Information and Research	2
MATH	2306	Ordinary Differential Equations	3
		Free Electives	6
		Upper Division Physics Electives	4
		Foreign Language and International Studies Minor	18
		Degree Program Total	**120**

Physics
Bachelor of Science Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/ Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)			
MATH	2253	Calculus I	4
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	

2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours*)

MATH	2254	Calculus II	4
MATH	2255	Calculus III	4
PHYS	2211K	Principles of Physics I	4
PHYS	2212K	Principles of Physics II	4

*1 hour from MATH 1113 [A] and 1 hour from MATH 2253 [D] are counted here

Major (27 hours)

PHYS	3210	Intermediate Mechanics	4
PHYS	3220	Electromagnetism I	3
PHYS	3410K	Electronics Laboratory	2
PHYS	3500K	Introduction to Computational Physics	2
PHYS	3710	Modern Physics	4
PHYS	3720L	Modern Physics Laboratory	1
PHYS	4210	Quantum Physics	4
PHYS	4230	Thermal Physics	4
PHYS	4410K	Advanced Measurements Laboratory	2
PHYS	4430	Capstone Physics Project	1

Other Requirements (33 hours)

A&S	2023	Information and Research	2
MATH	2206	Ordinary Differential Equations	3
		Free Electives	6
		Upper Division Physics Electives	4-10
		Directed Electives approved by the department	12-18
		Degree Program Total	**120**

SPSU students who wish to earn a second major in physics will be required to take the following 22 hours of course work: PHYS 3210, 3220, 3410K, 3500K, 3710, 3720L, 4230, 4410K.

Technical and Professional Communication

(Bachelor of Arts and Bachelor of Science Degrees Offered)

The Bachelor's programs in Technical and Professional Communication and International Technical Communication are designed to prepare students for a variety of communication careers. Possible positions include documentation and manual writer, technical editor, media specialist, proposal writer, graphics specialist, and communication training specialist. The program also can serve as a pre-professional background for students who plan to attend graduate school.

Students pursuing the degree must complete (1) the Core Curriculum, (2) required upper division courses in technical and professional communication, (3) either a group of technology courses (BS) or the International Studies minor (BA), (4) Arts and Sciences courses, especially those in science, technology, and society and in information and research, and (5) free electives.

Included below are the complete requirements for the programs.

International Technical Communication
Bachelor of Arts Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1111	College Algebra	3

Area B Institutional Options (4 hours)

SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/Fine Arts (6 hours)

Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)

Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	

CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	
Take one from the following group:			3-4
MATH	1113	Precalculus	
MATH	2240	Survey of Calculus	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	
2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours)

ENGL	2000	Business Communication	3
ENGL	2010	Technical Writing	3
		Mathematics	6
		Science, 3 of which must be a programming language	6

Required Courses (17 hours)

A&S	2023	Information and Research	2
TCOM	3000	Advanced Grammar and Editing	3
TCOM	4030	Foundations of Graphics or ARTS 3000	3
TCOM	4100	Small Group Communication	3
TCOM	4160	Rhetoric: History, Theory, and Practice	3
TCOM	4800	Project Portfolio	3

Electives (21 hours)

ARTS	3000	Visual Thinking	3
ENGL	4000	Literature and Technology	3
TCOM	3010	Science Writing	3
TCOM	3020	Proposals	3
TCOM	3030	Technical Training	3

TCOM	3050	Journalism	3
TCOM	3060	International Communication	3
TCOM	3901-3	Special Topics	1-3
TCOM	4030	Foundations of Graphics	3
TCOM	4045	Foundations of Multimedia	3
TCOM	4070	Manuals	3
TCOM	4130	Online Communication	3
TCOM	4170	Video Production	3
TCOM	4700	Internship	3
		International Studies Minor*	15
		Free Electives	6-7
		Degree Program Total	**120**

*Note that the International Studies Minor also requires completion of a language requirement by (1) testing or demonstrating proficiency in one foreign language or (2) completing FREN 1002, GRMN 1002, or SPAN 1002.

Technical and Professional Communication
Bachelor of Science Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1111	College Algebra	3

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)

Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Take one from the following group:			3-4
MATH	1113	Precalculus	
MATH	2240	Survey of Calculus	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	

2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours)

ENGL	2000	Business Communication	3
ENGL	2010	Technical Writing	3
		Mathematics	6
		Science, 3 of which must be a programming language	6

Required Courses (17 hours)

A&S	2023	Information and Research	2
TCOM	3000	Advanced Grammar and Editing	3
TCOM	4030	Foundation of Graphics or ARTS 3000	3
TCOM	4100	Small Group Communication	3
TCOM	4160	Rhetoric: History, Theory, and Practice	3
TCOM	4800	Project Portfolio	3

Electives (21 hours)

ARTS	3000	Visual Thinking	3
ENGL	4000	Literature and Technology	3
SIS	3700	International Issues in Science and Technology	3
TCOM	3010	Science Writing	3
TCOM	3020	Proposals	3
TCOM	3030	Technical Training	3
TCOM	3050	Journalism	3
TCOM	3060	International Communication	3
TCOM	3901-3	Special Topics	1-3
TCOM	4030	Foundations of Graphics	3
TCOM	4045	Foundations of Multimedia	3
TCOM	4070	Manuals	3
TCOM	4130	Online Communication	3
TCOM	4170	Video Production	3
TCOM	4700	Internship	3

TECHNICAL CONCENTRATION **15**

NOTE: At least 6 hours must be 3000 level or above.

This part of the curriculum offers the student two choices: Option 1 and Option 2. Option 1 provides breadth by requiring students to take one course from each of four major technical fields. Option 2 provides depth by requiring students to take 15 hours in one technical area.

NOTE: Some students may want to pursue an official minor in one of the fields that follow, in which case they need to check catalog requirements carefully. Requirements for minors will differ from those listed in Option 2.

Option 1 Broad View

A total of 15 hours with at least one course from each of the following areas:

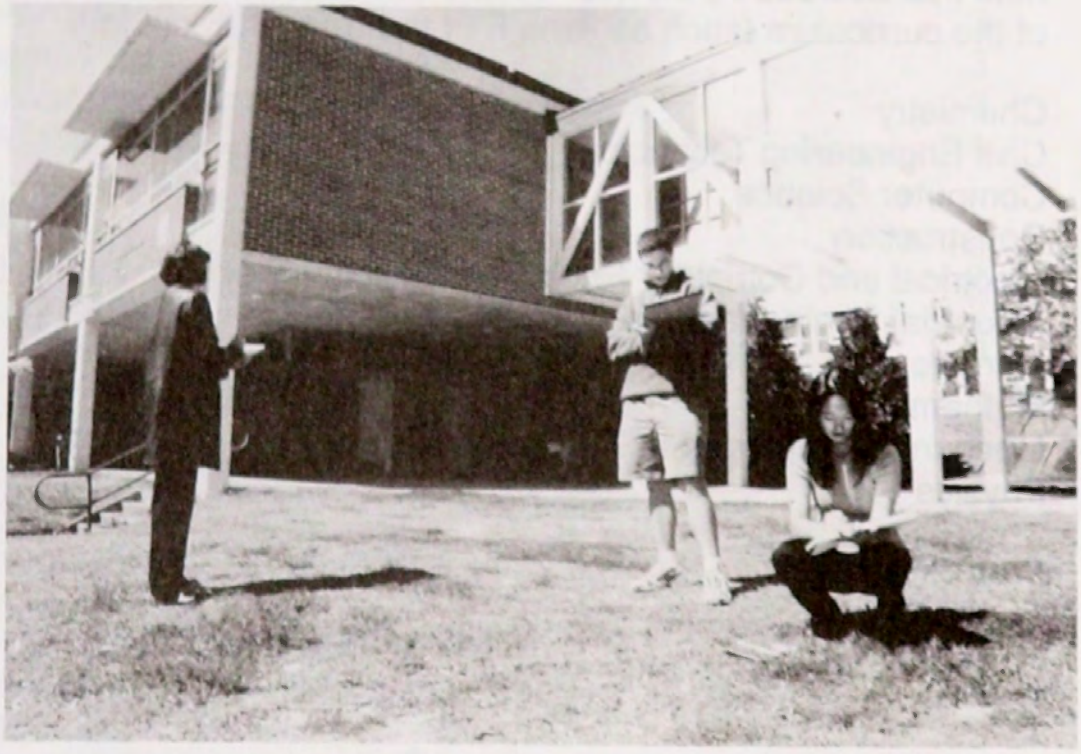
1: Built Environment: Take one course from Construction (CNST) or Civil Engineering Technology (CET).
2: Industrial Processes: Take one course from Apparel/Textile Engineering Technology (ATET) or Industrial Engineering Technology (IET).
3: Electrical and Computer Engineering Technology: Take one course from Electrical and Computer Engineering Technology (ECET).
4: Mechanical: Take one course from Mechanical Engineering Technology (MET).

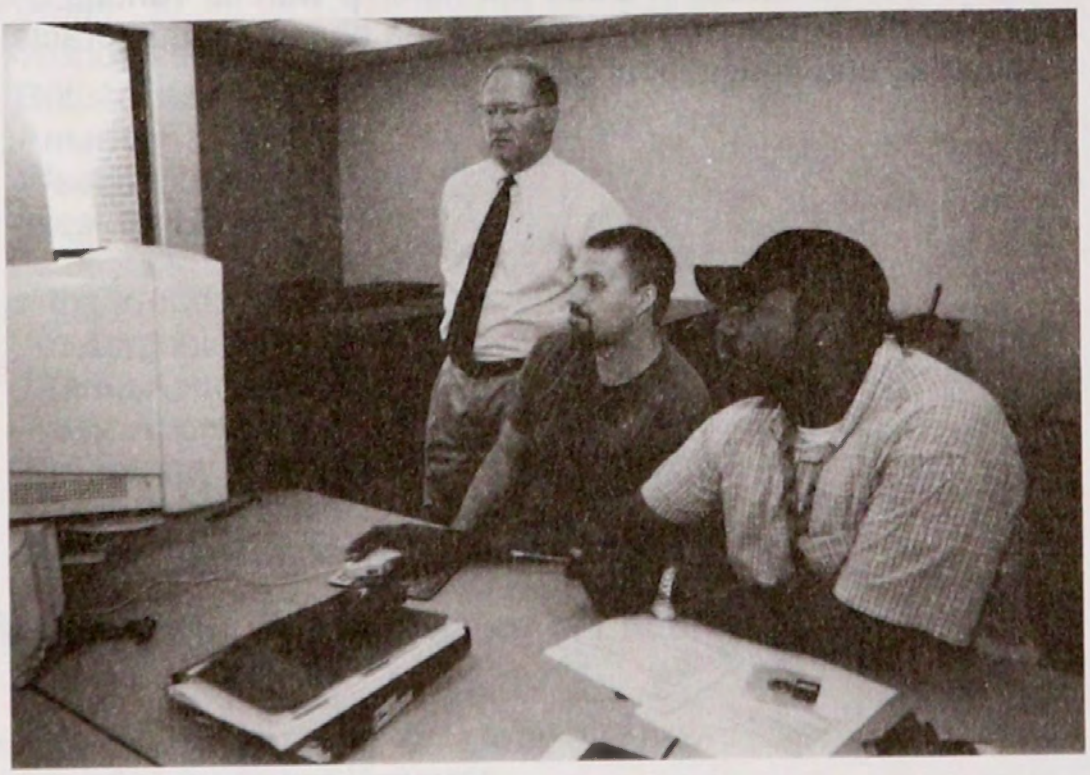
Option 2 In-Depth View

Fifteen hours must be taken in one area. Students may choose courses from any department other than Humanities and Technical Communication or Social and International Studies. The specific options are described below. Note that some courses require prerequisites that are not included in the 15 hours. Also, note that courses cannot be "double counted" for both this area and another part of the curriculum (such as Area F of the Core Curriculum).

Chemistry
Civil Engineering Technology
Computer Science
Construction
Electrical and Computer Engineering Technology
Industrial Engineering Technology
Management
Mathematics
Mechanical Engineering Technology
Physics

Free Electives	**6-7**
Degree Program Total	**120**





School of Management

The mission of the School of Management is to serve the needs of the students of Southern Polytechnic State University, the citizens, and industry within the State of Georgia for instruction in the science and practice of management.

The School offers courses of instruction leading to the master's and bachelor degrees with a major in Management, undergraduate instruction leading to a minor in Management, and survey courses in Economic Principles.

Through excellent classroom teaching and other relevant educational experiences, the School seeks to enhance its students' understanding of the current and developing needs of technology-oriented enterprise, and to prepare them with theoretical knowledge, analytical techniques, and interpersonal skills necessary for increasingly responsible positions within the work environment.

It is the mutual goal of the administration, faculty, staff, and students to offer the highest quality academic programs.

The faculty and staff strive to promote an atmosphere in which open communication and free exchange of ideas can flourish in a tolerant and supportive environment. The school encourages and supports scholarship of various kinds by its faculty, including curriculum and course development, research, consulting, publication, case study development, student research, advising, and active participation in relevant professional associations.

The graduate program is designed for a predominantly part-time student population who work in professional occupations. The program is committed to diversity of both student and faculty with regard to race, ethnicity, and gender.

The School exists in close partnership with its various constituencies. It addresses the needs and concerns of the alumni, and interacts with the business, industrial, and educational communities.

Applied Science

(Bachelor of Applied Science Degree Offered)

This program is designed to cap appropriate associate degree programs with a primarily upper-level, broadly-based component at Southern Polytechnic State University. Admission to the program requires the completion of an associate of applied science or associate of applied technology degree. This program provides a general coverage of management and systems together with written and oral communications coursework to lead a candidate into a supervisory role in business or industry.

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/Fine Arts (6 hours)

Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)

MATH	2240	Survey of Calculus	3
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	
2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Technical Block **38**

Transfer credit of up to 38 hours for courses from approved associate degree programs

Required Courses (40 Hours*)

ECON	1101**	Introduction to Economics	3
MATH	2240**	Survey of Calculus	3
MGNT	3105	Management and Organizational Behavior	3
MGNT	3125	Basic Business Finance	3
MGNT	3135	Marketing Principles	3
MGNT	3145	Legal Environment	3
MGNT	3155	Total Quality Management	3
MGNT	3160	Management Science	3
MGNT	3505	Managerial Statistics	3
MGNT	4125	Technology and Public Issues	3
MGNT	4135	Project Management	3
MGNT	4145	International Management	3
MGNT	4151	Production and Operations Management I	3
MGNT	4595	Business Strategy	3
		Upper Level Free Electives	3
		Degree Program Total	**120**

* 1 hour from MATH 1113 [A] is counted here.

** Required only of students not taking these courses as a part of the core curriculum.

Management

(Bachelor of Arts and Bachelor of Science Degrees Offered)

This program will serve the needs of those students who desire undergraduate education in management. Emphasis will be upon productivity as it results from the application of technology and creativity to the process of work within industrial and service enterprises.

The objectives of the program are as follows:

1. To prepare Southern Polytechnic State University graduates for successful and productive careers in the management of technology-based organizations and enterprises.
2. To develop graduates who possess the knowledge and ability to enhance the competitiveness of business and industry within the State of Georgia through the application of technology to production processes.
3. To make available a wide variety of undergraduate management courses at Southern Polytechnic State University so that students in other fields may have the opportunity to take advantage of instruction in this field.
4. To increase the institution's value to business, industry, and the State of Georgia by increasing the scope of our technology-based instruction to include the field of management.

Management
Bachelor of Arts Program

Core Curriculum

			Hours
Area A Essential Skills (9 hours)			
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4
Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2
Area C Humanities/Fine Arts (6 hours)			
Take one from each of the following two groups:			
1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	
2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)

MATH	2240	Survey of Calculus	3

Take any two courses from the following for a total of 8 hours: 8

ASTR	1000K	Introduction to the Universe
BIOL	2107K	Biology Principles I
BIOL	2108K	Biology Principles II
CHEM	1211K	Principles of Chemistry I
CHEM	1212K	Principles of Chemistry II
PHYS	1111K	Introductory Physics I
PHYS	1112K	Introductory Physics II
PHYS	2211K	Principles of Physics I
PHYS	2212K	Principles of Physics II

Area E Social Sciences (12 hours)

Take one from each of the following four groups:

1) American Context: 3

HIST	2111	U.S. History I
HIST	2112	U.S. History II
POLS	1101	American Government

(All satisfy the legislative requirement for U.S. Constitution and Georgia History)

2) World History: 3

HIST	1011	World Civilization: Ancient
HIST	1012	World Civilization: Medieval
HIST	1013	World Civilization: Modern

3) Behavioral Sciences: 3

ECON	1101	Introduction to Economics
PSYC	1100	Contemporary Issues in Psychology
PSYC	1101	Introduction to General Psychology

4) Cultures and Societies: 3

ANTH	1102	Introduction to Anthropology
ES	1100	Ethnic Studies
GEOG	1101	Introduction to Human Geography
POLS	2401	Global Issues
RELG	1200	World Religion

Area F (18 hours)

ACCT	2101	Accounting I	3
ACCT	2102	Accounting II	3
ECON	2105	Macro Economics	3
ECON	2106	Micro Economics	3
MGNT	1115	Introduction to Management	3
MGNT	2201	Introduction to Computer Applications	3

Common Body of Knowledge (24 hours)

MGNT	3105	Management and Organizational Behavior	3
MGNT	3125	Basic Business Finance	3
MGNT	3135	Marketing Principles	3
MGNT	3145	Legal Environment	3
MGNT	4115	Human Resources Management	3
MGNT	4125	Technology and Public Issues	3
MGNT	4151	Production and Operations Management I	3
MGNT	4595	Business Strategy	3

Required Courses (18 hours*)

MGNT	3155	Total Quality Management	3
MGNT	3160	Management Science	3
MGNT	3205	Management Information Systems	3
MGNT	3505	Managerial Statistics	3
MGNT	4145	International Management	3
		Free Electives	2

*1 hour from MATH 1113 [A] is counted here.

Foreign Language and International Studies Minor	**18**
Degree Program Total	**120**

Management
Bachelor of Science Program

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4

Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	

2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)			
MATH	2240	Elements of Calculus	3
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	

(All satisfy the legislative requirement for U.S. Constitution and Georgia History)

2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours)

ACCT	2101	Accounting I	3
ACCT	2102	Accounting II	3
ECON	2105	Macro Economics	3
ECON	2106	Micro Economics	3
MGNT	1115	Introduction to Management	3
MGNT	2201	Introduction to Computer Applications	3

Common Body of Knowledge (24 hours)

MGNT	3105	Management and Organizational Behavior	3
MGNT	3125	Basic Business Finance	3
MGNT	3135	Marketing Principles	3
MGNT	3145	Legal Environment	3
MGNT	4115	Human Resources Management	3
MGNT	4125	Technology and Public Issues	3
MGNT	4151	Production and Operations Management I	3
MGNT	4595	Business Strategy	3

Required Courses (18 hours)

ENGL	2000	Business Communication	3
MGNT	3155	Total Quality Management	3
MGNT	3160	Management Science	3
MGNT	3205	Management Information Systems	3
MGNT	3505	Managerial Statistics	3
MGNT	4145	International Management	3

Concentration Courses or a Minor (18 Hours*)

Choose one of the following concentrations or a minor:

Management of Operations and Technology

MGNT	4135	Project Management	3
MGNT	4152	Production and Operations Management II	3
MGNT	4185	Technology Management	3
MGNT	4195	Current Readings in Management of Technology and Operations	3
		Free Electives	5

Management Information Systems

CS	1113	BASIC Programming	3
MGNT	4140	Management of Networks and Telecommunications	3
MIS	3500	Database Applications	3
MIS	4100	Business Systems Analysis and Design	3
		Free Electives	5

Marketing

MKTG	3210	Professional Selling	3
MKTG	3224	Business Marketing	3
MKTG	3228	Market Research	3
MKTG	4100	Marketing Management	3
		Free Electives	5

* 1 hour from MATH 1113 [A] is counted here.

Minor **18**

Instead of a concentration, the student can choose to complete any non-management minor and free electives for a total of 18 hours.

Degree Program Total **120**

College of Technology

It is the goal of the College of Technology to serve its customers: students, employers of graduates, and those who pay for education (students, parents, employers, taxpayers, and state legislators); by providing high quality, current, relevant and applicable technical education. It accomplishes this goal by virtue of an experienced energetic faculty, modern laboratory facilities, continued interaction with industry, and a talented student population. As technology is enhanced at an ever increasing rate, supported by the computer, it is essential that the College continuously strive to develop its curriculum and laboratories accordingly. It is the goal of the College to contribute to the development of students into productive people, capable of making significant contributions to the creation of wealth and the betterment of society. The faculty of the College of Technology is committed to assisting students in achieving their maximum potential by instructing them in the classroom, by helping them assess career options, and by serving as role models for them — the nation's most valuable resource.

The College of Technology offers Bachelor of Science degree programs with majors in Apparel/Textile Engineering Technology, Civil Engineering Technology, Computer Engineering Technology, Construction, Electrical Engineering Technology, Industrial Distribution, Industrial Engineering Technology, Mechanical Engineering Technology, Surveying and Mapping, and Telecommunications Engineering Technology, and Master of Science degree programs with majors in Construction, Engineering Technology, and Quality Assurance. The Quality Assurance program is offered both in the traditional manner and also via the Internet.

Apparel/Textile Engineering Technology

(Bachelor of Science Degree Offered)

The apparel/textile industry is one of the largest in the United States. Dealing with fibers and their almost innumerable end uses; this vast industrial complex includes fibers found in recreational items, medical products, civil engineering applications, architectural products, aircraft, automobiles, clothing, home furnishings, space craft, etc. From the sourcing and testing of raw materials to the shipment and sale of the finished product, this industry offers creative and challenging careers. There are excellent opportunities for qualified people to move rapidly into executive-level positions. Both apparel and textile concentrations are available for study at SPSU.

The Apparel Computer Systems Technology Concentration

Recent advances in computer technology have transformed the creative processes involved in the product development and production of apparel products into a network of computer systems. Students and graduates work with new equipment and technologies, computers and software to create quality products in a fast-paced environment.

The Apparel Systems Technology Concentration

The business of designing, producing/sourcing, and distributing sewn products such as apparel is one of the largest and most important industries in the USA. Excellent starting salaries, rapid advancement, job diversity, and travel are just some of the benefits to apparel technology graduates. The challenge is to use engineering and management principles to create apparel better, faster and more profitably.

The Textile Engineering Technology Concentration

The US textile industry is the most efficient high-tech manufacturer of textiles in the world and instrumental in today's global marketplace. Each year the industry invests more than $2 billion in new plants and equipment to remain competitive. Computer-driven operations, robotics, and lasers are common sights in many facilities. The industry offers a wide range of interesting and exciting careers. There is a great demand for scientists, engineers, chemists, and computer specialists as well as technologically-trained individuals to manage state-of-the-art equipment.

Core Curriculum

Area A Essential Skills (9 hours)			**Hours**
ENGL	1101	Composition I	3
ENGL	1102	Composition II	3
MATH	1113	Precalculus	4
Area B Institutional Options (4 hours)			
SPCH	2400	Public Speaking	2
STS	2400	Science, Technology, and Society	2

Area C Humanities/ Fine Arts (6 hours)
Take one from each of the following two groups:

1) Literature of the World:			3
ENGL	2110	World Literature	
ENGL	2120	British Literature	
ENGL	2130	American Literature	
ENGL	2141	Western Literature I	
ENGL	2142	Western Literature II	
2) Art and Culture of the World:			3
ARTS	2001	Art Appreciation	
ARTS	2002	Drama Appreciation	
ARTS	2003	Music Appreciation	
FREN	1002	Elementary French II	
GRMN	1002	Elementary German II	
SPAN	1002	Elementary Spanish II	

Area D Science, Mathematics, and Technology (11 hours)

MATH	2253	Calculus I	4
Take any two courses from the following for a total of 8 hours:			8
ASTR	1000K	Introduction to the Universe	
BIOL	2107K	Biology Principles I	
BIOL	2108K	Biology Principles II	
CHEM	1211K	Principles of Chemistry I	
CHEM	1212K	Principles of Chemistry II	
PHYS	1111K	Introductory Physics I	
PHYS	1112K	Introductory Physics II	
PHYS	2211K	Principles of Physics I	
PHYS	2212K	Principles of Physics II	

Area E Social Sciences (12 hours)
Take one from each of the following four groups:

1) American Context:			3
HIST	2111	U.S. History I	
HIST	2112	U.S. History II	
POLS	1101	American Government	
2) World History:			3
HIST	1011	World Civilization: Ancient	
HIST	1012	World Civilization: Medieval	
HIST	1013	World Civilization: Modern	
3) Behavioral Sciences:			3
ECON	1101	Introduction to Economics	
PSYC	1100	Contemporary Issues in Psychology	
PSYC	1101	Introduction to General Psychology	
4) Cultures and Societies:			3
ANTH	1102	Introduction to Anthropology	
ES	1100	Ethnic Studies	
GEOG	1101	Introduction to Human Geography	
POLS	2401	Global Issues	
RELG	1200	World Religion	

Area F (18 hours*)

CHEM	1211K	Principles of Chemistry I	4
CS	1113	BASIC Programming**	3
EG	1210	Survey of Engineering Graphics	2
ENGL	2010	Technical Writing	3
IET	2227	Industrial Statistics	4

*1 hour from MATH 1113 [A] and 1 hour from MATH 2253 [D] are counted here

**CS 1301 is required for Apparel Computer Systems Technology Concentration

Major Courses (27 hours)

ATET	1000	Orientation	1
ATET	1040	Introduction to Computers for Textile/Apparel	3
ATET	1100	Fiber and Yarn Formation	5
ATET	1300	International Sourcing and Employee Systems	4
ATET	2500	Fabric Formation	5
ATET	3200	Production Data Systems	5
ATET	4440	Testing and Quality Control	4

Apparel Computer Systems Technology Concentration (41 hours)

ACCT	2101	Accounting I	3
ATET	2301	Apparel and Textile Computer Systems I	5
ATET	2600	Equipment/Systems Evaluation and Selection	3
ATET	3602	Apparel and Textile Computer Systems II	5
ATET	4670	Apparel/Textile Production Planning and Scheduling	4
CS	1302	Computer Science II	4
CS	3153	Database Systems	3
CS	4324	User-Centered Design	4
	or		
CS	4624	Software Engineering	
CS	4354	Computer Graphics and Multimedia	4
CS	4683	Management Information Systems	3
SPAN	1001	Elementary Spanish I	3

Apparel Systems Technology Concentration (42 hours)

ACCT	2101	Accounting I	3
ATET	2301	Apparel and Textile Computer Systems I	5
ATET	2600	Equipment/Systems Evaluation and Selection	3
ATET	3602	Apparel and Textile Computer Systems II	5
ATET	4670	Apparel/Textile Production Planning and Scheduling	4
ATET	4840	Textile/Apparel Product Manufacturing	2
ECON	1101	Introduction to Economics	3
IET	3339	Statistical Quality Control	4
IET	3424	Engineering Economy	3
IET	4405	Principles of Operations Research	4
IET	4427	Methods-Time-Measurement	3
SPAN	1001	Elementary Spanish I	3

Textile Engineering Technology Concentration (42 hours)

ATET	2701	Textile Processing Lab I	1
ATET	2900	Introduction to Textile/Polymer Chemistry †	2
ATET	3300	Introduction to Composite Structures	2
ATET	3700	Carpet Manufacturing	2
ATET	4320	Textile Wet Processing	3
ATET	4330	Textile Processing Lab II	1

ATET	4800	Textile Management Internship	1
ATET	4810	Ethics and Safety	1
ATET	4840	Textile/Apparel Product Manufacturing	2
ECON	1101	Introduction to Economics	3
IET	2432	Engineering Product and Process Cost Estimating I	3
IET	3433	Engineering Product and Process Cost Estimating II	3
IET	4422	Plant Layout and Materials Handling	4
IET	3339	Statistical Quality Control	4
IET	3424	Engineering Economy	3
MATH	2254	Calculus II	4
MGNT	3105	Management and Organizational Behavior	3
PHYS	1111K*	Introductory Physics I	4
PHYS	1112K*	Introductory Physics II	4
		Degree Program Total	**129**

*PHYS 1111K and PHYS 1112K are required for Textile Engineering Technology Concentration only. If they are not taken to satisfy Area D, Lab Science requirement, the physics courses will replace IET 4422 and MATH 2254 as requirements.

†CHEM 2510 or CHEM 2511K may be substituted for ATET 2900

Civil Engineering Technology

(Bachelor of Science Degree Offered)

Civil Engineering Technology is a broad field producing engineering technologists with versatile backgrounds in a number of subject areas. Southern Polytechnic State University graduates have the qualifications to enter careers in construction, structural design, surveying, transportation, hydraulics, site planning and the environmental technologies. A student may select elective courses from a variety of specialty areas including Environmental, Structural, Surveying or Transportation.

Electives in Environmental will enable a graduate to pursue a career in planning, analysis and design of systems to correct or control the pollution of air, land or water. Many career opportunities exist with municipalities, industry, consulting firms and governmental agencies.

Graduates with Structural electives are prepared for positions involving the design, plan preparation, construction, and inspection of modern buildings and bridges. In their coursework, students analyze and design structural members of steel, reinforced concrete and other engineering materials.

Graduates interested in Surveying can choose from electives in boundary, topographic, geodetic, route, and construction surveying. In laboratories for these courses, students utilize state-of-the-art surveying equipment (including theodolites, total stations, GPS units, and field-to-plot systems) in developing maps, designing and laying out construction projects and in planning land development for residential and commercial enterprises.

Electives in Transportation provide a graduate with the knowledge and understanding to perform design and plan maintenance of all types of transportation facilities including streets, highways, mass transit systems, railroads, airfields, ports, harbors and pipelines.

Non-Degree Surveying Students

The Civil Engineering Technology department offers coursework which is accepted by the Georgia Board of Registration for Engineers and Land Surveyors in satisfying the 14 semester credit hour educational requirement for surveying licensure. The required courses include a minimum of 10 semester credit hours of surveying and 4 semester credit hours of Hydrology. Since the courses are all college credit work, students wishing to take only the surveying courses must

1. meet the general admission requirements for the university
2. obtain credit for all prerequisite courses by
   a. completing the courses at Southern Polytechnic State University, or
   b. transferring the courses from another college, or
   c. obtaining credit by examination for the courses.

Professional Registration

Professional Engineer: In Georgia and approximately 35 other states in the U.S., the BS-CET degree along with the appropriate number of years of experience, and the passage of two 8-hour examinations (FE and PE), qualifies one to become a licensed Professional Engineer (PE). CET students are **strongly** urged to take one or more of the following courses, in addition to their regular requirements:

ECET	3000	Electrical Principles
MATH	2306	Ordinary Differential Equations
MET	3401	Thermodynamics I

Licensed Surveyor: CET majors whose curriculum contains at least 6 elective hours of surveying coursework meet the educational qualification to become licensed as a Professional Land Surveyor (PLS) in Georgia. In addition, they must obtain 4 years of acceptable experience and pass the FLS and PLS examinations.

Civil Engineering Technology

First Year

			Hours Per Week		Credit
First Semester			**Class**	**Lab**	**Hours**
CET	1001	Orientation to CET Profession	1	0	1
CET	1002	Orientation to CET Computer Practices	0	2	1
CET	2160	Civil Graphics and Computer Aided Drafting	2	6	4
CS	1113	BASIC Programming	2	2	3
	or				
CS	2123	C Programming			
	or				
CS	2143	FORTRAN Programming			
ENGL	1101	English Composition I	3	0	3
MATH	1113	Precalculus	4	0	4
		Total	**12**	**10**	**16**
Second Semester					
Area D		Lab Science*	3	3	4
ENGL	1102	English Composition II	3	0	3
MATH	2253	Calculus I	4	0	4
STS	2400	Science, Technology, and Society	2	0	2
SURV	2221	Surveying I	3	3	4
		Total	**15**	**6**	**17**

Second Year

			Hours Per Week		Credit
First Semester			**Class**	**Lab**	**Hours**
Area E		Group 1	3	0	3
CET	2214	Engineering Mechanics - Statics	3	0	3
ENGL	2010	Technical Writing	3	0	3
MATH	2254	Calculus II	4	0	4
PHYS	2211K	Principles of Physics I**	3	3	4
		Total	**16**	**3**	**17**
Second Semester					
Area C		Group 1	3	0	3
Area D		Lab Science*	3	3	4
CET	2215	Engineering Mechanics - Dynamics	2	0	2
CET	2219	Strength of Materials	3	3	4
SPCH	2400	Public Speaking	2	0	2
		Total	**13**	**6**	**15**

*Students are advised to take Chemistry I, Physics I, and either Chemistry II or Physics II as partial fulfillment of Area D and F requirements.

**Either trigonometry based PHYS 1111K (Introductory Physics I) or calculus based PHYS 2211K (Principles of Physics I) is accepted in the CET curriculum.

NOTES: CET students are required to earn a grade of "C" or better in all CET courses and courses used as CET electives. Students are required to earn a GPA of 2.0 or better in all CET courses.

For more information about Area C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Civil Engineering Technology

Third Year

			Hours Per Week		Credit
First Semester			Class	Lab	Hours
CET	3302	Construction Materials	3	3	4
CET	3316	Structural Analysis	4	0	4
CET	3321	Transportation Systems	3	3	4
CET	3343	Basic Fluid Mechanics	3	3	4
		CET Elective*			1
		Total			**17**
Second Semester					
Area E		Group 2	3	0	3
CET	3301	Soil Mechanics and Foundations	3	3	4
CET	3344	Fundamentals of Environmental Engineering Technology	3	3	4
CET	3371	Structural Steel Design I	3	0	3
	or				
CET	3381	Reinforced Concrete Design I			
		CET Elective*			3
		Total			**17**

Fourth Year

			Hours Per Week		Credit
First Semester			Class	Lab	Hours
Area E		Group 3	3	0	3
Area E		Group 4	3	0	3
CET	3324	Project Cost Analysis	4	0	4
CET	4444	Applied Hydrology	3	3	4
		Free Elective			2
		Total			**16**
Second Semester					
Area C		Group 2			3
CET	4480	Senior Project	1	9	4
		CET Elective*			8
		Total			**15**
		Degree Program Total			**130**

*CET Electives are any non-required 3000 or 4000 level CET/SURV courses. Up to 6 hours of SURV 3XXX and 4XXX courses may be used for CET electives

NOTE: CET students are required to earn a grade of "C" or better in all CET courses and courses used as CET electives. Students are required to earn a GPA of 2.0 or better in all CET courses.

Computer Engineering Technology

(Bachelor of Science Degree Offered)

The development of the microcomputer has created a need for engineering technologists with a specialized knowledge of computers and control systems. The bachelor degree in computer engineering technology was created to meet this need.

The degree program in computer engineering technology utilizes a core of mathematics, physics, and electronics courses. These courses provide the scientific and technical background for an in-depth study of the hardware and software aspects of computers and related systems.

The emphasis of the program is on microcomputers and their application to the solution of industrial problems relating to robotics, control, instrumentation, monitoring, data communications, networks, and automated testing.

Graduates of these programs are qualified for employment as engineering technologists with companies that utilize computers in computation and control activities as well as companies that design, manufacture, market, install, and service computers and computer networks.

Suggested areas of special interest:

1. **Embedded Systems: (take 2 of the following courses)**

ECET 4630	Digital Signal Processing
ECET 4720	Distributed Microcontrollers and PCs
ECET 4730	VHDL and Field Programmable Gate Arrays

Graduate will specialize in the design and implementation of smart devices used in products ranging from audio to medical to security systems. Both hardware design and programming at the system level will be stressed. The specialist will gain resume skills such as DSP and VHDL design, embedded micro-controller and embedded PC interfacing and programming.

2. **Networks: (take 2 of the following courses)**

ECET 4720	Distributed Microcontrollers and PCs
ECET XXXX	BS Telecom 3000-4000 course
ECET XXXX	BS Telecom 3000-4000 course

Graduate will specialize in the development and implementation of networks of computers and microcontrollers. Applications include tele-medicine, factory automation systems, point-of-sales systems, and robotics. There will be heavy emphasis of high-level programming using C, Visual C++, JAVA, Visual BASIC, HTML, Windows including NT, LINUX, TCP/IP, etc. Hardware will emphasize PCs and embedded PCs, smart devices, LAN technologies, and remote sensing and control.

Computer Engineering Technology

First Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ECET	1000	Orientation	2	0	2
ECET	1010	Fundamentals	1	3	2
EG	1210*	Survey of Engineering Graphics	1	3	2
ENGL	1101	English Composition I	3	0	3
MATH	1113	Precalculus	4	0	4
		Totals	**11**	**6**	**13**
Second Semester					
ECET	1100	Circuits I	3	3	4
ECET	1200	Digital I	3	3	4
ENGL	1102	English Composition II	3	0	3
MATH	2253	Calculus I	4	0	4
SPCH	2400	Public Speaking	2	0	2
		Total	**15**	**6**	**17**

Second Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ECET	2110	Circuits II	3	3	4
ECET	2300	Electronics I	3	3	4
MATH	2254	Calculus II	4	0	4
PHYS	1111K	Introductory Physics I (Area D, Lab Science)	3	3	4
		Total	**13**	**9**	**16**
Second Semester					
Area C		Group 2	3	0	3
ECET	2210	Digital II	3	3	4
ECET	2310	Electronics II	3	3	4
ENGL	2010*	Technical Writing	3	0	3
PHYS	1112K	Introductory Physics II (Area D, Lab Science)	3	2	4
		Total	**15**	**8**	**18**

*If courses other than Physics are used to satisfy Area D, Lab Science, it is recommended that you discuss course options with your assigned faculty advisor or the ECET department head prior to taking the annotated courses.

Since Physics I and II are requirements for the degree, it is strongly recommended that they be taken to satisfy the Lab Science component of Area D of the Core Curriculum It is also recommended that you discuss Lab Science options with your assigned faculty advisor or the ECET department head.

NOTES:CpET majors are required to earn a "C" or better in their ECET courses.

For more information about Areas C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Computer Engineering Technology

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ECET	3220	Digital III	3	3	4
ECET	3400	Data Communications	3	3	4
ECET	3600	Test Engineering	3	3	4
MATH	2335	Numerical Methods I	3	0	3
		Total	**12**	**9**	**15**
Second Semester					
Area E		Group 3	3	0	3
ECET	3410	High Frequency Systems	3	3	4
ECET	3700	PC Assembly Language and Interfacing	3	3	4
ECET	3810	Applications of C++, JAVA and HTML	2	3	3
MATH	2306	Ordinary Differential Equations	3	0	3
		Total	**14**	**9**	**17**

Fourth Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area C		Group 1	3	0	3
Area E		Group 1	3	0	3
ECET	3610	Introduction to Control Systems	3	3	4
ECET	4710	Network Programming and Interfacing	3	3	4
		CpET Electives			4
		Total			**18**
Second Semester					
Area E		Group 2	3	0	3
Area E		Group 4	3	0	3
ECET	4820	Communications Networks and the Internet	3	3	4
STS	2400	Science, Technology, and Society	2	0	2
		CpET Elective*			4
		Total			**16**
		Degree Program Total			**130**

*If courses other than Physics are used to satisfy Area D, Lab Science, it is recommended that you discuss course options with your assigned faculty advisor or the ECET department head prior to taking the annotated courses.

NOTE: CpET majors are required to earn a "C" or better in their ECET courses.

Construction

(Bachelor of Science Degree Offered)

Construction education is defined by the Associated Schools of Construction as a ". . . discipline which is designed to instill in future constructors the skills, knowledge and understanding necessary to make the critical decisions which will guide the production and management processes of the largest industry in the United States. In this Major the traditional areas of business, engineering, and architecture are combined with specialized courses in construction. Completion of this curriculum prepares the constructor to work with other specialists in managing the construction process. Graduates in this field will help solve the complex technical and managerial problems in the building process, and can look forward to challenging careers which provide a full range of outlets for their creative efforts."

Our accredited Construction program provides a broad range of studies in construction-related courses as well as general education. The subjects are taught so as to develop skills as well as instill knowledge. The intent is to create a professional who works well in team situations. The coursework frequently uses cases or projects to simulate the working environment. A constant effort is made to help the student develop an analytical, practical, and realistic approach to problem-solving and decision-making.

There are two different concentrations available to students pursuing this degree. The "general" concentration focuses on project management and the construction process from the general contractor perspective. The "development" concentration focuses on the entrepreneurial and economic aspects of construction from the owner or developer perspective.

Upon graduation most students pursue careers with construction firms. Typical entry level positions include: project engineer; safety engineer; scheduling engineer; assistant cost engineer; assistant superintendent; assistant project manager; quality control engineer; assistant estimator. Opportunities are not limited to these areas, however, as many graduates start their careers with equipment or material suppliers, development firms, specialty contractors, lenders, or owners.

The demand for constructors in Georgia, and particularly in the Atlanta area, has been so great that employers have been forced to recruit out-of-state to hire graduates with construction management degrees. As a result, the program at Southern Polytechnic State University was established through the financial support of the members and associate members of the Georgia Branch of The Associated General Contractors of America, Inc.

Southern Polytechnic State University is a member of Associated Schools of Construction (ASC). ASC is an association of colleges and universities with construction related curricula, and individuals who are interested in construction education. The fundamental objective of the ASC is to establish, advance, and sustain construction education as a unique and progressive academic discipline. The establishment and nurturing of the construction program is evidence of Southern Polytechnic State University's commitment to this objective.

Construction

First Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 1	3	0	3
CNST	1000	Orientation to Construction and Development	1	2	2
CNST	2000	Construction Graphics	2	4	4
ENGL	1101	English Composition I	3	0	3
MATH	1113	Precalculus	4	0	4
SPCH	2400	Public Speaking	2	0	2
		Total	**15**	**6**	**18**
Second Semester					
Area D		Lab Science	3	3	4
CNST	3000	Computer Applications in Construction	1	3	2
ENGL	1102	English Composition II	3	0	3
MATH	2240	Survey of Calculus	3	0	3
PHYS	1111K*	Introductory Physics I	3	3	4
		Total	**13**	**9**	**16**

Second Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 3	3	0	3
CNST	3110	Building Techniques and Methods I	3	2	4
IET	2227	Industrial Statistics	3	3	4
STS	2400	Science, Technology, and Society	2	0	2
SURV	2200	Construction Measurements	3	3	4
		Total	**14**	**8**	**17**
Second Semester					
Area D		Lab Science**	3	3	4
ACCT	2101	Accounting I	3	0	3
CET	2200	Introduction to Structures	4	0	4
CNST	3160	Building Techniques and Methods II	3	2	4
		Total	**13**	**5**	**15**

*If PHYS 1111K was taken to satisfy Area D, Lab Science, a 4-hour Construction Elective can be substituted.

**CHEM 1211K is recommended.

NOTE: For more information about Areas C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Construction
General Concentration

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area C		Group 1	3	0	3
CET	4220	Soils and Concretes in Construction	3	3	4
CNST	3410	Construction Estimating I	3	2	4
CNST	3620†	Construction Finance and Feasibility	4	0	4
		Total	**13**	**5**	**15**
Second Semester					
CNST	3210†	Applied Structures I	4	0	4
CNST	3420†	Construction Estimating II	3	2	4
CNST	4510	Scheduling	4	0	4
ECON	1101*	Introduction to Economics	3	0	3
		Total	**14**	**2**	**15**

Fourth Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 2	3	0	3
CNST	4560†	Construction Project Management	4	0	4
CNST	4710	Construction Safety	4	0	4
CNST	4800†	Construction Process Simulation	1	6	3
MGNT	3105	Management and Organizational Behavior	3	0	3
		Total	**15**	**6**	**17**
Second Semester					
Area C		Group 2	3	0	3
Area E		Group 4	3	0	3
CNST	3260†	Applied Structures II	2	2	3
CNST	4760	Construction Law	4	0	4
CNST	4900	Capstone Project	1	6	4
		Total	**13**	**8**	**17**
		Degree Program Total			**130**

*If ECON 1101 was taken to satisfy Area E, Group 3, a 3-hour Construction Elective can be substituted.

† Unique to the "General" Concentration

Construction
Development Concentration

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
CET	4220	Soils and Concretes in Construction	3	3	4
CNST	3310††	Development Planning	3	0	3
CNST	3410	Construction Estimating I	3	2	4
CNST	4510	Scheduling	4	0	4
		Total	**13**	**5**	**15**
Second Semester					
Area C			3	0	3
CNST	3430††	Construction Estimating III	2	2	3
CNST	3710††	Site Planning	3	2	4
CNST	4570††	Development Process I	4	0	4
ECON	1101*	Introduction to Economics	3	0	3
		Total	**15**	**4**	**17**

Fourth Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 2	3	0	3
CNST	4620††	Development Process II	4	0	4
CNST	4710	Construction Safety	4	0	4
CNST	4770††	Development Law	4	0	4
		Total	**15**	**0**	**15**
Second Semester					
Area C		Group 2	3	0	3
Area E		Group 4	3	0	3
CNST	4760	Construction Law	4	0	4
CNST	4900	Capstone Project	1	6	4
MGNT	3105	Management and Organizational Behavior	3	0	3
		Total	**14**	**6**	**17**
		Degree Program Total			**130**

*If ECON 1101 was taken to satisfy Area E, Group 3, a 3-hour Construction Elective can be substituted.

†† Unique to the "Development" Concentration

Electrical Engineering Technology

(Bachelor of Science Degree Offered)

Electrical Engineering Technology is a branch of engineering education that emphasizes the practical aspects of engineering rather than abstract concepts or theories. It is a blend of the application of science, engineering knowledge, and technical skills used in support of engineering activities.

Electronics is a relatively new science, but it has given birth to an industrial giant. Computers, medical electronics, automation, communications, instrumentation, radar, and robotics are but a few of the fields based on electronics.

This demand has created a need for electrical engineering technologists in all phases of development, design, production, maintenance, and troubleshooting. This need is being met by graduates of the bachelor degree program in electrical engineering technology.

Any non-required upper division (3XXX/4XXX) ECET course, with the exception of ECET 3000, may be used as a technical elective (ECET Elective) in the EET degree program. Students may wish to focus their technical electives in a particular area of Electrical Engineering Technology. Suggested choices in the areas of communications, digital, power, and telecommunications are listed below:

Communications:	ECET 4320, ECET 4330, ECET 4420, ECET 4431, ECET 4432, ECET 4820
Digital:	ECET 3700, ECET 4630, ECET 4710, ECET 4720, ECET 4730, ECET 4820
Power:	ECET 4510, ECET 4520, ECET 4530, ECET 4540
Telecommunications:	ECET 3810, ECET 4820, ECET 4840, ECET 4850

Electrical Engineering Technology

First Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ECET	1000	Orientation	2	0	2
ECET	1010	Fundamentals	1	3	2
EG	1210*	Survey of Engineering Graphics	1	3	2
ENGL	1101	English Composition I	3	0	3
MATH	1113	Precalculus	4	0	4
		Totals	**11**	**6**	**13**
Second Semester					
ECET	1100	Circuits I	3	3	4
ECET	1200	Digital I	3	3	4
ENGL	1102	English Composition II	3	0	3
MATH	2253	Calculus I	4	0	4
SPCH	2400	Public Speaking	2	0	2
		Totals	**15**	**6**	**17**

Second Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ECET	2110	Circuits II	3	3	4
ECET	2300	Electronics I	3	3	4
MATH	2254	Calculus II	4	0	4
PHYS	1111K	Introductory Physics I (Area D, Lab Science)	3	3	4
		Total	**13**	**9**	**16**
Second Semester					
Area C		Group 2	3	0	3
ECET	2210	Digital II	3	3	4
ECET	2310	Electronics II	3	3	4
ENGL	2010*	Technical Writing	3	0	3
PHYS	1112K	Introductory Physics II (Area D, Lab Science)	3	2	4
		Total	**15**	**8**	**18**

*If courses other than Physics are used to satisfy Area D, Lab Science, it is recommended that you discuss course options with your assigned faculty advisor or the ECET department head prior to taking the annotated courses.

Since Physics I and II are requirements for the degree, it is strongly recommended that they be taken to satisfy the Lab Science component of Area D of the Core Curriculum It is also recommended that you discuss Lab Science options with your assigned faculty advisor or the ECET department head.

NOTES: EET majors are required to earn a "C" or better in their ECET courses.

For more information about Areas C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Electrical Engineering Technology

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
CHEM	1211K*	Principles of Chemistry I	3	3	4
ECET	3220	Digital III	3	3	4
ECET	3400	Data Communications	3	3	4
ECET	3600	Test Engineering	3	3	4
		Total	**12**	**12**	**16**
Second Semester					
Area E		Group 3	3	0	3
ECET	3410	High Frequency Systems	3	3	4
ECET	3500	Survey of Electric Machines	3	3	4
ECET	3610	Introduction to Control Systems	3	3	4
MATH	2306	Ordinary Differential Equations	3	0	3
		Total	**15**	**9**	**18**

Fourth Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area C		Group 1	3	0	3
Area E		Group 1	3	0	3
ECET	4620	Signals and Systems Analysis	3	3	4
		ECET Electives			7
		Total			**17**
Second Semester					
Area E		Group 2	3	0	3
Area E		Group 4	3	0	3
STS	2400	Science, Technology, and Society	2	0	2
		ECET Electives			7
		Total			**15**
		Degree Program Total			**130**

*If courses other than Physics are used to satisfy Area D, Lab Science, it is recommended that you discuss course options with your assigned faculty advisor or the ECET department head prior to taking the annotated courses.

NOTES:EET majors are required to earn a "C" or better in their ECET courses.

Industrial Distribution

(Bachelor of Science Degree Offered)

The Industrial Distribution degree prepares the student for sales, sales management, and mid-management positions with wholesale distributors who purchase, warehouse, sell, distribute, and service a wide variety of industrial products. The day-to-day challenges faced by the industrial distributor requires him or her to be a professional with many capabilities. To fulfill this demand, the program of study includes study in management, industrial engineering, communications, data processing, and marketing.

This is one of the few industrial distribution programs offered in the United States and the only one offered in Georgia.

First Year

First Semester			Hours Per Week Class	Lab	Credit Hours
CS	2123	C Programming	2	2	3
EG	1210	Survey of Engineering Graphics	1	3	2
ENGL	1101	English Composition I	3	0	3
ID	1000	Orientation	2	0	2
MATH	1113	Precalculus	4	0	4
		Total	**12**	**5**	**14**
Second Semester					
ENGL	1102	English Composition II	3	0	3
ID	2307	Production Processes	2	3	3
ID	2432	Engineering Product & Process Cost Estimating I	2	2	3
IET	2227	Industrial Statistics	3	3	4
MATH	2253	Calculus I	4	0	4
		Total	**14**	**8**	**17**

Second Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area D		Lab Science	3	3	4
ID	2303	Principles of Industrial Systems and Design	3	0	3
ID	3430	Industrial and Consumer Marketing	3	0	3
IET	3322	Work Measurement and Analysis	3	6	5
SPCH	2400	Public Speaking	2	0	2
		Total	**14**	**9**	**17**
Second Semester					
Area D		Lab Science	3	3	4
ENGL	2010	Technical Writing	3	0	3
ID	3334	Production and Inventory Control	2	2	3
ID	3434	Distribution Channels	3	0	3
IET	3424	Engineering Economy	2	2	3
		Total	**13**	**7**	**16**

NOTES: A grade of "C" or better is required in all ID and IET courses prescribed for the four-year bachelor degree program.

For more information about Areas C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Industrial Distribution

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area C		Group 1	3	0	3
ID	3410	Principles of Team Dynamics	3	0	3
ID	4350	Industrial Loss Control	2	2	3
IET	3401	Project Organization and Control	2	2	3
IET	3433	Engineering Product and Process Cost Estimating II	2	2	3
		Total	**12**	**6**	**15**
Second Semester					
Area C		Group 2			3
Area E		Group 2	3	0	3
CHEM	1211K	Principles of Chemistry I	3	3	4
	or				
PHYS	1111K	Introductory Physics I			
ID	4326	Wage and Salary Administration	3	0	3
ID	4435	Fundamentals of Engineering Sales	3	0	3
		Total			**16**

Fourth Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 1	3	0	3
Area E		Group 4	3	0	3
ID	4375	Engineering Sales Law	3	0	3
IET	4422	Plant Layout and Materials Handling	2	4	4
		Total	**11**	**4**	**13**
Second Semester					
Area E		Group 3	3	0	3
ID	4447	Purchasing and Material Planning	3	0	3
ID	4449	Logistics Planning and Control	3	0	3
ID	4460	Warehouse Operations	3	0	3
STS	2400	Science, Technology, and Society	2	0	2
		Total	**14**	**0**	**14**
		Degree Program Total			**122**

NOTES: A grade of "C" or better is required in all ID and IET courses prescribed for the four-year bachelor degree program.

Industrial Engineering Technology

(Bachelor of Science Degree Offered)

The field of Industrial Engineering Technology offers the student a challenging career in business, industry, or government. Industrial Engineering Technologists deal primarily with the efficient management of money, materials, and manpower in a business environment. They solve problems dealing with the location and layout of plant facilities, materials handling, work-station design, wage and salary payment plans, quality control, personnel selection and placement, occupational safety and health, and economic cost studies. To enable the graduate to solve such a wide variety of management problems, the curriculum of study will be broad and interesting.

First Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 1	3	0	3
CS	2123	C Programming	2	2	3
EG	1210	Survey of Engineering Graphics	1	3	2
ENGL	1101	English Composition I	3	0	3
IET	1000	Orientation	2	0	2
MATH	1113	Precalculus	4	0	4
		Total	**15**	**5**	**17**

Second Semester					
ENGL	1102	English Composition II	3	0	3
IET	2227	Industrial Statistics	3	3	4
IET	2307	Production Processes	2	3	3
IET	2432	Engineering Product and Process Cost Estimating I	2	2	3
MATH	2253	Calculus I	4	0	4
		Total	**14**	**8**	**17**

NOTES: A grade of "C" or better is required in all IET courses prescribed for the bachelor degree program.

For more information about Areas C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Industrial Engineering Technology

Second Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area D		Lab Science*	3	3	4
IET	2303	Principles of Industrial Systems and Design**	3	0	3
IET	3322	Work Measurement and Analysis	3	6	5
IET	3339	Statistical Quality Control	3	2	4
		Total	**12**	**11**	**16**
Second Semester					
ENGL	2010	Technical Writing	3	0	3
IET	3334	Production and Inventory Control	2	2	3
IET	3401	Project Organization and Control	2	2	3
IET	3424	Engineering Economy	2	2	3
PHYS	1112K	Introductory Physics II	3	2	4
SPCH	2400	Public Speaking	2	0	2
		Total	**14**	**8**	**18**

*Physics I is required for the IET degree and is recommended as the Lab Science in the first semester of the second year.

** Students that do not obtain credit for Physics I as Lab Science may take Physics I in lieu of IET 2303 and one hour of directed elective.

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area C		Group 1	3	0	3
Area D		Lab Science*	3	3	4
IET	3403	Industrial Experimentation	3	2	4
IET	3410	Principles of Team Dynamics	3	0	3
IET	3433	Engineering Product and Process Cost Estimating II	2	2	3
		Total	**14**	**7**	**17**
Second Semester					
Area C		Group 2			3
Area E		Group 2	3	0	3
IET	4422	Plant Layout and Materials Handling	2	4	4
STS	2400	Science, Technology, and Society	2	0	2
		Directed Elective			4
		Total			**16**

*Chemistry I is recommended as the Lab Science in the first semester of the third year.

NOTE: A grade of "C" or better is required in all IET courses prescribed for the bachelor degree program.

Industrial Engineering Technology

Fourth Year

			Hours Per Week Class	Lab	Credit Hours
First Semester					
Area E		Group 3	3	0	3
Area E		Group 4	3	0	3
IET	4405	Principles of Operations Research	2	4	4
IET	4478	Senior Internship	2	6	4
		Directed Elective			3
		Total			**17**
Second Semester					
IET	4356	Quality Concepts and Systems Design	3	0	3
IET	4427	Methods-Time-Measurement	1	5	3
IET	4451	Systems Simulation	1	5	3
IET	4475	Senior Project	1	6	3
		Total	**6**	**16**	**12**
		Degree Program Total			**130**

Directed Electives: Select 7 hours of technical science courses by taking a combination of the following:

(1) CET 2200 Introduction to Structures or MET 3121 Statics [Credit will not be given for both]
(2) ECET 3000 Electrical Principles
(3) MET 3400 Survey of Thermodynamics or MET 3401 Thermodynamics I [Credit will not be given for both]

NOTE: A grade of "C" or better is required in all IET courses prescribed for the bachelor degree program.

Mechanical Engineering Technology

(Bachelor of Science Degree Offered)

Our purpose is to develop students into Mechanical Engineering Technologists capable of applying current engineering concepts to industrial applications. Instruction is in the broad area of technological education, bridging the gap between the research engineer and the skilled craftsman and technician trained in the vocational-technical schools. Our graduates apply engineering principles to today's industrial needs in the areas of manufacturing, machine design, heating, ventilating and air conditioning, and power production. We emphasize practical, applications-oriented laboratory experience in manufacturing processes and techniques, instrumentation and controls, and equipment and machinery performance testing and evaluation, with particular emphasis on the needs of industries prevalent in the Southeast.

In addition to the common core of courses taken by all MET students, a student may concentrate in an area of specialization by the appropriate choice of elective courses.

General Concentration

The MET bachelor degree with a general concentration permits the selection of two elective courses in the major. It is strongly encouraged that students concentrate these two elective courses in one of the following two areas to enhance their knowledge and preparation in an area in which they are most interested in working:

1. Energy/Thermal Design: The Heating, Ventilating, Air Conditioning (HVAC) and Refrigeration area specializes in the design and operation of heat and mass transfer systems which produce the needed environments for manufacturing operations, industrial processes and human comfort. Systems which utilize mechanical equipment such as pumps, blowers, fans, compressors and heat exchanges are found in fields as diverse as air conditioning, low temperature metallurgy, food preservation, chemical processing and industrial manufacturing. Graduates of this program are employed as systems designers for consulting firms and mechanical contractors; as manufacturer sales representatives; and as maintenance supervisors. The Heat/Power area of specialization deals with energy conversion, i.e., the study of internal combustion engines, steam turbines, boilers, air compressors, pumps and fans. The program includes study in thermodynamics, heat transfer and fluid mechanics. Graduates with this specialty are employed as process plant engineers in the petrochemical and pulp and paper industry; as power generation plant results engineers; as maintenance supervisors; and as sales representatives for manufacturers. Specialty courses in this area include:

   MET 4411 Refrigeration
   MET 4412 Air Conditioning and/or
   MET 4431 Plant and Power Applications

2. Machine/Mechanical Design: This area of specialization is concerned with the application of fundamental principles of design to new and existing machines, machine parts and mechanical structures; the fabricating, testing and assembly of components into production of mechanical systems; and the operation of machines and mechanical equipment. Graduates may be employed as designers of machinery and/or machine parts for the improvement of production operations and cost; as product designers; as supervisors of fabricating facilities, manufacturing plants, maintenance and repair shops; and as sales and service representatives of industrial and manufacturing firms. Specialty courses in this area include:

MET 4124 Vibrations and Advanced Dynamics and/or
MET 4133 Advanced Engineering Materials and/or
MET 4142 Machine Design II

NOTE: MET 4801 - 4805 Special Projects and MET 4901 - 4905 Special Topics may also be used to satisfy portions of the above requirements.

Manufacturing Concentration

The area of specialization called Manufacturing is concerned with manufacturing production processes and operations: tool and jig design, and the design and layout of manufacturing facilities. Graduates may be employed in areas such as steel production and fabrication, aircraft and automobile fabrication and assembly, cable manufacture, and textile mills.

The MET bachelor degree with a manufacturing concentration is obtained by the appropriate selection of elective courses and one course substitution within the MET curriculum.* These courses emphasize a variety of topics in modern manufacturing and are as shown below. All four courses must be completed to obtain this designation. A student may take only two of the courses and elect the General Concentration if desired.

Manufacturing Courses	*Source of Credit Hours*
MET 4332 Advanced Tool Design	Major Electives (3)
MET 4341 Automation Systems and Controls	Major Electives (3)
MET 4342 Numerical Control of Machines	Free Electives (3)
MET 4351 Manufacturing System Design Project	Substitute for MET 3402 (3)

*If courses other than Physics are used to satisfy Area D, Lab Science I and/or Lab Science II, Core Curriculum requirements, it is recommended that you discuss course options with your assigned Faculty Advisor and/or the Mechanical Engineering Technology Department Head.

NOTE: In approximately 40 states in the U.S., including Georgia, bachelor degree Engineering Technology graduates with the appropriate work experience are eligible to take examinations for registration as Professional Engineers.

Mechanical Engineering Technology

First Year

First Semester			Hours Per Week Class	Lab	Credit Hours
EG	1211	Engineering Graphics I	3	3	4
ENGL	1101	English Composition I	3	0	3
MATH	1113	Precalculus	4	0	4
MET	1000	MET Orientation	1	0	1
MET	1311	Manufacturing Processes	3	0	3
SPCH	2400	Public Speaking	2	0	2
		Total	**16**	**3**	**17**
Second Semester					
EG	1212	Engineering Graphics II	3	3	4
ENGL	1102	English Composition II	3	0	3
CHEM	1211K	Principles of Chemistry I	3	3	4
MATH	2253	Calculus I	4	0	4
MET	1321	Manufacturing Processes Lab I	1	3	2
		Total	**14**	**9**	**17**

Second Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 2	3	0	3
CS	2123	C Programming	2	2	3
MET	2322	Manufacturing Processes Lab II	2	3	3
MATH	2254	Calculus II	4	0	4
PHYS	2211K*	Principles of Physics I (Area D, Lab Science)	3	3	4
		Total	**14**	**8**	**17**
Second Semester					
ENGL	2010	Technical Writing	3	0	3
MATH	2306	Ordinary Differential Equations	3	0	3
MET	3121	Statics	3	0	3
MET	3401	Thermodynamics I	3	0	3
PHYS	2212K*	Principles of Physics II (Area D, Lab Science)	3	2	4
STS	2400	Science, Technology, and Society	2	0	2
		Total	**17**	**2**	**18**

*Since Physics I and II are requirements for the degree, it is strongly recommended that they be taken to satisfy the Lab Science component of Area D of the Core Curriculum. It is also recommended that you discuss Lab Science options with your assigned Faculty Advisor and/or the Mechanical Engineering Technology Department Head.

NOTES: MET majors are required to earn a 2.0 average in all courses (not a "C" in every course) designated as "MET" and "EG" courses.

For more information about Area C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

PHYS 1111K for PHYS 2211K and PHYS 1112K for PHYS 2212K are course substitutions allowed.

Mechanical Engineering Technology

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area C		Group 2			3
Area E		Group 1	3	0	3
MET	3101	Fluid Mechanics	3	3	4
MET	3122	Dynamics	3	0	3
MET	3131	Strength of Materials	3	3	4
		Total			**17**
Second Semester					
ECET	3000	Electrical Principles	3	3	4
MET	3123	Dynamics of Machines	3	0	3
MET	3132	Engineering Materials	3	3	4
MET	3331	Tool Design	3	0	3
MET	3402	Thermodynamics II	3	0	3
		Total	**15**	**6**	**17**

Fourth Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 3	3	0	3
MET	4141	Machine Design I	4	0	4
MET	4421	Instruments and Controls	3	3	4
		Major Elective*			3
		Total			**14**
Second Semester					
Area C		Group 1	3	0	3
Area E		Group 4	3	0	3
		Major Elective*			3
		Free Elective*			3
		Total			**12**
		Degree Program Total			**129**

*If courses other than Physics are used to satisfy Area D, Lab Science, Core Curriculum requirements, it is recommended that you discuss course options with your assigned Faculty Advisor and/or the Mechanical Engineering Technology Department Head prior to taking the annotated courses.

NOTES: MET majors are required to earn a 2.0 average in all courses (not a "C" in every course) designated as "MET" and "EG" courses.

The Free Elective may not be MATH 1111.

For more information about Area C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Surveying and Mapping

(Bachelor of Science Degree Offered)

The Surveying and Mapping program is offered through the Civil Engineering Technology department. Students in Surveying and Mapping are taught the principles and techniques of field measurements and adjustments, boundary, topographic, geodetic, route and construction surveys. Students apply classroom knowledge in laboratory exercises through the use of modern surveying equipment including theodolites, electronic distance meters, electronic total stations, Global Positioning System (GPS) satellite receivers, and optical alignment devices. Mapping topics include Geographic Information Systems (GIS), photogrammetry and remote sensing.

In laboratories, students develop maps from field measurements, design and layout construction projects, plan subdivision developments and establish horizontal and vertical control using satellite geodesy. Microcomputers are used extensively in reducing data, planning field layouts, plotting boundaries, drawing (CAD) plats and map production.

Students also study topics from the Civil Engineering Technology program including elementary structures, fluid mechanics, hydrology and the design and construction of highways. Courses in mathematics, business principles and core requirements provide the student added depth.

The program is designed to meet the State of Georgia academic registration requirements to become a Registered Land Surveyor.

First Year

			Hours Per Week Class	Lab	Credit Hours
First Semester					
CET	1001	Orientation to CET Profession	1	0	1
CET	1002	Orientation to CET Computer Practices	0	2	1
CET	2160	Civil Graphics and Computer Aided Drafting	2	6	4
CS	1113	BASIC Programming	2	2	3
	or				
CS	2123	C Programming			
	or				
CS	2143	FORTRAN Programming			
ENGL	1101	English Composition I	3	0	3
MATH	1113	Precalculus	4	0	4
		Total	**12**	**10**	**16**
Second Semester					
Area C		Group 1	3	0	3
Area D		Lab Science	3	3	4
Area E		Group 1	3	0	3
ENGL	1102	English Composition II	3	0	3
MATH	2253	Calculus I	4	0	4
		Total	**16**	**3**	**17**

NOTE: For more information about Areas C, D, and E courses, see the "Core Curriculum" section under "Admission Information."

Surveying and Mapping

Second Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 2	3	0	3
MATH	2254	Calculus II	4	0	4
PHYS	1111K	Introductory Physics I	3	3	4
STS	2400	Science, Technology, and Society	2	0	2
SURV	2221	Surveying I	3	3	4
		Total	**15**	**6**	**17**
Second Semester					
CET	2200	Introduction to Structures	4	0	4
ENGL	2010	Technical Writing	3	0	3
MATH	2260	Probability and Statistics I	3	0	3
PHYS	1112K	Introductory Physics II	3	2	4
SURV	3222	Surveying II	3	3	4
		Total	**16**	**5**	**18**

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area E		Group 3	3	0	3
CET	3321	Transportation Systems	3	3	4
CET	3343	Basic Fluid Mechanics	3	3	4
SPCH	2400	Public Speaking	2	0	2
SURV	4410	Surveying Computations and Adjustments	3	3	4
		Total	**14**	**9**	**17**
Second Semester					
CET	4444	Applied Hydrology	3	3	4
SURV	3421	Geographic Information Systems I	3	3	4
SURV	4412	Applied Geodesy	3	3	4
SURV	4465	Legal Aspects of Land Surveying	4	0	4
		Total	**13**	**9**	**16**

NOTE: Students are required to earn a grade of "C" or better in all SURV and CET courses and a GPA of 2.0 or better in all SURV and CET courses.

Surveying and Mapping

Fourth Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area D		Lab Science	3	3	4
CET	3324	Project Cost Analysis	4	0	4
SURV	4470	Land Development Design	3	3	4
		Math Elective	3	0	3
		Total	**13**	**6**	**15**
Second Semester					
Area C		Group 2			3
Area E		Group 4	3	0	3
SURV	4413	Geodetic Positioning with GPS	3	3	4
SURV	4475	Land Surveying Practice	1	3	2
		Free Elective			2
		Total			**14**
		Degree Program Total			**130**

NOTE: Students are required to earn a grade of "C" or better in all SURV and CET courses and a GPA of 2.0 or better in all SURV and CET courses.

Telecommunications Engineering Technology

(Bachelor of Science Degree Offered)

The ever-increasing popularity of the Internet combined with significant advances in communications software and hardware has spawned an immense demand for individuals possessing the knowledge and skills required to design, implement, and maintain computer networking systems of all types. The BSTET degree program is designed to provide individuals with the theory and hands-on knowledge necessary to meet that demand.

The degree program is based upon a core of mathematics, physics, and electronics courses. These courses provide the scientific and technical background required for an in-depth understanding of the hardware and software aspects of computers and related systems. Building upon this core, students immerse themselves into several telecommunications-related courses that provide them with a holistic perspective of this behemoth industry.

Although entitled a telecommunications degree, this program covers virtually all aspects of modern computer networking. The student's experience is greatly augmented by numerous hands-on exercises undertaken in the university's state-of-the-art telecommunications laboratory. Providing the graduate of this program with the opportunity to ascend into management, the degree is also comprised of several management-related courses.

Telecommunications Engineering Technology

First Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ECET	1000	Orientation	2	0	2
ECET	1010	Fundamentals	1	3	2
EG	1210*	Survey of Engineering Graphics	1	3	2
ENGL	1101	English Composition I	3	0	3
MATH	1113	Precalculus	4	0	4
		Total	**11**	**6**	**13**
Second Semester					
Area C		Group 2	3	0	3
ECET	1100	Circuits I	3	3	4
ECET	1200	Digital I	3	3	4
ENGL	1102	English Composition II	3	0	3
MATH	2253	Calculus I	4	0	4
		Total	**16**	**6**	**18**

Second Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ECET	2110	Circuits II	3	3	4
ECET	2300	Electronics I	3	3	4
MATH	2254	Calculus II	4	0	4
PHYS	1111K	Introductory Physics I (Area D, Lab Science)	3	3	4
		Total	**13**	**9**	**16**
Second Semester					
ECET	2210	Digital II	3	3	4
ECET	2310	Electronics II	3	3	4
ECET	2800	Introduction to Telecommunications	3	0	3
ENGL	2010*	Technical Writing	3	0	3
PHYS	1112K	Introductory Physics II (Area D, Lab Science)	3	2	4
		Total	**15**	**8**	**18**

* If courses other than Physics are used to satisfy Area D, Lab Science, it is recommended that you discuss course options with your assigned faculty advisor or the ECET department head prior to taking the annotated courses.

Since Physics I and II are requirements for the degree, it is strongly recommended that they be taken to satisfy the Lab Science component of Area D of the Core Curriculum. It is also recommended that you discuss Lab Science options with your assigned faculty advisor or the ECET department head.

NOTE: TCET majors are required to earn a "C" or better in their ECET courses.

For more information about Areas C, D, and E courses, see the "Core Curriculum" section under "Admission Information".

Telecommunications Engineering Technology

Third Year

First Semester			Hours Per Week Class	Lab	Credit Hours
ACCT	2101	Accounting I	3	0	3
ECET	3400	Data Communications	3	3	4
ECET	3410	High Frequency Systems	3	3	4
ECET	3810	Applications of C++, JAVA and HTML	2	3	3
SPCH	2400	Public Speaking	2	0	2
		Total	**13**	**9**	**16**
Second Semester					
Area E		Group 3	3	0	3
ECET	3220	Digital III	3	3	4
ECET	4820	Communications Networks and the Internet	3	3	4
MATH	2260	Probability and Statistics I	3	0	3
MGNT	3105	Management and Organizational Behavior	3	0	3
		Total	**15**	**6**	**17**

Fourth Year

First Semester			Hours Per Week Class	Lab	Credit Hours
Area C		Group 1	3	0	3
Area E		Group 1	3	0	3
ECET	4830	Telecommunications Management	3	3	4
ECET	4840	Advanced Telecommunications	3	3	4
MGNT	3125	Basic Business Finance	3	0	3
		Total	**15**	**6**	**17**
Second Semester					
Area E		Group 2	3	0	3
Area E		Group 4	3	0	3
ECET	4850	Telecommunications Project	3	3	4
MGNT	4135	Project Management	3	0	3
STS	2400	Science, Technology, and Society	2	0	2
		Total	**14**	**3**	**15**
		Degree Program Total			**130**

* If courses other than Physics are used to satisfy Area D, Lab Science, it is recommended that you discuss course options with your assigned faculty advisor or the ECET department head prior to taking the annotated courses.

NOTE: TCET majors are required to earn a "C" or better in their ECET courses.

Minors

Southern Polytechnic State University offers minors in the following areas:

Apparel/Textile Engineering Technology
Computer Information Systems
Computer Science
Construction
Industrial Engineering Technology
International Studies
Management
Mathematics
Physics
Spanish
Technical and Professional Communication

A minor must contain 15 to 18 semester hours of coursework with at least 9 hours of upper division coursework. Courses taken to satisfy Core Areas A through E may not be counted as coursework in the minor. Courses taken in Core Area F may be counted as coursework in the minor.

In the following pages, the course requirements for each minor are outlined.

Minor in Apparel/Textile Engineering Technology

To be eligible for a minor in Apparel/Textile Engineering Technology, the student must complete 18 credit hours of the following courses with at least 9 hours of upper division course work:

			Hours
ATET	1040	Introduction to Computers for Textile/Apparel	3
ATET	1100	Fiber and Yarn Formation	5
ATET	2301	Apparel and Textile Computer Systems I	5
ATET	2500	Fabric Formation	5
ATET	2600	Equipment/Systems Evaluation and Selection	3
ATET	3200	Production Data Systems	5
ATET	3300	Introduction to Composite Structures	2
ATET	3602	Apparel and Textile Computer Systems II	5
ATET	3700	Carpet Manufacturing	2
ATET	4320	Textile Wet Processing	3
ATET	4440	Testing and Quality Control	4
ATET	4670	Apparel/Textile Production Planning and Scheduling	4

Minor in Computer Information Systems

To be eligible for a minor in Computer Information Systems, the student must complete the following courses with a grade of "C" or better:

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
CS	3153	Database Systems	3
CS	4683	Management Information Systems	3
		One additional upper-level CS course	3-4

Minor in Computer Science

To be eligible for a minor in Computer Science, the student must complete the following courses with a grade of "C" or better:

CS	1301	Computer Science I	4
CS	1302	Computer Science II	4
CS	3423	Data Structures and Algorithm Analysis	3
		Two additional upper-level CS courses	6-7

Minor in Construction

To be eligible for a minor in Construction, the student must complete the following courses:

CNST	2000*	Construction Graphics	4
CNST	3000*	Computer Applications in Construction	2
CNST	3160*	Building Techniques and Methods II	4
CNST	3410	Construction Estimating I	4
CNST	4510	Scheduling	4

*Students having the prerequisite knowledge in these courses may substitute courses of greater or equal credit from the following list with the consent of the CNST department head:

CNST	3411	Construction Estimating Software	2
CNST	3420	Construction Estimating II	4
CNST	3912	Workplace Law	3
CNST	4511	Construction Scheduling Software	2
CNST	4560	Construction Project Management	4
CNST	4710	Construction Safety	4
CNST	4760	Construction Law	4

Minor in Industrial Engineering Technology

To be eligible for a minor in Industrial Engineering Technology, the student must complete the following courses:

IET	2303	Principles of Industrial Systems and Design	3
	or		
IET	4356	Quality Concepts and Systems Design	
IET	3322	Work Measurement and Analysis	5
IET	3403	Industrial Experimentation	4
IET	4422	Plant Layout and Material Handling	4

Minor in International Studies

To be eligible for a minor in International Studies, the student must complete fifteen (15) semester hours from the courses listed below with a grade of "C" or better. At least nine (9) hours must be upper division courses (3000 or 4000 level courses). Up to 6 hours may be lower division (1000 or 2000) level but these courses may **NOT** count **BOTH** as a core curriculum requirement and toward the minor. All students receiving the minor in International Studies must complete an SIS 400X, Regional Studies, or SIS 2903, Special Topics, Study Abroad, course.

Lower Division		**(0-6 hours)**	
ANTH	1102	Introduction to Anthropology	3
ECON	1101	Introduction to Economics	3
GEOG	1101	Introduction to Human Geography	3

ONE of the following:			
HIST	1011	World Civilization: Ancient	3
	or		
HIST	1012	World Civilization: Medieval	3
	or		
HIST	1013	World Civilization: Modern	3
POLS	2401	Global Issues	3
RELG	1200	World Religions	3
Upper Division		**(6-12 hours)**	
GEOG	3101	World Regional Geography	3
MGNT	4145	International Management	3
SIS	3100	Contemporary World Politics	3
SIS	3500	Contemporary International Economic Issues	3
SIS	3600	Comparative Culture	3
SIS	3700	International Issues in Science and Technology	3
SIS	3800	Contemporary World History since 1945	3
SIS	3901-3903	Special Topics in International Studies	1-3
Regional Studies		**(Take at least ONE of the following:)**	
SIS	2901-2903	Special Topics in Studies Abroad	1-3
SIS	4000	Regional Studies/General	3
SIS	4001	Regional Studies/Latin America	3
SIS	4002	Regional Studies/Asia: China	3
SIS	4003	Regional Studies/Asia: Japan	3
SIS	4004	Regional Studies/Middle East	3
SIS	4005	Regional Studies/Russia/Central Europe	3
SIS	4006	Regional Studies/Western Europe	3
SIS	4007	Regional Studies/Africa	3

Notes: 1. A student may take more than one Regional Studies course as long as different regions are covered.

2. A student must also complete a language requirement by testing or demonstrating proficiency in one foreign language or completing FREN 1002, GRMN 1002, or SPAN 1002.

Minor in Management

To be eligible for a minor in Management, the student must complete MGNT 3105 and at least 12 hours of course work in management with at least 6 hours in upper division courses.

Minor in Mathematics

To obtain a minor in Mathematics, the student must complete MATH 2255 and MATH 3256 plus an additional 11 semester hours of Mathematics courses at the 2300 level or higher. At least 6 of these additional 11 hours must be at the 3000 level or higher. Courses used to fill other requirements at SPSU (excluding core areas A through E) may also be used to obtain a minor in Mathematics except that no course may be used for a minor if a course for which dual credit is not allowed is used to fill any requirement at SPSU, including required free electives.

Minor in Physics

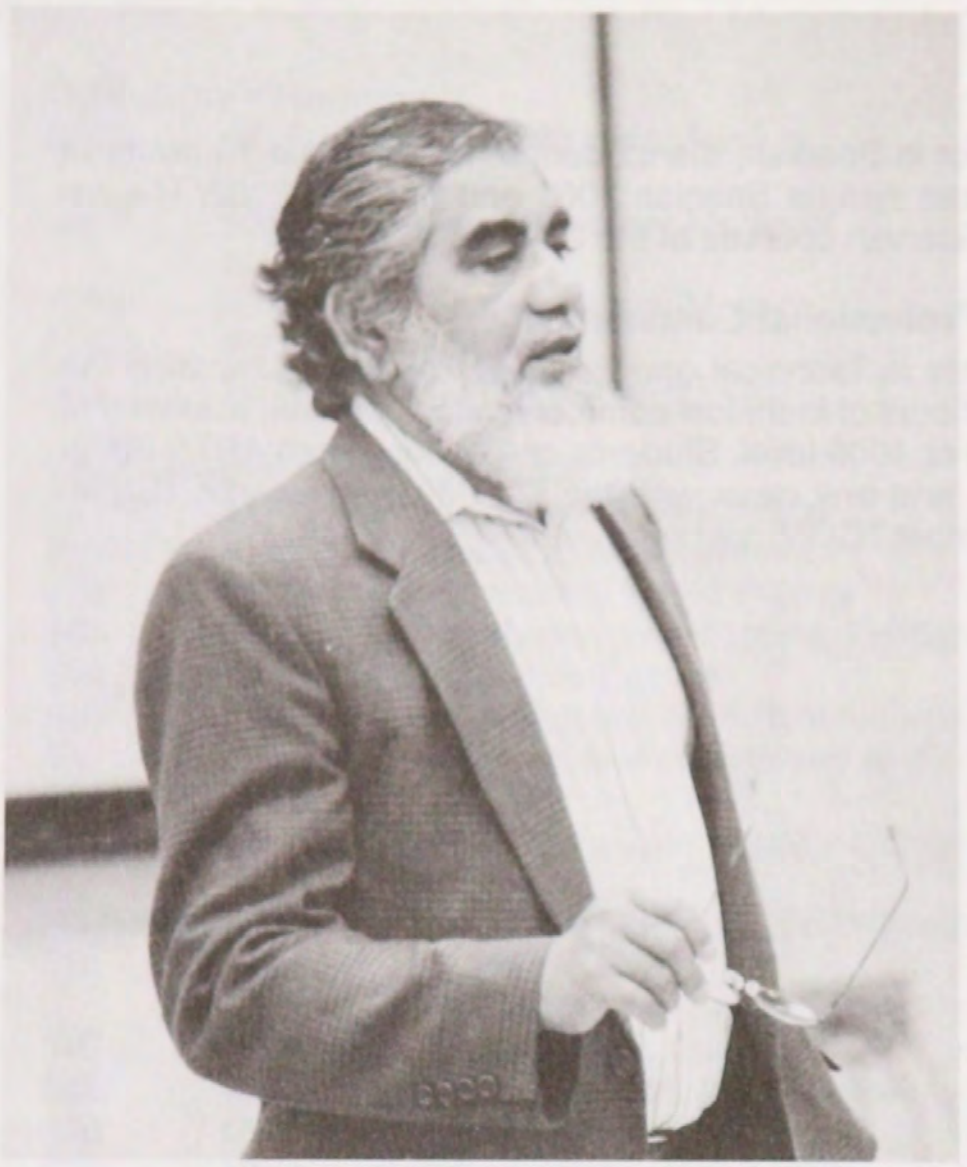
To be eligible for a minor in Physics, the student must complete at least 15 hours of course work in physics with at least 10 hours in upper division courses.

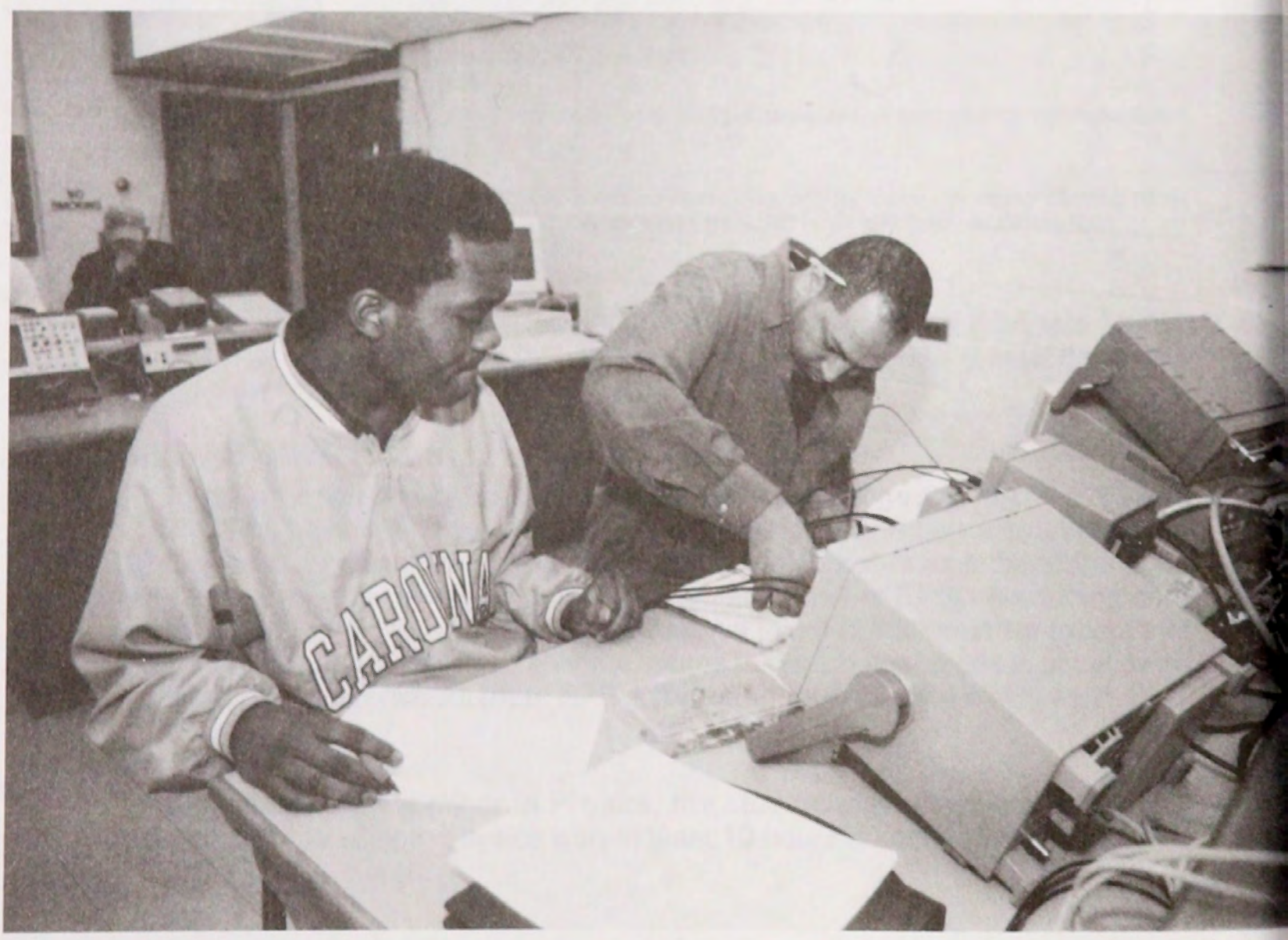
Minor in Spanish

To be eligible for a minor in Spanish, the student must complete 15 hours of Spanish courses which must include Spanish 2001 and Spanish 2002. The remaining 9 hours must be Spanish courses at the 3000 or 4000 level.

Minor in Technical and Professional Communication

To be eligible for a minor in Technical and Professional Communication the student must complete 15 hours of technical communication courses, at least 9 of which must be at the 3000 or 4000 level. Students can choose from ARTS 3000, ENGL 2000, ENGL 2010, and any class with the TCOM course prefix. (ENGL 2010 is a prerequisite for most TCOM courses.)

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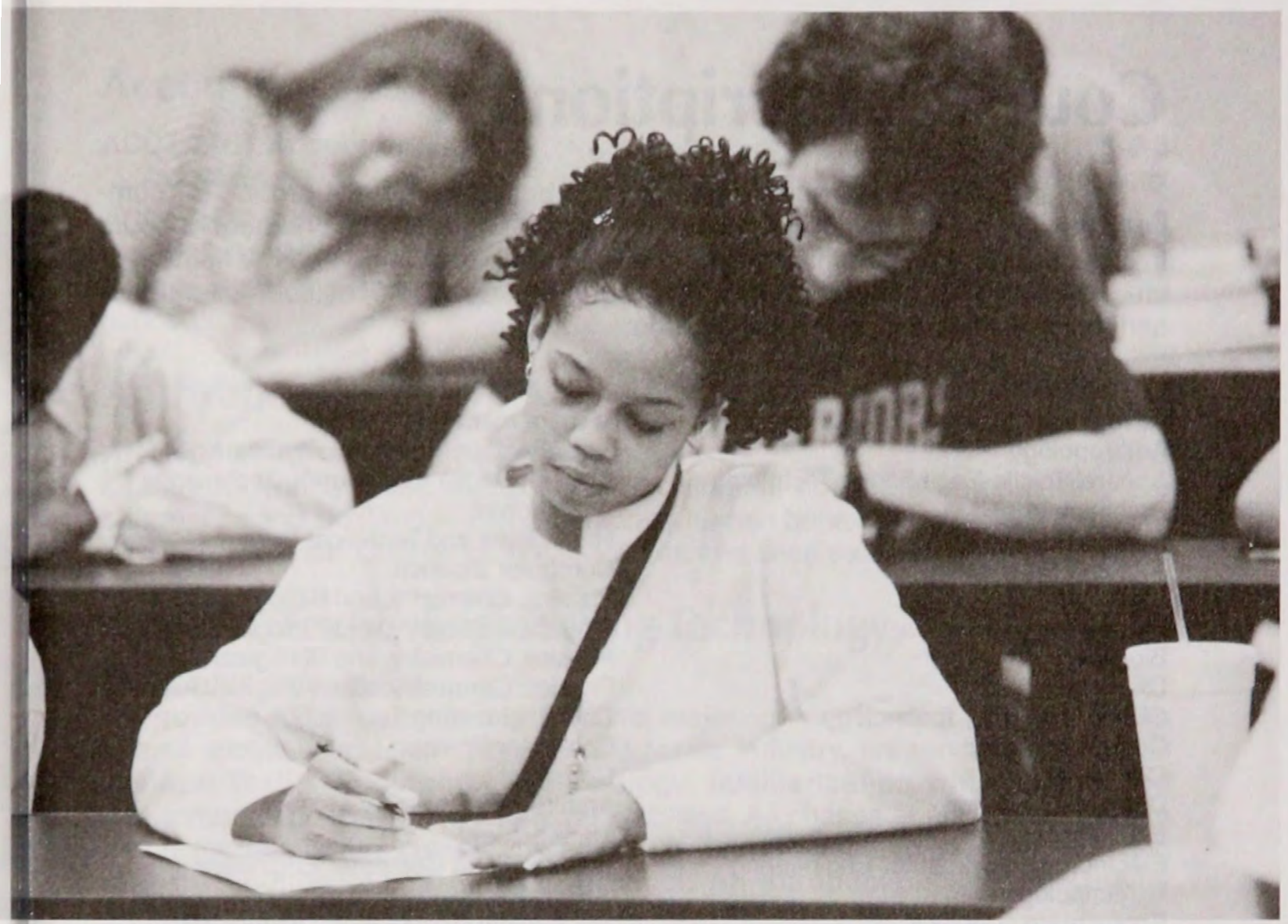
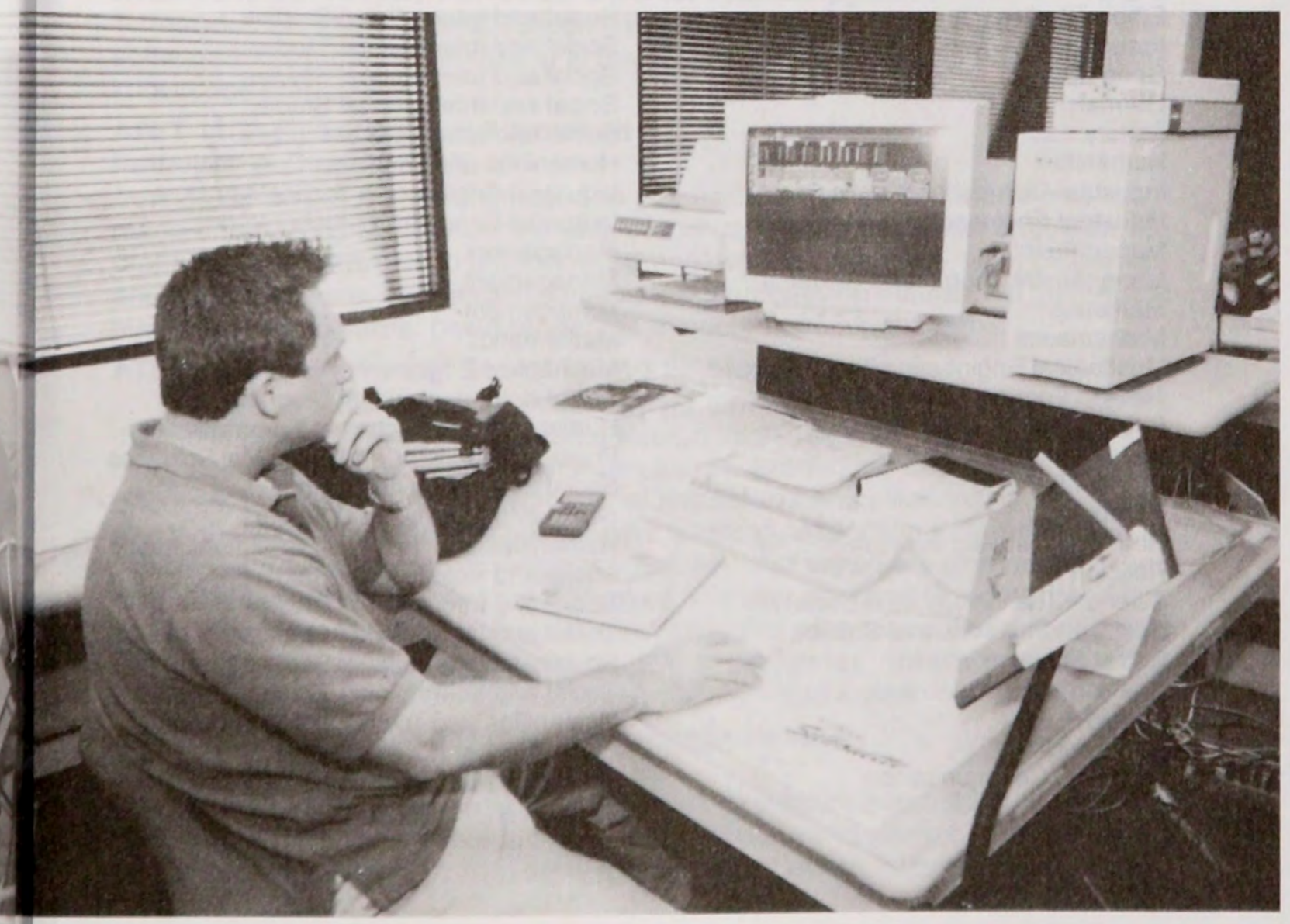




Course Descriptions

Course descriptions are arranged in alphabetical-numerical order. The numbers shown after the title of the course indicate (in sequence) the number of hours in class per week, the number of hours in laboratory per week, and the number of credit hours for the course. Course prerequisites are also specified. Course descriptions are listed in the following order:

Subject	Department
Accounting	Management
Anthropology	Social and International Studies
Apparel/Textile Engineering Technology	Apparel/Textile Engineering Technology
Architecture	Architecture
Arts	Humanities and Technical Communication
Arts and Sciences	Computer Science
Astronomy	Physics, Chemistry, and Biological Sciences
Biochemistry	Physics, Chemistry, and Biological Sciences
Biology	Physics, Chemistry, and Biological Sciences
Chemistry	Physics, Chemistry, and Biological Sciences
Civil Engineering Technology	Civil Engineering Technology
Computer Science	Computer Science
Construction	Construction
Design Foundation	Architecture
Economics	Management
Electrical and Computer Engineering Technology	Electrical and Computer Engineering Technology
Engineering Graphics	Mechanical Engineering Technology
English	Humanities and Technical Communication
Ethnic Studies	Social and International Studies
French	Social and International Studies
Geography	Social and International Studies
German	Social and International Studies
History	Social and International Studies
Humanities	Humanities and Technical Communication
Industrial Distribution	Industrial Engineering Technology
Industrial Engineering Technology	Industrial Engineering Technology
Management	Management
Management Information Systems	Management
Marketing	Management
Mathematics	Mathematics
Mechanical Engineering Technology	Mechanical Engineering Technology
Modern Foreign Languages	Social and International Studies
Philosophy	Humanities and Technical Communication
Physics	Physics, Chemistry, and Biological Sciences
Political Science	Social and International Studies
Psychology	Social and International Studies
Regents' Test Remediation	Humanities and Technical Communication
Religion	Social and International Studies
Science, Technology, and Society	Social and International Studies
Social and International Studies	Social and International Studies
Social Sciences	Social and International Studies
Spanish	Social and International Studies
Speech	Humanities and Technical Communication
Surveying	Civil Engineering Technology
Technical Communication	Humanities and Technical Communication

Accounting

ACCT 2101 Accounting I **3-0-3**

A study of the underlying theory and application of financial accounting concepts.

ACCT 2102 Accounting II **3-0-3**

Prerequisite: ACCT 2101

A study of the underlying theory and application of managerial accounting concepts.

Anthropology

ANTH 1102 Introduction to Anthropology **3-0-3**

Introduction to basic cultural anthropological concepts emphasizing the differences and similarities in contemporary human behavior in Western and non-Western societies. Course includes lectures and case studies.

Apparel/Textile Engineering Technology

ATET 1000 Orientation **1-0-1**

Provides ATET students and students majoring in other degree programs an overall introduction to the apparel and textile industry, career opportunities in Apparel/Textile Engineering Technology, familiarization with college and departmental policies, curriculum, and facilities. All phases of apparel and textile manufacturing will be covered from receipt of raw material to the manufacturing and distribution of the finished product. An introduction to Total Quality Management(TQM) is included.

ATET 1040 Introduction to Computers for Textile/Apparel **2-3-3**

Introduction to computers, including word processing, spreadsheets, and other software tools for problem solving in textile/apparel applications and information/knowledge management.

ATET 1100 Fiber and Yarn Formation **5-0-5**

Prerequisite: CHEM 1211K

A study of the major chemical and physical properties of natural and man-made fibers. Emphasis is on the fiber's end uses, with particular stress on the properties the fibers give to fabric hand, drape, wrinkle resistance, wear properties, and permanent use. Fundamental principles of processing natural and man-made staple fibers into yarns: basic properties of spun and filament yarns.

ATET 1300 International Sourcing and Employee Systems **3-2-4**

The evaluation of international sourcing strategies including transportation, domestic production, 807 operations, foreign investment, foreign purchase, turn time, competitive advantage, communications, production capabilities, cultural priorities, political influence, international regulations and alliances, costs, quality and technology. The processes of garment finishing, inspecting, coloration, special finishes and shipping the finished product and the principles of marketing and distribution to a global market are discussed. The systems used to recruit, interview, select, train and retain operating personnel including supervision and management are presented. These systems include ergonomics, interactive training, programmed instruction, employee empowerment and human resources.

ATET 2301 Apparel and Textile Computer Systems I **2-6-5**

Prerequisites: ATET 1040, EG 1210

The use of computer systems to develop the product information for apparel/textile products including source materials, processing and assembly options, fabric and embroidery design, pattern development, sizing theory, garment fit and product

development. Includes developing apparel patterns, grade rules, flat patterns, slopers, seam allowances, size scales, and quality specifications. The student develops complete sets of commercial apparel patterns utilizing manual and computer systems. Principles of material utilization, pattern engineering and fabric consumption are emphasized in all subject areas.

ATET 2500 Fabric Formation **5-0-5**
Prerequisites: ATET 1100, PHYS 1111K

Theory and practice of warping and slashing, elements of fabric design, fabric analysis, the physics of loom motions including shuttle and shuttleless looms and the elements of fabric geometry and fabric cover are included. The principles of circular, flat, warp, and double-knits and the fundamentals of nonwoven systems are covered.

ATET 2600 Equipment/Systems Evaluation and Selection **2-3-3**

Includes studies of stitch formation, seam application, and thread characteristics as they relate to the apparel/textile product and the cost considerations in the selection of appropriate machinery. Presents a survey of industrial sewing equipment, tabling, and auxiliary equipment for apparel/textile production as well as analyzing and evaluating attachments and automated systems for their qualitative and quantitative potentials. Includes studies of the lease/purchase options and construction analysis for operator training methods as well as presentations on material handling, cutting systems, quality assurance and return on investment analysis.

ATET 2701 Textile Processing Lab I **0-3-1**
Prerequisites: ATET 1100, ATET 2500

Manufacturing and management operations in the textile industry.

ATET 2900 Introduction to Textile/Polymer Chemistry **2-0-2**
Prerequisite: CHEM 1211K

An introduction to the chemistry of polymer and textile fibers, preparation agents, dyes, and finishes. Survey of Organic Chemistry (CHEM 2510) may be substituted for this course.

ATET 3200 Production Data Systems **3-4-5**
Prerequisite: ATET 2500 or ATET 2600

Provides an understanding of the uses of work measurement and its limitations, human abilities, expected performance levels, pace rating, computation of time standards, electronic time study equipment, and computerized standard data systems. Laboratory assignments include determination of product costs, analysis of actual and standard costs, and determination of overhead cost items. Topics include distribution of human abilities, expected performance levels, pace rating systems, computation of time standards and their application to cost control, production planning and wage incentives.

ATET 3300 Introduction to Composite Structures **1-3-2**
Prerequisites: CHEM 1211K, PHYS 1111K

Introduces the student to basic types of composites construction with emphasis on typical component materials used and typical manufacturing techniques utilized in industry.

ATET 3602 Apparel and Textile Computer Systems II **2-6-5**
Prerequisites: ATET 2301, ATET 2500

Principles and methods used in the preparation, planning, and cutting of fabrics and materials in apparel/textile products are presented including preparatory processes related to fabric cutting. Presents basic principles and computer methods of calculating, designing, and making pattern markers for apparel/textile products including yardage, cost estimation, and garment and fabric specification. Laboratory work includes developing cost and quality factors and the operation of equipment

for inspecting, marking, shading, fabric defects, spreading, cutting and ply numbering. A systematic appraisal of the factors governing economical fabric use, including: in-depth study of the relationship of pattern make-up to fabric consumption; the impact of width variation to total consumption; and the relationship of all fabric defects to total utilization is presented.

ATET 3700 Carpet Manufacturing **2-0-2**
Prerequisites: ATET 1100, ATET 2500

A study of carpet manufacturing technology with emphasis on fibers, yarns, and cords used in the manufacture of carpets; carpet material and carpet manufacturing processes; carpet design and construction; dyeing, printing, and finishing; and evaluation.

ATET 3901-3905 Special Topics **variable credit-1 to 5 hours**
Prerequisite: Consent of the department head

Special problems selected by the department. Offered on a demand basis.

ATET 4320 Textile Wet Processing **3-0-3**
Prerequisites: ATET 2500, ATET 2900 or CHEM 2510, CHEM 1211K

The chemical, thermal, and mechanical processes used in the preparation, coloration, and finishing of textile structures.

ATET 4330 Textile Processing Lab II **0-3-1**
Prerequisite: ATET 4320

Textile dyeing and finishing operations.

ATET 4440 Testing and Quality Control **3-3-4**
Prerequisites: ATET 2500, IET 2227

Fundamentals of the testing methods normally found in the plant laboratory including Uster Evenness Tester, Spinlab HVI System, twist tests, various fiber, yarn and fabric ASTM, AATCC, and Federal Standards test methods plus statistical analysis of the test results including statistical process control methods.

ATET 4670 Apparel/Textile Production Planning and Scheduling **3-3-4**
Prerequisites: ATET 2301, ATET 2600

Evaluation of the comprehensive factors that determine planning, scheduling and production of apparel/textile products. Analysis includes the determination of production methods, equipment, personnel, materials, training, manufacturing capacities, lead times, and delivery schedules. Laboratory assignments include the use of computers in predicting, gathering, manipulating, analyzing, and managing production by planning the optimum production cycle for a product from receipt of raw materials to the finished item.

ATET 4800 Textile Management Internship **0-3-1**
Prerequisite: ATET 2500

Students participate in an internship at an industrial site to receive management training and to be involved with corporate activities such as sales, marketing, management and human resources.

ATET 4810 Ethics and Safety **1-0-1**
Prerequisite: Senior standing or consent of the department head

Students are provided information pertaining to ethics and safety regulations applicable to the textile industry.

ATET 4840 Textile/Apparel Product Manufacturing **1-3-2**
Prerequisites: ATET 4670 or IET 3339, senior standing

This course is designed to provide the student with integrated knowledge from previous courses. The course focuses on the planning and control functions required in textile and apparel production systems, including design of facilities, inventories, and planning. A formal written report and oral presentation will be evaluated by faculty and industry representatives.

ATET 4901-4905 Special Topics **variable credit-1 to 5 hours**
Prerequisite: Consent of the department head
Special problems selected by the department. Offered on a demand basis.

Architecture

ARCH 3011 Architecture Studio I **1-9-4**
Prerequisite: Acceptance into the professional program
This course, an introduction to architectural design, offers small-scale problems that deal with space, measure, structure, site, technics, program and habitation. These problems address human needs and the interaction of persons with the natural and built environment.

ARCH 3012 Architecture Studio II **1-9-4**
Prerequisite: ARCH 3011
This course is a continuation of ARCH 3011 and involves research, design, design development, preparation of construction documents and construction of a small-scale architectural project, or portion of the project.

ARCH 3112 Architecture Culture II - The Renaissance through 1850 **3-0-3**
A continuation of Architecture Culture, examining the relationship between architecture and other cultural discourses such as philosophy, aesthetics, science, religion, politics and technology. While continuing in the aim of developing an understanding of how architecture manifests the socio-cultural conditions of a given moment in aesthetic form, simultaneously examines the development of an autonomous architecture culture, one that we refer to as theory.

ARCH 3113 Architecture Culture III - 1850 through 1945 **3-0-3**
A continuation of the Architecture Culture series, additionally examining the relationship between architecture and other cultural discourses such as philosophy, aesthetics, science, religion, politics and technology. While continuing in the aim of developing an understanding of how architecture manifests the socio-cultural conditions of a given moment in aesthetic form, it takes as its central concern the search for a definition of 'Modernity', and how it might be translated into a style. Particular attention is paid to the various 'isms' of the Modern Movement and the key historical figures that shaped them.

ARCH 3211 Building Technology I **2-0-2**
Prerequisite: DFN 2211, Corequisite: ARCH 3231
Wood, light gauge steel, masonry and concrete are introduced as building and structural materials. The relationship of structure to enclosure systems is examined along with the structural analysis and design of light framing systems. A comparative study of structural versus non-structural enclosure systems is undertaken. Students produce a resource package for ARCH 3012, Architecture Studio II.

ARCH 3212 Building Technology II **2-0-2**
Prerequisite: ARCH 3211, Corequisite: ARCH 3232
This course is a continuation of ARCH 3211 with the emphasis on code requirements for gravity and lateral loads and statically determinate structural steel systems. Approximate analysis of rigid frames is introduced and the student learns to use "pre-packaged" computer programs to input data and evaluate results. The study of the relationship of structure to enclosure is continued throughout the course sequence.

ARCH 3221 Environmental Technology I **2-0-2**
Corequisite: ARCH 3231
This course studies site engineering standards and legal issues related to the development of building sites. The course focuses on zoning, building placement, rough grading, vehicular and pedestrian circulation and storm water management.

ARCH 3222 Environmental Technology II **2-0-2**
Prerequisite: ARCH 3221, Corequisite: ARCH 3232

A study of the connection between basic human comfort, building form, orientation and envelope materials, and energy consumption is undertaken in this course. System selection and configuration are examined in response to building spatial configuration, functions and life cycle cost are included.

ARCH 3231-3232 Architecture Practicum I, II **0-3-1**

These practicums provide an opportunity for students to apply knowledge acquired in the concurrent technology courses to current studio projects or related projects. Field trips may also be required.

ARCH 3241 Computer Applications in Architecture **1-3-2**
Prerequisite: ARCH 3011

This course presents basic training in the operation of the hardware and software of computer-aided design (CAD) with an introduction to two and three dimensional graphic techniques and their application to professional practice.

ARCH 3311 Contract Documents **2-0-2**
Corequisite: ARCH 3231

This course is the study and preparation of contract documents required for the construction of an architectural project. It emphasizes material research, manually and computer generated documents and utilization of A.I.A. General and Supplemental Conditions.

ARCH 3501 Introduction to Applied Architectural Research **2-0-2**
Prerequisite: Admission to the professional program

This course introduces the logic of scientific thinking, method, and research. Methods of inquiry, problem statement, data gathering, analysis, as applied to technological as well as the social aspects of architecture are discussed as a basis of informing architectural design studies. Students may select research topics directly related to the material covered in the third year of the curriculum.

ARCH 35X1- 35X4* Applied Architectural Research **variable credit-1 to 4 hours**
Prerequisite: ARCH 3501

Students select independent research projects that provide them with the opportunity to explore an area of professional interest for credit. All research projects must be approved by the faculty. May be repeated twice when topics vary.

ARCH 39X1-39X4* Special Topics **variable credit-1 to 4 hours**
Prerequisite: Admission to the professional program

This course provides an opportunity for a group of students to undertake in-depth study under the direction of a member of the full-time faculty or visiting faculty. Areas of study may include extension and enhancement of material offered in required architecture courses or exploration in an area of professional interest not covered by, but directly related to, material covered in the third year architecture courses. May be repeated twice when topics vary.

ARCH 4013 Architecture Studio III **0-12-4**
Prerequisite: ARCH 3012

Students undertake a studio problem in architectural design with an emphasis on the integration of technology and the knowledge from ARCH 4114, as applied to a contemporary building type.

ARCH 4014 Architecture Studio IV **0-12-4**
Prerequisite: ARCH 4013

This course continues with the students undertaking a studio problem in architectural design of multi-use project with emphasis on the integration of

technology and the application of knowledge acquired in the concurrent Architectural Theory course.

ARCH 4114 Architectural Theory I - The Questioning of Modernity **2-0-2**

Corequisite: ARCH 4013

A continuation of the Architecture Culture sequence, this course examines the development of issues and questions that began to undo the dogma of the Modern movement, exploring topical issues raised by architects, historians and critics alike that help to formulate alternative strains of Modernism.

ARCH 4115 Architectural Theory II - The Post-Modern Condition **2-0-2**

Corequisite: ARCH 4014

A continuation of the Architecture Culture sequence, this course concerns itself with the rise of alternative positions in the contemporary architectural debate. It examines topical issues raised by architects, historians and critics that have formulated alternative theoretical approaches to contemporary architecture.

ARCH 4213 Building Technology III **2-0-2**

Prerequisite: ARCH 3212, Corequisite: ARCH 4233

This course is a continuation of ARCH 3212 with emphasis on reinforced, poured-in-place concrete as a building and structural material. Students will also be introduced to precast, prestressed and post-tensioned concrete systems and components.

ARCH 4214 Building Technology IV **2-0-2**

Prerequisite: ARCH 4213, Corequisite: ARCH 4234

This course will provide students with the opportunity to investigate current innovations in the design and construction of structural and building systems and to discuss their application to studio projects.

ARCH 4223 Environmental Technology III **2-0-2**

Prerequisite: ARCH 3222, Corequisite: ARCH 4233

This course is a continuation of ARCH 3222 with emphasis on building electrical distribution systems and lighting.

ARCH 4233-4234 Architecture Practicum III, IV **0-3-1**

This advanced practicum provides an opportunity for students to apply knowledge acquired in the concurrent technology courses to current studio projects or related projects. Field trips may also be required.

ARCH 4312 Codes **2-0-2**

Prerequisites: ARCH 4213, ARCH 4223, Corequisite: ARCH 4234

This course is an introduction to the Standard Building Code, N.F.P.A. 101 and A.D.A. Emphasis is placed on theory of building safety, code document organization and the application of codes to actual buildings.

ARCH 45X1-45X4* Applied Architectural Research **variable credit-1 to 4 hours**

Prerequisite: ARCH 3501

Students select independent research projects that provide them with the opportunity to explore an area of professional interest for credit. All research projects must be approved by the faculty. May be repeated twice when topics vary.

ARCH 49X1-49X4* Special Topics **variable credit-1 to 4 hours**

Prerequisite: Admission to the professional program

This course provides an opportunity for a group of students to undertake in-depth study under the direction of a member of the full-time faculty or visiting faculty. Areas of study may include extension and enhancement of material offered in required architecture courses or exploration in an area of professional interest not covered by, but directly related to, material covered in fourth year architecture courses. May be repeated twice when topics vary.

ARCH 5015 Architecture Studio V **0-9-3**
Prerequisite: ARCH 4014

Students are required to design multipurpose architectural environments in response to a complex set of criteria. Design solution should demonstrate an investigation and application of urban design principles, theories and philosophies.

ARCH 5116 Urban Planning and Design Theory **2-0-2**
Corequisite: ARCH 5015

This course examines the evolution of modern cities and the major issues and problems confronting metropolitan centers. Emphasis will be placed on culture, economics, natural environment, and their influence on urban form.

ARCH 5313 Professional Practice and Ethics **2-0-2**
Prerequisite: 5th year standing in the professional program, Corequisite: ARCH 3232

Study of professional ethics, laws governing the practice of architecture, and contractual relationships are undertaken in this course.

ARCH 55X1-55X4* Applied Architectural Research
variable credit-1 to 4 hours
Prerequisite: ARCH 3501

Students select independent research projects that provide them with the opportunity to explore an area of professional interest for credit. All research projects must be approved by the faculty. May be repeated twice when topics vary.

ARCH 5593 Diploma Project Research **2-3-3**
Prerequisite: ARCH 3501

Faculty approved, independent research projects that require students to select, research, and program a diploma project subject. Results of this course must be presented and approved by the faculty prior to admission to ARCH 5999.

ARCH 59X1-59X4* Special Topics **variable credit-1 to 4 hours**
Prerequisite: Admission to the professional program

This course provides an opportunity for a group of students to undertake in-depth study under the direction of a member of the full-time faculty or visiting faculty. Areas of study may include extension and enhancement of material offered in required architecture courses or exploration in an area of professional interest not covered by, but directly related to, material covered in fifth year architecture courses. May be repeated twice when topics vary.

ARCH 5999 Diploma Project **1-12-5**
Prerequisite: ARCH 5593

Students execute and present a faculty approved terminal project in this course. Projects are developed from programmatic research, performed in ARCH 5593, to completed design development and documented in a manner acceptable for publication.

*X denotes the program area for the special topic of applied research. 0-Design, 1-History/Theory, 2-Building Technology, 3-Practice/Management/Marketing, 4-Real Estate, 5-Land Development, 6-Environmental Studies, 7-Planning/Urban Design, 8-Facilities Management, 9-Human Factors.

Arts

ARTS 2001 Art Appreciation **3-0-3**
Prerequisite: ENGL 1101

Appreciation of visual arts is developed through an introduction to the aesthetics, criticism, history, and production of visual art in the Western world. Some non-Western art will be included.

ARTS 2002 Drama Appreciation **3-0-3**
Prerequisite: ENGL 1101

Survey of drama as a performing art, considering both literary and nonliterary elements. Some non-Western drama will be included. In addition, attendance at one or more live dramatic performances will be required.

ARTS 2003 Music Appreciation **3-0-3**
Prerequisite: ENGL 1101

Survey of music in the Western world, including historical movements and basic musical notation. The course also covers some non-Western music, as well as contemporary, classical, and popular music.

ARTS 2901-2903 Special Topics **variable credit-1 to 3 hours**

Special topics in the arts — especially music, art, or drama. Offered by the department at its discretion.

ARTS 3000 Visual Thinking **3-0-3**

Study of visual thinking as an alternative to and enhancement of verbal and mathematical thinking. Helps students develop creative problem-solving skills by (1) analyzing types of conceptual blocks, and (2) developing techniques that use order and visual coherence to overcome these blocks. Students may be required to produce graphic solutions to problems; however, prior drawing experience is not required.

Arts and Sciences

A&S 2023 Information and Research **1-2-2**
Prerequisite: ENGL 1102

Instruction and independent work in research methods, including finding, interpreting, and evaluating sources of information on a variety of topics. Required for all majors in the College of Arts and Sciences.

Astronomy

ASTR 1000K Introduction to the Universe **3-2-4**

A survey of the universe, examining the historical origins of astronomy; the motions and physical properties of the Sun, Moon, and planets; the formation, evolution, and death of stars; and the structure of galaxies and the expansion of the universe. Laboratory exercises supplement classroom work.

Biochemistry

BIOC 2111K Biochemistry I **3-3-4**
Prerequisite: CHEM 1211K

A survey of biochemistry emphasizing the structure, chemistry, and metabolism of biomolecules such as amino acids, proteins, carbohydrates, and lipids. Laboratory exercises supplement classroom work.

BIOC 3112K Biochemistry II **3-3-4**
Prerequisite: BIOC 2111K

A continuation of the coverage begun in Biochemistry I. Topics include metabolism of carbohydrates, lipids, and amino acids, the structure and functions of nucleic acids, and the genetic code. Laboratory exercises supplement classroom work.

BIOC 3901-3905 Special Topics **variable credit-1 to 5 hours**

Special topics selected by the department. Offered on a demand basis.

BIOC 4901-4905 Special Topics **variable credit- 1 to 5 hours**

Special topics selected by the department. Offered on a demand basis.

Biology

BIOL 2107K Biological Principles I **3-3-4**

An introduction to biology including the chemistry of life, cell structure and functions, bioenergetics, genetics, basic statistics, biotechnology, and evolution. The laboratory exercises supplement the class work.

BIOL 2108K Biological Principles II **3-3-4**

Topics include organ system anatomy and physiology, a survey of the diversity of life, animal behavior, and ecology. The laboratory exercises supplement the class work.

BIOL 3000K Genetics **3-3-4**

Prerequisites: BIOL 2107K, BIOL 2108K

An introduction to the structure, function, regulation and transmission of hereditary materials in viruses, prokaryotes and eukaryotes. Laboratory includes exercises in both classical and molecular genetics.

BIOL 3100K Microbiology **3-3-4**

Prerequisites: BIOL 2107K, BIOL 2108K

An introduction to the biology of prokaryotic and eukaryotic microorganisms and viruses with emphasis on bacteria and viruses. Includes the morphology, biochemistry, taxonomy, immunology, and ecology of microorganisms. Laboratory exercises supplement classroom work.

BIOL 3200K Biotechnology **3-3-4**

Prerequisites: BIOL 2107K, BIOL 2108K

An introduction to artificial gene manipulation including: recombinant DNA technology, genetic engineering techniques, DNA amplification, gene therapy, and ethical considerations. Laboratory exercises supplement classroom work.

BIOL 3300K Ecology **3-3-4**

Prerequisites: BIOL 2107K, BIOL 2108K

An examination of the relationship of organisms with their abiotic and biotic environments. Population, community and ecosystem interactions are evaluated from both ecological and environmental perspectives. Laboratory and field studies emphasize the structure and function of natural populations, communities, and ecosystems.

BIOL 3400K Cell Physiology **3-3-4**

Prerequisites: BIOL 2107K, BIOL 2108K

An overview of the structure and functions of cells and their organelles. Includes membrane structure and transport, catabolism, energy metabolism, photosynthesis, and biosynthesis. Laboratory exercises supplement classroom work.

BIOL 3901-3904 Special Topics **variable credit-1 to 4 hours**

Prerequisite: Junior standing

Special topics selected by the department. Offered on a demand basis.

BIOL 4901-4904 Special Topics **variable credit-1 to 4 hours**

Prerequisites: BIOL 2107K, BIOL 2108K

Special topics selected by the department. Offered on a demand basis.

Chemistry

CHEM 1211K Principles of Chemistry I **3-3-4**
Prerequisite: MATH 1111

First course in a two-semester sequence covering the fundamental principles and applications of chemistry designed for science majors. Topics to be covered include composition of matter, stoichiometry, periodic relations, and nomenclature. Laboratory exercises supplement the lecture material.

CHEM 1212K Principles of Chemistry II **3-3-4**
Prerequisite: CHEM 1211K

Second course in a two-semester sequence covering the fundamental principles and applications of chemistry designed for science majors. Laboratory exercises supplement the lecture material.

CHEM 2211K Environmental Chemistry **3-3-4**
Prerequisite: CHEM 1211K

This course emphasizes the source, transport, reactions and fate of pollutants and natural chemical substances that enter or compose the aquatic, air, and soil environments. Laboratory exercises focus on water and wastewater analysis.

CHEM 2510 Survey of Organic Chemistry **3-0-3**
Prerequisite: CHEM 1211K

A survey of the chemistry of the compounds of carbon. Topics include a study of the synthesis, reactions, and properties of acyclic and cyclic compounds and their derivatives.

CHEM 2511K Organic Chemistry I **3-3-4**
Prerequisite: CHEM 1211K

An introduction to the chemistry of the compounds of carbon. Topics include a study of the synthesis, reactions, reaction mechanisms, and properties of acylic and cyclic compounds and their derivatives. Laboratory exercises supplement classroom work.

CHEM 2512K Organic Chemistry II **3-3-4**
Prerequisite: CHEM 2511K

A continuation of the study of organic molecules. Topics include a survey of heterocycles, natural products and synthetic polymers. Laboratory exercises supplement classroom work.

CHEM 3100K Analytical Chemistry **3-6-5**
Prerequisite: CHEM 1212K

An introduction to classical and instrumental methods of quantitative analysis and their underlying principles. Laboratory exercises supplement classroom work.

CHEM 3300K Instrumental Analysis **2-6-4**
Prerequisite: CHEM 3100K

Principles of operation and application of instrumental methods including ultraviolet/visible and infrared spectroscopy, atomic absorption and emission, nuclear magnetic resonance spectroscopy, chromatography, and electrochemistry. Laboratory exercises supplement classroom work.

CHEM 3901-3905 Special Topics **variable credit-1 to 5 hours**

Special topics selected by the department. Offered on a demand basis.

CHEM 4111K Physical Chemistry I **3-3-4**
Prerequisites: CHEM 1212K, MATH 2254

An introduction to the physical laws, theoretical principles, and mathematical relationships in chemistry, particularly in regard to chemical thermodynamics, equilibrium, electrochemistry, and changes of state. Laboratory exercises supplement classroom work.

CHEM 4112 Physical Chemistry II **3-0-3**
Prerequisite: CHEM 4111K

A continuation of the coverage begun in Physical Chemistry I. Topics include chemical kinetics, an introduction to quantum mechanics, and statistical mechanics. The laboratory is optional.

CHEM 4112L Physical Chemistry II Lab **0-3-1**
Prerequisite: CHEM 4111K, Corequisite: CHEM 4112

Laboratory exercises which compliment the material covered in CHEM 4112, Physical Chemistry II.

CHEM 4901-4905 Special Topics **variable credit-1 to 5 hours**

Special topics selected by the department. Offered on a demand basis.

Civil Engineering Technology

CET 1001 Orientation to CET Profession **1-0-1**

Introduction to Civil Engineering Technology field; career opportunities; educational spectrum; and professional options. Includes departmental policies and expectations for student majors.

CET 1002 Orientation to CET Computer Practices **0-2-1**

A general introduction to computer methods and tools used in practice. Various software applications including spreadsheets, word processors and network programs will be covered.

CET 2160 Civil Graphics and Computer Aided Drafting **2-6-4**

An introduction to graphic principles and practices in civil engineering technology. This course includes the development of the basic drafting skills needed to produce civil engineering plans and graphical presentations. The elements of descriptive geometry are addressed. A major component of the course is an introduction to the fundamentals of computer-aided drafting and design (CADD).

CET 2200 Introduction to Structures **4-0-4**
Prerequisite: PHYS 1111K

An introduction to architectural structures with emphasis on statics and strength of materials concepts. Subject matter includes force systems, shear and moment diagrams, determination of section properties, and the design of wood beams and columns. (Not for credit for CET students.)

CET 2214 Engineering Mechanics - Statics **3-0-3**
Prerequisites: PHYS 1111K or PHYS 2211K (or concurrent enrollment), MATH 2253

Study of force vectors, equilibrium of particles, equilibrium of rigid bodies in two and three dimensions; trusses, friction, centroids and moments of inertia.

CET 2215 Engineering Mechanics - Dynamics **2-0-2**
Prerequisite: CET 2214

A study of kinematics and kinetics of particles and rigid bodies. Topics include principles of displacement; velocity and acceleration; relative and absolute motions; force, mass and acceleration; work and energy; and impulse momentum.

CET 2219 Strength of Materials **3-3-4**
Prerequisites: CET 2214, MATH 2254

The study and mathematical modeling of the mechanical behavior of materials under load. Emphasis will be on the elastic conditions of equilibrium, compatibility and material behavior. Includes study of stress and strain in columns, connectors, beams, eccentrically-loaded members, as well as introduction to statically indeterminate members.

CET 3301 Soil Mechanics and Foundations **3-3-4**
Prerequisites: CHEM 1211K, CET 2219, CET 3343

Theory of soil mechanics relative to index properties, classification, stress distribution, settlement, permeability, consolidation, shear strength, density, compaction, bearing capacity and lateral earth pressures. Introduction to selection and design of foundation design. Laboratory includes obtaining field sampling, evaluation of soil properties, and utilizing test results in design projects. Design of foundations with consideration given to settlement, stress distribution, bearing capacity, structural capacity of footings, lateral earth pressures, retaining walls and pile foundations.

CET 3302 Construction Materials **3-3-4**
Prerequisites: CHEM 1211K, CET 2219

Introduction to materials science and the engineering properties of a variety of civil engineering materials such as metals, wood, aggregates, portland cement products and concretes, asphalt products and concretes. The relationship between composition, material properties and manufacturing will be examined. Laboratory will emphasize the analysis of data and the application of standard tests to design and construction specifications.

CET 3316 Structural Analysis **4-0-4**
Prerequisite: CET 2219

Structural loads and types of structures, analysis of determinate and indeterminate structures and deflection of beams, frames, and trusses.

CET 3321 Transportation Systems **3-3-4**
Prerequisite: SURV 2221

An overview of transportation engineering as it applies to land, air, and sea systems. Special emphasis is given to the design factors required in planning and constructing a highway including the planning process, traffic analysis and capacity, intersection design and signalization. The lab focuses on the preparation of highway design plans as well as data measurement techniques unique to transportation engineering.

CET 3324 Project Cost Analysis **4-0-4**
Prerequisite: MATH 2253

A study of the project cost measurement and analysis techniques unique to the civil engineering profession. Cost analysis procedures and their relationship with cost estimation methodologies are examined. Emphasis is placed on techniques for economy studies of multiple alternatives, uncertainties in forecasts, increment costs, taxes, and retirement and replacement of highways, transportation systems, bridges and publics works facilities. Current economic issues are also discussed.

CET 3343 Basic Fluid Mechanics **3-3-4**
Prerequisite: CET 2200 or CET 2214

A study of the basic principles of fluid mechanics and the application of these principles to practical problems. The subject matter will consist of fluid properties, fluid pressure, buoyancy, pipe flow analysis, open channel flow, and pump selection. Pressure pipe systems, flow measurement, and open channel systems are examined.

CET 3344 Fundamentals of Environmental Engineering Technology **3-3-4**
Prerequisites: CHEM 1211K, CET 3343

A study of the basic unit operations of Environmental Engineering Technology with emphasis on the design of water and wastewater treatment plants. Aspects of environmental chemistry and standard methods of industrial and municipal wastewater characterization are included.

CET 3371 Structural Steel Design I **3-0-3**
Prerequisites: CET 3302, CET 3316
AISC design procedures for steel beams, joints, girders, columns, base plates, and connections.

CET 3381 Reinforced Concrete Design I **3-0-3**
Prerequisites: CET 3302, CET 3316
ACI design procedures for reinforced concrete beams, columns, and other members. Design of masonry members is included.

CET 3901-3904 Special Topics **variable credit-1 to 4 hours**
Prerequisites: Junior standing, consent of the department head.
Special topics offered by the department on a demand basis.

CET 4220 Soils and Concretes in Construction **3-3-4**
Prerequisite: CET 2200
A study of the properties and behavior of soil, aggregates and Portland cement concrete as they relate to construction operations. Topics include soil index properties, classification, compaction and drainage; aggregate gradation, durability and applications; design of Portland cement concrete mixtures and testing of concrete in both plastic and cured states, use of concrete admixtures and field concreting practices. (Not for credit for CET students).

CET 4331 Highway Design **3-3-4**
Prerequisite: CET 3321
A continuation of the highway design concepts introduced in Transportation Systems. The changing role of the highway designer and the impacts of GIS on the design process will be examined. Design projects will be used to reinforce material studied.

CET 4354 Unit Operations in Environmental Engineering **3-3-4**
Prerequisite: CET 3344
Study of the unit operations for advanced water and wastewater treatment. Standard laboratory tests with accompanying reports are included. Topics include membrane processes, carbon absorption, air stripping, nutrient removal and sludge treatment.

CET 4371 Steel Design II **4-0-4**
Prerequisite: CET 3371
This is a follow up steel design course with an emphasis on the AISC Load and Resistance Factor Design method. Topics covered are beams (fully plastic, inelastic, elastic), concentric columns, leaner columns, standard connections (bolted and welded), eccentric connections, frame design (braced), modified effective lengths, base plates, and composite beam design (both ASD and LRFD).

CET 4374 Solid Waste Management **3-3-4**
Prerequisite: CET 3344
Study of management and equipment alternatives in solid waste generation, collection, processing, transferring, transporting and disposal. Consideration of legislation, regulation and management of solid wastes. Activities include field trips and a municipal solid waste landfill design with both oral and written project reports.

CET 4381 Concrete Design II **4-0-4**
Prerequisite: CET 3381
This is a continuation of the concrete design procedures covered in CET 3381. Topics include prestress member design, posttensioned member design, retaining wall design, biaxial bending in short and long concrete columns, and two-way slab design.

CET 4401 Computer Methods in Structures **3-3-4**
Prerequisite: CET 3371

Review of matrix algebra, structural analysis by matrix methods (Flexibility and Displacement), Slope-Deflection theory, true stiffness determination of spans with varying moments of inertia, multi-story analysis, global stiffness matrix determination as applied to trusses, beams and frames (2D, 3D). Use of commercially available software for analysis and design such as PC-STRAN, GTSTRUDL or STAAD-III emphasized.

CET 4402 Ethics of Engineering **1-0-1**

A review of the theoretical and practical aspects of ethical problems in engineering, along with their suggested solutions. Specific examples, situations and limitations of ethics and ethical relationships are discussed in detail.

CET 4418 Geology of Engineering **3-3-4**
Prerequisites: CET 3301, CET 3302

Introductory geology, including rock types, geneses, formations, strength, permeability, and weathering. Investigation of the effects of geologic structure, groundwater, rock properties and mineralogy on design and construction of highways, buildings, tunnels and dams. Problems of construction excavation and dewatering, tunneling methods, evaluation of slope stability and determination of geologic substructure through use of maps and subsurface investigations.

CET 4442 Industrial/Hazardous Waste Treatment **3-3-4**
Prerequisite: CET 3344

Deals with the scope and characteristics of industrial wastewater, treatment processes, pre and primary treatment, coagulation and precipitation, aeration and mass-transfer, and adsorption and biological oxidation.

CET 4444 Applied Hydrology **3-3-4**
Prerequisite: CET 3343

An introduction to the physical process of the hydrologic cycle, the fundamentals of hydrologic analysis, and the elements of design hydrology. Also includes drainage area studies, hydrograph theory, and storm water and culvert design. Analysis and design of storm sewer appurtenances, flood plain analysis, and open channels. Introduction to site development and the methods presently employed to control erosion and sediment in urban areas. Design of detention ponds, sediment basins and storm sewer systems.

CET 4450 Pavement Design and Maintenance **3-3-4**
Prerequisites: CET 3301, CET 3302, CET 3321

A study of the methods used to determine thickness and composition of the components of both flexible and rigid highway pavements. Classwork will also include evaluation of paving materials, design of pavement drainage systems recognition of pavement distress, and the design of repair measures. Standard techniques and computer software such as that of PCA, ACPA, the Asphalt Institute and AASHTO will be utilized in pavement thickness design.

CET 4464 Air Pollution Control **3-0-3**
Prerequisite: CET 3344

Global and local effects of air pollution, pollution sources, emission controls, meteorology, plume dispersion and rise, particulate, sulfur oxides, nitrogen oxides, air quality and emission standards, and control systems and devices.

CET 4471 Transportation Network Design **3-3-4**
Prerequisite: CET 3321

A study of the principles and concepts employed in the design of multimodel transportation networks. Topics include: interaction of multimodel systems, terminal design, ports and harbors, airport design, and mass transit. Design projects will look at solutions to network problems facing metropolitan Atlanta.

CET 4480 Senior Project **1-9-4**
Prerequisites: Senior standing, consent of the department head

This course is designed to be the culmination of the undergraduate civil engineering technology education. Under the guidance of the professor, students will form small design teams, choose a proposed or ongoing project in the metropolitan area of Atlanta and redesign the project. Working as independent teams with guidance from the lead professor the projects will be completed and the results presented for review to a panel of faculty and students.

CET 4901-4904 Special Topics **variable credit-1 to 4 hours**
Prerequisites: Junior standing, consent of the department head.

Special topics offered by the department on a demand basis.

Computer Science

CS 1113 BASIC Programming **2-2-3**
Prerequisite: MATH 1113 or concurrently

This course covers the fundamentals of computer programming and the use of a computer for performing calculations and using data files. Microcomputers are used in laboratory assignments. Students are taught the concepts of counters, accumulators, decision-making, looping, subroutines, arrays, files, DOS operations, and string processing. (CSci majors may not receive degree credit for this course).

CS 1301 Computer Science I **3-2-4**
Prerequisite: MATH 1113 or concurrently

This course provides an introduction to computer science with a focus on structured programming. Topics include an overview of computers and programming, problem-solving and algorithm development, simple data types, arithmetic and logical operators, selection and repetition structures, text files, one- and two-dimensional arrays, procedural abstraction and software design, and modular programming including subprograms. Programming assignments focus on the techniques of good programming style and how to design, code, debug, and document programs.

CS 1302 Computer Science II **3-2-4**
Prerequisite: CS 1301

This second course in computer science provides a focus on both abstraction and advanced programming techniques. Topics include abstract data types, multi-dimensional arrays and records, strings, searching and sorting, introductory algorithm analysis, recursion, pointers and linked lists, software engineering concepts, and dynamic data structures (stacks, queues, and trees). Programming assignments emphasize good software development principles such as information hiding, re-use, use of symbolic debuggers, and separate compilation.

CS 2123 C Programming **2-2-3**
Prerequisite: MATH 1113 or concurrently

This course covers the beginning concepts of programming logic and algorithms using the C Programming Language. (CSci majors may not receive degree credit for this course).

CS 2143 FORTRAN Programming **2-2-3**
Prerequisite: MATH 1113 or concurrently

A fundamental course in FORTRAN programming covering data types, basic operations, control structures, arrays, functions and subroutines, I/O formatting, and sequential file access. (CSci majors may not receive degree credit for this course).

CS 2224 Computer Architecture and Assembly Language **3-2-4**
Prerequisite: CS 1301

This course emphasizes the relationships between computer software and hardware. Number systems and basic computer system principles are addressed, followed by more detailed coverage of digital logic, microprogramming, and instruction set design. Assembly language programming is covered to the extent appropriate for teaching architectural concepts associated with a modern microprocessor. Advanced architectural concepts (e.g., RISC and parallel processing) are covered as time permits.

CS 2642 Computers and Society **2-0-2**
Prerequisite: CS 1302

This course deals with current issues of computers, ethics, and social values. Topics include ethics, computer crime, abuse, social responsibility, risk analysis, computer law and cultural impact. This course includes library and internet research components.

CS 3123 Programming Language Concepts **3-0-3**
Prerequisites: CS 1302, CS 2224

A comparative study of programming languages covering their history, development, and different design criteria; their formal definitions of syntax and semantics; their concepts and constructs; and the similarities and differences between languages. This course includes examination of object-oriented, functional, and concurrent languages, exception handling, modularization, scoping, etc. The use of programming tools that enable the student to practice the course objectives are incorporated.

CS 3153 Database Systems **3-0-3**
Prerequisite: CS 1302

This course covers various database models including hierarchical, network, relational, and object-oriented. Also included is an overview of various file structures including sequential, indexed-sequential, and direct. Labs use an SQL based database product such as Oracle.

CS 3244 Operating Systems **4-0-4**
Prerequisites: CS 2224, CS 3423

An introduction to basic operating system principles. Process management, memory management (real and virtual), peripheral device management, file systems, and distributed systems are introduced and examined from a conceptual viewpoint. Selected aspects of operating systems are explored in greater depth via software simulation projects. A research project is also required.

CS 3423 Data Structures and Algorithm Analysis **2-2-3**
Prerequisite: CS 1302

Advanced algorithms for sorting, searching, listing, and updating of data structures are covered. Analysis of algorithms is included. Topics include object-oriented programming concepts, advanced sorting and searching methods, advanced tree topics, graphs, priority queues and heaps, and hashing.

CS 3623 Applications Programming in C **2-2-3**
Prerequisite: CS 3423

The computer programming language C presented with a focus on its use in applications involving systems programming, low- and high-level features, graphics, and libraries of program units. Laboratory projects are required.

CS 3643 Applications Programming in C++ **2-2-3**
Prerequisite: CS 3423

Applications programming in C++ starting with abstract data types coded in classes and working toward the object-oriented features of C++, including class inheritance, genericity, and re-use through object-class libraries. The course

focuses on C++ within the object-oriented paradigm and includes individual lab exercises and a team project in an appropriate problem domain.

CS 3663 Applications Programming in Java **2-2-3**

Prerequisite: CS 3244

The computer programming language Java is presented with emphasis on its use for developing graphical user interfaces, and client/server applets and applications. Laboratory projects are required.

CS 3683 Applications Programming in Ada **2-2-3**

Prerequisite: CS 3244

The computer programming language Ada is presented with a focus on its use in applications that involve multi-tasking and as a vehicle for applying a software engineering approach to software development. Laboratory projects are required.

CS 3901-3904 Special Topics **variable credit-1 to 4 hours**

Prerequisite: Junior standing

Special topics selected by the department. Offered on a demand basis.

CS 4243 System Programming in Windows and UNIX **2-2-3**

Prerequisite: CS 3244

Concepts of system programming in Windows and in UNIX environments are presented. In addition to projects which involve implementation of system programming in both environments, students complete and present a major programming project in the environment of their choice.

CS 4263 Computer Networks **3-0-3**

Prerequisite: CS 3244

Issues involved in computer-to-computer communications are examined based on the layered ISO Reference Model on Open Systems Interconnection. The objectives and methodologies of each layer are studied, with particular emphasis on the Datalink, Network, and Transport layers. Also explored are the various protocols for Local Area Networks and Wide Area Networks including wired and wireless solutions. Laboratory projects involve simulation and implementation of various aspects of inter-computer communication. Students are required to write a paper and present the findings on some of the latest network technologies.

CS 4283 Real-Time Systems **3-2-4**

Prerequisites: CS 3244, CS 4624, ENGL 2010, SPCH 2400

This course covers 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. System performance issues are also discussed. Major project included.

CS 4324 User-Centered Design **3-2-4**

Prerequisite: CS 3423 for CSci majors; permission of CS department head for others

A course that presents the fundamental knowledge, processes, skills, and practices leading to the user-centered design of computer systems and applications. The course addresses the effectiveness of human interactions with computers by examining issues of physical ergonomics, cognition and perception, human memory and information processing, and usability. Software engineering techniques are covered leading to improved system effectiveness in supporting use of computers, user learning, diversity in interaction styles, and individual versus group work. Class exercises provide practice of needed skills. A major design and development project that integrates all aspects of user-centered design is included.

CS 4354 Computer Graphics and Multimedia **3-2-4**
Prerequisites: CS 4624, ENGL 2010, SPCH 2400

The basic principles and practices of interactive computer graphics and multimedia systems are covered in this introductory course. The design and implementation of state-of-the-art computer graphic rendering and visual multimedia systems are the main part of the course. The sub-topics of the course deal with specific input/output hardware devices and their technology, software and hardware standards, programming methods for implementing 3-dimensional graphical applications and interactive multimedia applications, and a study and evaluation of the effectiveness of graphic/multimedia communications. A large component of the class is the building of a large-scale application.

CS 4423 Logical Foundations of Computer Science **3-0-3**
Prerequisites: CS 3423, MATH 3345, senior standing

An elective course surveying computability theory, finite state machines, automata, parsing, grammars, and selected aspects of compiler construction. **Particularly useful for students contemplating attending graduate school in computer science.**

CS 4453 Simulation and Modeling **2-2-3**
Prerequisites: MATH 2260, a programming course

An introduction to the basic role of simulation in system modeling. Presents approaches to organizing and conducting simulation studies. Emphasis is on the principles and practice of discrete-event simulation using one or more applicable programming languages.

CS 4523 Artificial Intelligence **3-0-3**
Prerequisite: CS 3423

An introduction to artificial intelligence, with an emphasis on searching techniques, knowledge representation, and problem-solving strategies.

CS 4554 Expert Systems **3-2-4**
Prerequisites: CS 4624, ENGL 2010, SPCH 2400

An introduction to the development of expert systems, with an emphasis on the role of domain knowledge, knowledge acquisition, expert knowledge representation, and implementation. A major project is required.

CS 4624 Software Engineering **3-2-4**
Prerequisite: CS 3153, CS 3423

The entire software engineering life cycle is explored, with emphasis on the initial phases. Topics include problem definition, systems analysis, requirements gathering, cost and benefit analysis, proposal preparation, prototyping, design techniques and usability testing. Software engineering principles, practices, and design standards are examined through case studies. Various structured analysis and design tools are used by students in conjunction with real-world projects. A major component is a team project which goes through prototyping and usability testing.

CS 4683 Management Information Systems **3-0-3**
Prerequisite: Senior standing

A study of the information needs in a formal organization and the information systems required to meet those needs within the planning, control, operating and decision making processes.

CS 4724 Software Engineering Project **3-2-4**
Prerequisites: CS 4624, ENGL 2010, SPCH 2400

This major project course is a follow-up to CS 4624. Emphasis is placed on completing the entire software engineering life cycle in team projects. Topics include software development, testing, implementation, and user manuals. Software

engineering methodologies and some formal methods are covered. Software CASE tools are utilized in the projects from planning and analysis through implementation.

CS 4743 Object-Oriented Development **3-0-3**

Prerequisites: CS 3123, CS 3423

This course covers the concepts of object-oriented analysis, design, and programming. Topics include objects, classes, messages, methods, encapsulation, and inheritance. Projects emphasize object-oriented problem-solving and are implemented in languages such as C++ and Smalltalk.

CS 4804 Senior Project **3-2-4**

Prerequisites: CS 4624, ENGL 2010, SPCH 2400, consent of the department head

An individual senior-level project course applying the theories, tools, and techniques of Computer Science. This involves a major report and oral presentation under the direction of a CS faculty member.

CS 4901-4904 Special Topics **variable credit-1 to 4 hours**

Prerequisite: Senior standing

Special topics selected by the department. Offered on a demand basis.

Construction

CNST 1000 Orientation to Construction and Development **1-2-2**

An introduction to construction industry careers; an overview of construction industry sectors and the industry's impact on the economy; and discussion of the basics of the construction process. Also includes a preview of the construction degree curriculum and an overview of Southern Polytechnic policies, procedures, and resources.

CNST 2000 Construction Graphics **2-4-4**

A study of the fundamentals of graphic language used by construction professionals, with an emphasis on developing skills in expressing concepts in visual form and in reading architectural and engineering construction documents.

CNST 2901-2904 Special Topics **variable credit-1 to 4 hours**

Prerequisite: Consent of the department head

Special topics in construction. Offered by the department at its discretion.

CNST 3000 Computer Applications in Construction **1-3-2**

An introduction to microcomputers and commercial software. Students learn DOS and Windows manipulations, spreadsheets, word processing, visualization, and presentation software by actively using tutorials and help screens in a structured laboratory setting. Scheduling and estimating software are introduced.

CNST 3110 Building Techniques and Methods I **3-2-4**

Prerequisite: CNST 2000

A study of materials, techniques, and methods used in residential and light construction. Foundations, wood frame and masonry structural systems, interior and exterior finishes, residential electrical, plumbing, and mechanical systems are included. Also included are residential building code requirements.

CNST 3160 Building Techniques and Methods II **3-2-4**

Prerequisite: CNST 2000

A study of the materials, techniques, and methods used in non-residential construction. Foundations, structural frames, interior and exterior finishes, and specialties are included. Special attention is given to an introductory study of mechanical, electrical and conveying systems used in commercial buildings. Basic design of these systems and their major components is presented including: plumbing, HVAC, electrical power, lighting, alarm systems, elevators and other conveying systems.

CNST 3210 Applied Structures I **4-0-4**
Prerequisite: CET 2200

A study of structural design analysis and design concepts used in steel and concrete construction. Topics include selection of structural systems and the design of columns, beams, and other structural components.

CNST 3260 Applied Structures II **2-2-3**
Prerequisite: CET 2200

A study of structural design and analysis concepts of temporary structures used in the construction process. Topics include formwork design, scaffolding, and material handling equipment and staging.

CNST 3310 Development Planning **3-0-3**
Prerequisite: CNST 1000

An overview of development and planning including introduction to real property development principles and processes. The roles of professionals involved in the process will be investigated. The relationship of land development to urban planning, community organization, housing, and economic development will be explored.

CNST 3410 Construction Estimating I **3-2-4**
Prerequisites: CNST 3000, CNST 3160

A study of techniques in the process of construction estimating, with an emphasis on development of the quantity survey. The completion of a specification takeoff and a quantity survey of commercial construction are required.

CNST 3411 Construction Estimating Software **1-2-2**
Prerequisite: CNST 3410

Hands-on computer application of commonly used commercial construction estimating software to construction projects. Instruction in use of the software.

CNST 3420 Construction Estimating II **3-2-4**
Prerequisite: CNST 3410

The continued study of the estimating process emphasizing pricing the general contractor's work, including estimating procedures, development of direct and indirect unit costs, evaluation of subcontractor bids, bidding strategy and bid opening. The completion of an estimate, bid submission, and development of a schedule of values are required. Also included is an introduction to conceptual estimating.

CNST 3430 Construction Estimating III **2-2-3**
Prerequisite: CNST 3410

A study of quantity take-off techniques and equipment productivity analysis necessary to development. Small scale development project budgeting will be analyzed from the developer viewpoint. Initial conceptual design budget is based on square foot or asembly pricing for the various construction systems and detailed estimate for the infrastructure costs including site work and utilities. Indirect costs associated with zoning, local codes, and ordinances, as well as soft cost associated with design and engineering will be discussed.

CNST 3620 Construction Finance and Feasibility **4-0-4**
Prerequisite: ACCT 2101

A study of Financial Management for the Contractor, and Builder/Developer Organization. Topics include: balance sheet analysis using Percentage of Completion Method, Completed Contract Method with Absorption Analyses, and Work in Process Accounting regarding construction progress payments in excess of costs and estimated earnings. Ratio analysis for construction industry and bid and payment/bond performance. Cashflow projection for construction projects. Also included is building construction economics in terms of: Value Engineering, Constructability, building delivery systems and real estate processes for the Builder/

Developer and Construction Management organizations. Graduate students will do additional work on construction cost accounting.

CNST 3710 Site Planning **3-2-4**

Prerequisite: CNST 2000

An integrated theory and applications course which provides an exposition of theoretical principles associated with the site planning process, and then involves the students in hands-on application exercises. The inter-relationship between site planning decisions and their potential consequences will be demonstrated through practical exercises.

CNST 3912 Workplace Law **3-0-3**

A study of the legal constraints encountered in the workplace. Topics included are drugs and drug testing, sexual harassment, labor management cooperation, discrimination, worker compensation, foreign labor regulation, minority/women's business enterprises and professional regulation.

CNST 3901-3904 Special topics **variable credit-1 to 4 hours**

Prerequisite: Consent of the department head

Special topics in construction. Offered by the department at its discretion.

CNST 4510 Scheduling **4-0-4**

Prerequisite: CNST 3000

A study of the management techniques used in controlling the time and cost of construction projects, including development of schedules and budgets, organization and presentation of project information, and updating and monitoring progress using critical path methodology. Development of a construction schedule and budget is required. Commonly used commercial software packages are introduced.

CNST 4511 Construction Scheduling Software **1-2-2**

Prerequisite: CNST 4510 or approval of the department head

Hands-on computer application of commonly used commercial construction scheduling software to construction projects. Instruction in use of the software.

CNST 4560 Construction Project Management **4-0-4**

Prerequisite: CNST 3160

A study of the management of field operations and administration of the construction contract. Contract documents, project organization, supervision, working with owners and design professionals, control of cash flow, procurement, management of subcontractors, job records, contract changes and payment procedures are discussed.

CNST 4570 Development Process I **4-0-4**

This course is intended to provide the student with an understanding of the market forces that shape real estate development. The course will provide a familiarity of the principles and procedures employed in determining the feasibility of improvement of real property and with an elementary knowledge of the project appraisal process. Different tools and analysis techniques used in development feasibility are the main focus of this course.

CNST 4620 Development Process II **4-0-4**

Prerequisites: ACCT 2101, CNST 4570

A continuation of CNST 4570 including application exercises in the eight stages of project development that assist the developer/builder in the creation of the built environment. This course will include a study of the market forces affecting development planing including development demand, demographics, and location theories; and discussion of how the developer delivers the product to the consumer.

CNST 4710 Construction Safety **4-0-4**

A study of construction safety and loss control principles and practices. Topics include project security control, construction accident prevention, safety information sources, weather precautions, emergency planning, and OSHA procedures and regulations.

CNST 4760 Construction Law **4-0-4**

Prerequisite: CNST 4560

A study of Construction Contract Documents and Claims. Topics include: analyses of AIA B141, A101, A201, and contractual graphic and technical documents. Other supporting construction contract documents such as bid bonds, payment and performance bond and construction modifications are studied. The traditional tri-union construction contract formation process is examined in relation to the owner, contractor, materialmen, and subcontractors. Discussions regarding damages for differing and unforeseen conditions, defective workmanship, and construction delay claims are surveyed in conjunction with AAA construction arbitration rules regarding emerging construction manager contracting processes.

CNST 4770 Development Law **4-0-4**

Prerequisite: CNST 4570

An examination of real property law, elements of land ownership, title of land in Georgia, eminent domain questions, estates and interest in land, zoning and easements, tenant landlord law, real property contracts, deeds, covenants, title examination and closing transactions, and environmental regulations.

CNST 4800 Construction Process Simulation **1-6-3**

Prerequisites: CNST 3420, CNST 4510

Simulations and case studies of events that affect the construction organization and project. Topics and event simulations will include problems typically encountered in the construction industry such as changed conditions, strikes, inconsistencies in documents, and surety assumption of the contract. Presentations by prominent industry representatives pertinent to the event being simulated.

CNST 4900 Capstone Project **1-6-4**

Prerequisites: CNST 3620, CNST 4560, CNST 4710, CNST 4800, and an approved graduation petition.

This project course is the application of course materials covered in the four year curriculum to an actual construction project with a simulated business construct. Project includes developing a company organization, preparing a bid on a construction project approved by course professor, executing all documents necessary to create the company, implement the project management plan, and complete the construction contract.

Design Foundation

DFN 1000 School of Architecture Orientation **2-0-2**

This course provides new students with the educational requirements and the licensing procedures for design professionals. Development of the built environment and the study of professional practice are also introduced.

DFN 1001 Design Foundation I **0-12-4**

Students investigate and document the spaces dedicated to a familiar activity as a means for developing basic skills and sensitivities toward the role of architecture in enhancing the quality of life.

DFN 1002 Design Foundation II **0-12-4**

Prerequisites: DFN 1000, DFN 1001

This course employs investigation, comparison, and evaluation of alternatives in order to understand the relationship between behavior and architectural form.

DFN 2003 Design Foundation III **1-9-4**
Prerequisite: DFN 1002

This course concentrates on shaping, organizing, and comparing architectural space using strategies developed by Architects.

DFN 2004 Design Foundation IV **0-9-3**
Prerequisite: DFN 2003

The culmination of the Design Foundation incorporates and builds upon all previous course work. It adds the fundamental concept of typology to previous experiences with architectural space, composition, and program. Students investigate layers of functional zoning, geometric organization, three dimensional configuration, openings, physical texture, color, character, and symbolic meaning.

DFN 2111 Architecture Culture I: Prehistory through Gothic with an Introduction to Non-Western Traditions **3-0-3**

The history of architecture is presented as a collection of buildings, each of which is seen as a concrete solution to a given set of culturally derived problems and issues. These buildings, as precedents, are not to be analyzed on the basis of composition or aesthetic image, but rather as design solutions to complex socio-cultural problems. History is used as a didactic device to aid the design student in problem solving by presenting examples of how architects have successfully transformed the intellectual concerns of their day into built form.

DFN 2211 Introduction to Structures **3-0-3**
Prerequisite: MATH 2253

This course is an introduction to architectural structures with an emphasis on statics and strength of materials concepts. Focus is on force systems, shear and moment diagrams and determination of section properties.

Economics

ECON 1101 Introduction to Economics **3-0-3**
Prerequisite: MATH 1111

An analysis of the economics of production in American society. Particular emphasis is given to the study of fiscal and monetary policies, and to the study of the impact of government upon the functioning of these industries. Topics include marginal productivity analysis, graphic models, national income analysis, and the importance of the labor market in American industry.

ECON 2105 Macro Economics **3-0-3**
Prerequisite: MATH 1111

An analysis of the economics of production in American society. Particular emphasis is given to the study of fiscal and monetary policies, and to the study of the impact of government upon the functioning of these industries. Topics include marginal productivity analysis, graphic models, national income analysis, and the importance of the labor market in American industry.

ECON 2106 Micro Economics **3-0-3**
Prerequisite: MATH 1111

This course deals principally with economic theory of consumer behavior and business decision-making. Concepts which will be studied include competitive environment; consumer equilibrium point; supply and demand curves; production and cost functions; determinations of optimum quantity; price, profit, cost and other relevant decision variables.

Electrical and Computer Engineering Technology

ECET 1000 Orientation **2-0-2**

This course will provide an introduction to Electrical and Computer Engineering Technology and to SPSU, to include: an introduction to the ECET faculty, an overview of career opportunities, available campus facilities, student organizations, etc. Some of the skills necessary to students will also be introduced. These include: writing formal lab reports and learning basic computer skills.

ECET 1010 Fundamentals **1-3-2**

Prerequisites: ECET 1000 or concurrently, MATH 1113 or concurrently

A study of several skills necessary in ECET. This is to include: lab orientation with simple circuits, critical thinking concepts, an introduction to C++ programming and other computer skills.

ECET 1100 Circuits I **3-3-4**

Prerequisites: ECET 1010, ENGL 1101, MATH 2253 or concurrently

This course introduces basic electrical quantities. Techniques for analyzing resistive networks are heavily emphasized. In addition, the physical mechanisms underlying capacitance and inductance are examined along with analysis of transient responses in circuits containing resistors and capacitors or resistors and inductors. The course concludes with a treatment of dependent sources and 2-port parameters. Laboratory exercises reinforce theoretical concepts presented in the class and provide various opportunities to become familiar with standard instrumentation in electrical engineering technology.

ECET 1200 Digital I **3-3-4**

Prerequisite: ECET 1100 or concurrently

A study of digital circuit fundamentals with an emphasis on combinational and sequential logic design, logic simplification and implementation using standard digital IC's and programmable logic devices. Topics include: binary number systems, binary arithmetic, logic families, design techniques, logic simulation, F/F's, counters, registers, memory technologies and PLD's.

ECET 2110 Circuits II **3-3-4**

Prerequisites: ECET 1100, MATH 2254 or concurrently, PHYS 1111K or concurrently

This course primarily extends the circuit analysis techniques learned in ECET 1100 to circuits containing all three types of passive circuit elements and sinusoidal sources. Several adjunct topics are then presented including transformers and 3-phase circuit analysis, resonance, pulse response of RLC circuits, and an introduction to Fourier series and non-sinusoidal waveforms. Laboratory exercises reinforce theoretical concepts presented in the class and provide various opportunities to become proficient in working with standard instrumentation in electrical engineering technology.

ECET 2210 Digital II **3-3-4**

Prerequisites: ECET 1200, ECET 2300

The study of digital design principles with emphasis on the use of LSI, MSI, and SSI circuits in the application and design of complex digital systems. Principles covered include: the study of an industry standard microcontroller, assembly language programming, logic family characteristics, system interfacing and system timing issues.

ECET 2300 Electronics I **3-3-4**

Prerequisites: ECET 2110 or concurrently, MATH 2254 or concurrently, PHYS 1111K or concurrently

A study of the characteristics, analysis, and practical applications of diodes, BJTs, and FETs. Semiconductor theory, biasing, stability and small-signal models

of BJTs and FETs are included. The course covers an introduction to the characteristics of the ideal op-amp including the basic amplifier model and basic linear circuits. Laboratory exercises include protoboarding, designing and analyzing selected circuits. PSpice simulations and computer-aided testing are utilized in conjunction with some laboratory exercises.

ECET 2310 Electronics II **3-3-4**

Prerequisites: ECET 2110, ECET 2300

A study of BJT and FET amplifiers including: amplifier frequency response, multistage amps, differential amps, feedback principles, heat sink principles and an introduction to power amplifiers. The characteristics, performance and practical applications of modern linear integrated circuits including: operational amplifiers, comparators, multipliers, logarithmic amplifiers, oscillators and phase-locked loops are also covered. Laboratory exercises include protoboarding, designing and analyzing selected circuits. PSpice simulations and computer-aided testing are utilized in conjunction with some laboratory exercises.

ECET 2800 Introduction to Telecommunications **3-0-3**

Prerequisite: ECET 2110

A study investigating the fundamentals of the telecommunications industry regulations, standards (international & national), state-of-the-art telecommunications systems and management issues as well as other topics will be explored.

ECET 3000 Electrical Principles **3-3-4**

Prerequisite: PHYS 1112K

Covers basic circuit theory including the ac and dc characteristics of resistors, capacitors and inductors as used in elementary single and three-phase circuits. Characteristics of basic industrial electric motors and single and three-phase connections are studied. Basic factory automation is covered including sensors, relay control and programmable logic controllers. Laboratory exercises supplement the material discussed in class. This course cannot be used for credit by CpET or EET majors.

ECET 3220 Digital III **3-3-4**

Prerequisite: ECET 2210

The student will design a single board computer (SBC) incorporating standard components such as RAM, ROM, address decode, and input/output devices such as keyboards and LCD displays. A complete software monitor system will be developed for the SBC utilizing industry standard development tools. One of the major objectives of this class is to provide an environment within which the student can experience a complete industry-like project development cycle. This cycle will include the design, development, construction and test of the project. Advance I/O topics will also be covered including ADC and DAC operation and interfacing.

ECET 3400 Data Communications **3-3-4**

Prerequisites: ECET 2310, PHYS 1112K

A survey study of guided data communications with emphasis given to line codes, RS232, and modems. The course includes topics on signaling, modulation, scrambling, compression and trellis coding. Transmission media, error detection and throughput will also be covered. Synchronous and asynchronous link control, character and bit oriented link protocols, standards organizations and the OSI model are introduced. Analog-to-Digital conversion, multiplexing, switched networks, local area networks and wide area networks are also covered.

ECET 3410 High Frequency Systems **3-3-4**

Prerequisites: ECET 2310, PHYS 1112K

A study of electronic transmission systems. The course includes the detailed study of rf transmission lines with a concentration on their fundamental principles,

specifications, operation and practical applications. The course also includes the study of the fundamental principles of wireless and fiberoptic communications. Electromagnetic interference and electrostatic discharge, standards and regulations, and an introduction to the concepts of distributed networks is also introduced.

ECET 3500 Survey of Electric Machines **3-3-4**
Prerequisite: ECET 2110

This introductory course in the characteristics and applications of basic electric machinery will begin with a review of magnetic circuits and transformers. Single-phase, three-phase, auto-transformers, instrument transformers and buck-boost transformers will be covered. Three-phase and single-phase induction motors, synchronous motors and synchronous generator, dc motors and dc generators will also be included. The laboratory exercises will involve operating and testing transformers and machines to determine their operating characteristics. Among these characteristics will be the efficiency and voltage regulation as determined by direct and indirect methods.

ECET 3600 Test Engineering **3-3-4**
Prerequisites: ECET 2210, ECET 2310

An introduction to test engineering principles with emphasis on computer-controlled instrumentation and data acquisition using industry standard bus structures such as the IEEE-488 bus and related protocol, D/A, A/D, and parallel I/O interfaces. Application software will be written in Visual Basic for testing a particular unit and interfacing various GPIB instruments. Visual Basic will be used as the overall project management software for the Unit Under Test. Design for testability and related topics will also be covered. Laboratory projects will emphasize automated testing using the principles covered in class.

ECET 3610 Introduction to Control Systems **3-3-4**
Prerequisites: ECET 2310 , MATH 2306 or concurrently

A study of feedback control systems with emphasis on the theory and practical applications of the theory. The root locus and frequency response design and analysis approaches are presented. Also, the design of discrete systems using programmable controllers is introduced. The use of control system software, such as MATLAB, in the analysis and design of control systems is covered. Process control, aerospace, motion control and other applications are considered.

ECET 3700 PC Assembly Language and Interfacing **3-3-4**
Prerequisite: ECET 2210, Corequisite: ECET 3810

Introduction to the assembly language programming and basic interfacing of 80x86-based microcomputers. Assembly language programming techniques will include the entire development process from coding, testing, debugging to documentation. The applications of BIOS and DOS calls will be stressed. Interfacing will involve projects using the serial, parallel, disk and display subsystems. The development of a basic interface circuit, at the chip level, will be required.

ECET 3810 Applications of C++, JAVA and HTML **2-3-3**
Prerequisite: ECET 1010

A study in the applications of several key programming environments. This course covers such topics as: data types, structures, functions, arrays, file I.O., system calls, data portability, security and Internet related topics as they pertain to the appropriate programming language.

ECET 3901-3904 Special Topics **variable credit-1 to 4 hours**
Prerequisite: Junior standing

Special topics selected by the department. Offered on a demand basis.

ECET 4320 Active Filters **3-3-4**
Prerequisite: ECET 2310

Emphasis is given to the classical polynomial approximation method of determining values for a transfer function that will satisfy a given filter design. The basics of determining pole-zero locations, pole reciprocation and transformation, frequency scaling, and the related magnitude and impedance scaling needed for practical implementation are included. Along with various responses, the practical aspects of topologies will be studied including sensitivity and delay. An introduction to digital filters will be given, including the basics of FIR and IIR filter design. Laboratory time will be used to study design examples and will culminate in the design, construction, and evaluation of a selected active filter. Computer simulation, design and testing will be utilized.

ECET 4330 Audio Technology **3-3-4**
Prerequisites: ECET 2210, ECET 2310

The fundamentals of specifications, standards, devices, circuits and systems used in audio are studied. Power amplifiers, preamplifiers, frequency contouring circuits, signal processors, microphones and loudspeakers are covered. Laboratory investigations include protoboarding, designing and analyzing selected practical audio circuits. PSpice simulations and computer-aided testing are utilized in conjunction with most laboratory exercises. One of the lab periods will be utilized for a field trip to a local sound reinforcement facility.

ECET 4420 Communications Circuit Applications **3-3-4**
Prerequisites: ECET 2310, PHYS 1112K

A study of rf and optical-wavelength communications circuits and their applications. A variety of basic transmitter and receiver circuits are studied, including amplifiers, tuned oscillators, phase-locked loops, modulators and demodulators. Spectral analysis is introduced and the effects of noise in communications systems are investigated. Laboratory experiences demonstrate circuits and concepts discussed in the classroom.

ECET 4431 Wireless Communications Systems **3-3-4**
Prerequisite: ECET 3410

A detailed study of point-to-point radio frequency (rf) communications systems and radar. The underlying principles, requirements, and characteristics of electromagnetic propagation and antennas are studied. Existing systems and recent advances in the area of wireless communications will be covered, including terrestrial and space applications. Topics covered include FDMA, TDMA, and CDMA based system design. Laboratory experiences and computer simulation supplement the classroom discussions.

ECET 4432 Fiberoptic Communications Systems **3-3-4**
Prerequisite: ECET 3410

A detailed study of optical-wavelength communications systems. The underlying principles, requirements, and characteristics of optic sources, detectors, and dielectric waveguides (fibers) are studied. Heavy emphasis is placed on systems analysis, including power budgets, bandwidth budgets, and signal-to-noise ratios. Recent advances in the area of fiberoptics will be covered, as well as emerging technologies and applications. Laboratory experiences supplement the classroom discussions.

ECET 4510 Power System Analysis **3-3-4**
Prerequisite: ECET 2110

This course involves the analysis of power systems starting with the calculation of line resistance, line inductance, and line capacitance of power transmission lines. These parameters are used to model power systems in order to derive the bus impedance matrix, perform network calculations and analyze systems for

symmetrical and unsymmetrical faults. The laboratory will be of a problem solving nature and will involve the solution of network problems with computer software such as MathCad.

ECET 4520 Industrial Distribution Systems, Illumination, and the NEC **3-3-4**

Prerequisites: ECET 2110, ECET 3500

This introductory design course involves the lighting, wiring and electrical protection systems in commercial and industrial buildings. This course will cover: lighting fundamentals, light sources, lighting system layouts for interior spaces, protection of electrical systems, fuses, circuit breakers, instrument transformers and protective relays, grounding and ground-fault protection, feeder design and branch circuits for lighting and motors. This course will include projects - designing lighting and wiring systems for commercial/industrial buildings.

ECET 4530 Industrial Motor Control **3-3-4**

Prerequisites: ECET 2110, ECET 3500

This introductory design course is a study of manual and automatic, starters and controllers of ac and dc motors. The course will concentrate on three-phase induction motor starters and controllers with some study of dc motor starters and controllers. The induction motor coverage will include both full-voltage and reduced voltage techniques, with the emphasis on the reduced voltage methods. Line impedance, auto-transformer, wye-delta and part-winding starters will be included. The laboratory will consist of several projects in designing, testing and demonstrating various motor starters and controllers. The designs will require using Programmable Logic Controllers in the projects. The course will conclude with variable frequency drives.

ECET 4540 Introduction to Power Electronics **3-3-4**

Prerequisites: ECET 2310, ECET 3500

An introduction to the devices, circuits and systems utilized in power electronics. An overview of power semiconductors: switches diodes, thyristors, gate turn-off thyristors, insulated gate transistors, MOS-controlled thyristors and other controllable switches. General power electronic circuits such as uncontrolled and phase controlled dc converters, dc-to-dc switch mode converters, switch mode dc-to-ac inverters and their application in motor drive, speed control and power supplies are included.

ECET 4620 Signals and Systems Analysis **3-3-4**

Prerequisites : ECET 2310, MATH 2306

A study of the analysis of nonsinusoidal waveforms, both continuous and discrete, occurring in circuits and systems containing linear and nonlinear elements. Methods of analysis include graphical techniques, Laplace transform, Fourier analysis, convolution, difference equations, Z-Transform and sampling theory. Emphasis is placed on the application of these techniques to the solution of electrical technology problems.

ECET 4630 Digital Signal Processing **3-3-4**

Prerequisites : ECET 2310, ECET 3220, MATH 2306

An introduction to the concept of discrete and digital signals and systems. Difference equations, Discrete Fourier Transforms (DFTs), Fast Fourier Transforms (FFTs), Z-Transform techniques, IIR filter design, and FIR filter design are covered. An introduction to the architecture, assembly language and application examples of general and special purpose microprocessors such as the TMS 320 and DSP56000 families is included.

ECET 4710 Network Programming and Interfacing **3-3-4**

Prerequisites: ECET 3400, ECET 3700

Introduction to the application and design of embedded and networked PC systems. Programming emphasis will be Visual C++ including TCP/IP. Networking

emphasis will be on an ethernet LAN connecting desktop and embedded PC's. Interfacing emphasis will be on robotic subsystems.

ECET 4720 Distributed Microcontrollers and PCs **3-3-4**
Prerequisites: ECET 3220, ECET 4710

A study of networked microcontrollers connected to a host PC. Two popular microcontroller architectures will be introduced. Software will emphasize assembly language programming. Hardware will emphasize the bus interconnections between the devices: RS232/RS485, 12C, CEBus, CAN, etc. The PC will use the LINUX operating system. Development of a capstone project, through the design of a printed circuit board, will also be included.

ECET 4730 VHDL and Field Programmable Gate Arrays **3-3-4**
Prerequisite: ECET 2210

Provide a thorough introduction to the Virtual Hardware Description Language (VHDL) and apply this knowledge to Field Programmable Gate Arrays (FPGA's). Current applications will be presented and students will design, develop, test and document complete FPGA based designs. The use of schematic capture tools for configuring FPGA's will also be covered.

ECET 4820 Communications Networks and the Internet **3-3-4**
Prerequisites: ECET 3400 , ECET 3410, ECET 3810

A study of the fundamental concepts, operational characteristics and design principles of digital networks. The course includes the study of networks commonly referred to as LAN's and MAN's, as well as the concepts and technologies of internetworking. Practical applications will be emphasized, including Ethernet, token ring, FDDI, ATM, DQDB and the Internet and World Wide Web. The use of radio frequency signaling in modern communications systems will also be studied, with an emphasis on emerging technologies and applications.

ECET 4830 Telecommunications Management **3-3-4**
Prerequisite: ECET 3400

A study investigating the issues encountered by management in the telecommunications industry. Course covers such broad topics as: regulations, national and international standards, the management of several key telecommunications technologies and managing telecommunication professionals. Laboratory exercises are also designed to illustrate the management of telecommunications environments.

ECET 4840 Advanced Telecommunications **3-3-4**
Prerequisites: ECET 2210, ECET 2800, ECET 4820

A study investigating several advanced telecommunications technologies and techniques. Course covers such topics as: electronic noise in communication systems, AM & FM transmissions, encoding techniques, telephony, synchronous and asynchronous protocols, the Internet and wireless technologies.

ECET 4850 Telecommunications Project **3-3-4**
Prerequisites: ECET 4830 , ECET 4840

This course teaches the student how to design, implement and troubleshoot advanced telecommunications networks. Both individual and team tasks are undertaken to challenge the student's acquired skill set. A comprehensive telecommunications project is completed, piece-by-piece, throughout the semester.

ECET 4901-4904 Special Topics **variable credit-1 to 4 hours**
Prerequisite: Senior standing

Special topics selected by the department. Offered on a demand basis.

Engineering Graphics

EG 1210 Survey of Engineering Graphics **1-3-2**

An introductory course in engineering graphics for non-MET majors. This course introduces the students to a broad range of engineering graphics topics. Manual drafting, freehand sketching, and computer-aided design (CAD) assignments cover theory and application in such areas as fundamentals of engineering graphics, drafting technique, lettering, orthographic projection, sectional views, pictorial drawings, dimensioning, and industry practices. (MET students may not take this course for credit.)

EG 1211 Engineering Graphics I **3-3-4**

An introduction to engineering graphics in mechanical engineering and manufacturing with an emphasis on using computer-aided design (CAD) to produce finished engineering drawings according to industry and ANSI standards. Topics include fundamentals of engineering graphics, orthographic projection, sectional views, pictorial drawings, dimensioning, industry practices, file management, geometric construction, basic 3D coordinate geometry, surface models, parametric solid modeling, and drawing composition.

EG 1212 Engineering Graphics II **3-3-4**

Prerequisite: EG 1211

A continuation of Engineering Graphics I, covering advanced concepts of 3D geometry, parametric solid modeling, boundary representation of solids, databases for manufacturing and inspection, an introduction to geometric dimensioning and tolerancing according to the American National Standards Institute (ANSI) and the International Standards Organizations (ISO), and an overview of assemblies and fasteners.

English

ENGL 1101 English Composition I **3-0-3**

A composition course focusing on skills required for effective writing in a variety of contexts, with emphasis on exposition, analysis, and argumentation, and also including introductory use of a variety of research skills. Includes Regents' Essay practice and work in the Learning Resources Center, as required. Final grade of "C" or better necessary to receive course credit.

Special sections of the course may be offered that focus on the needs of those international students for whom English is a second language. Such sections will include a required lab hour in the Learning Resources Center, but they will remain three-credit-hour courses.

ENGL 1102 English Composition II **3-0-3**

Prerequisite: "C" or better in ENGL 1101

A composition course that develops writing skills beyond the levels of proficiency required by ENGL 1101, that emphasizes interpretation and evaluation, and that incorporates a variety of more advanced research methods. Includes Regents' Essay practice and work in the Learning Resources Center, as required.

Special sections of the course may be offered that focus on the needs of those international students for whom English is a second language. Such sections will include a required lab hour in the Learning Resources Center, but they will remain three-credit-hour courses.

ENGL 2000 Business Communication **3-0-3**

Prerequisites: ENGL 1102, SPCH 2400

Introduction to the communication skills needed in the business world, learned through exposure to mock business situations. The job search is covered and

emphasis is placed on writing business correspondence and delivering business-related oral presentations.

ENGL 2010 Technical Writing **3-0-3**
Prerequisite: ENGL 1102

Introduction to organization, style, and mechanics of technical and professional writing. Includes practice in writing such typical documents as technical descriptions, instructions, proposals, and recommendation reports. Emphasis placed on planning, organizing, and writing reports; designing visual aids; and editing. Among other assignments, at least one complete technical report is required.

ENGL 2110 World Literature **3-0-3**
Prerequisite: ENGL 1102

A survey of important works of world literature. Includes Western and non-Western literature and deals with a variety of literary forms such as poetry, drama, nonfiction, short stories, and novels.

ENGL 2120 British Literature **3-0-3**
Prerequisite: ENGL 1102

A survey of important works of British literature. Includes a variety of literary forms such as poetry, drama, nonfiction, short stories, and novels. The course presents literature as a reflection of culture and the history of ideas.

ENGL 2130 American Literature **3-0-3**
Prerequisite: ENGL 1102

A survey of important works of American Literature. Includes a variety of literary forms such as poetry, drama, nonfiction, short stories, and novels. The course presents literature as a reflection of culture and the history of ideas.

ENGL 2141 Western Literature I **3-0-3**
Prerequisite: ENGL 1102

A survey of literature of the Western world from the Greeks through the Renaissance. The course includes drama, poetry, prose fiction, and nonfiction. It emphasizes literature as an art and as a reflection of the history of ideas.

ENGL 2142 Western Literature II **3-0-3**
Prerequisite: ENGL 1102

A survey of literature of the Western world from about 1600 to the present. The course includes drama, poetry, prose fiction, and nonfiction. It emphasizes literature as an art and as a reflection of the history of ideas.

ENGL 2200 Japanese Literature **3-0-3**
Prerequisite: ENGL 1102

Study of Japanese literature in English translation, from its beginnings to the contemporary period. Includes works from poetry, fiction, and drama. The formation and development of Japanese aesthetics and culture, and their relationship to literature, will be addressed.

ENGL 4000 Literature and Technology **3-0-3**
Prerequisite: ENGL 1102

Course examines connections between the literary and technological worlds. Emphasizes the manner in which all genres of literature reflect the problems, concerns, and solutions posed by technology.

ENGL 4100 Science Fiction **3-0-3**
Prerequisite: ENGL 1102

Study of selected works of science fiction both by mainstream writers and by those specializing in the genre. Emphasizing science fiction as a bridge between technology and human values, the course deals with such themes as nonhuman

intelligence, man in space, the future of society, and the promises and dangers of technology.

ENGL 4901-4903 Special Topics **variable credit-1 to 3 hours**
Prerequisite: Consent of the department head
Special topics in literature. Offered by the department at its discretion.

Ethnic Studies

ES 1100 Ethnic Studies **3-0-3**
An interdisciplinary course that introduces students to the culture and civilization (history, economy, art, architecture, etc.), literature, and religion of various ethnic groups. Instructor's choice will determine which ethnic group is the focus for the class (e.g., from Asian, African-American, Hispanic, or other areas).

French

FREN 1001 Elementary French I **3-0-3**
Introduction to listening, speaking, reading, and writing in French and to the culture of French speaking regions. Not open to native speakers of French.

FREN 1002 Elementary French II **3-0-3**
Continued listening, speaking, reading, and writing in French with further study of the culture of French speaking regions. For those students who have completed FREN 1001 or have had one year of French in high school. Not open to native speakers of French.

Geography

GEOG 1101 Introduction to Human Geography **3-0-3**
A survey of global patterns of resources, population, culture and economic systems. Emphasis is placed upon the factors contributing to these patterns and the distinctions between the technologically advanced and less advanced regions of the world. Includes cultural, political, urban, and economic geography.

GEOG 3101 World Regional Geography **3-0-3**
Prerequisite: GEOG 1101 or consent of the department head
Examines the geography of the world and its impact on population, urbanization, trade resources, and development as an ongoing framework for analysis and global perspective.

German

GRMN 1001 Elementary German I **3-0-3**
An introduction to the German language and the culture of the German-speaking world. Beginning of a survey of basic German grammar and the development of the four language skills of listening, speaking, reading, and writing German. Some aspects of everyday life in the German-speaking world will also be introduced. Not open to native speakers of German.

GRMN 1002 Elementary German II **3-0-3**
The second part of an introduction to the German language and the culture of the German-speaking world. Completion of the survey of Basic German grammar and further development of the four language skills of listening, speaking, reading, and writing German. Aspects of everyday life in the German-speaking world will also be introduced. For those students who have completed GRMN 1001 or have had one year of German in high school. Not open to native speakers of German.

History

HIST 1011 World Civilization: Ancient **3-0-3**

A survey of the cultural, political, economic, intellectual, and scientific development of early world civilizations from pre-historic times to the fall of Rome in the West, c.500 A.D.

HIST 1012 World Civilization: Medieval **3-0-3**

A survey of the political, economic, intellectual, and social development of civilization from 500 A.D. through the Protestant Reformation of the 16th century (with emphasis on Christendom and Islam).

HIST 1013 World Civilization: Modern **3-0-3**

A survey of the cultural, political, economic, intellectual, and scientific development from the emergence of the modern nation-state to the present.

HIST 2111 United States History I **3-0-3**

United States history from the colonial period through Reconstruction. Emphasis on the interpretation of American institutions and ideas. Satisfies U.S. and Georgia history and government requirement.

HIST 2112 United States History II **3-0-3**

The rise of the United States as in industrial power from the late 19th century to the present. Special emphasis on change and reform during this period. Satisfies U.S. and Georgia history and government requirement.

HIST 2911 U.S. Constitution and Georgia History **1-0-1**

A one-hour course designed to help out-of-state transfer students meet the State of Georgia's legislative requirement that all students have knowledge of the U.S. Constitution and of Georgia history. May not be taken as an elective.

HIST 3200 History of Science Survey **3-0-3**

Prerequisite: Junior standing or consent of the department head

Survey of developments in physical, biological, and human sciences and their connection to western culture from the sixteenth century to the present.

HIST 3250 History of American Technology **3-0-3**

Prerequisite: Junior standing or consent of the department head

Survey of the development of technology and its impact on American society. Topics will include technology transfer and American innovation, the organization and mechanization of industrial production, and the technologies of cities, households, transportation, communication, and leisure.

HIST 3260 History of American Science and Medicine **3-0-3**

Prerequisite: Junior standing or consent of the department head

Survey of the development of American science and medicine and their impact on American society. Topics will include the development of various fields of science, the relationship between science and government, the relationship between science and medicine, and the development of medical knowledge and practice.

HIST 3901-3903 Special Topics **variable credit-1 to 3 hours**

Prerequisite: Consent of the department head

Special topics in American or world history. Offered by the department on a demand basis.

Humanities

HUM 3901-3903 Special Topics **variable credit-1 to 3 hours**

Prerequisite: Consent of the department head

Special topics in humanities. Offered by the department at its discretion.

HUM 4000 Technology and Culture **3-0-3**
Prerequisite: Consent of the department head
A colloquium. A study of the ways in which technology interacts with other areas of culture.

Industrial Distribution

ID 1000 Orientation **2-0-2**
A part of this course is devoted to an orientation to the department, to college policy, and to expectations for students. The rest of the course is devoted to an orientation to the field of Industrial Systems and Design.

ID 2303 Principles of Industrial Systems and Design **3-0-3**
This course provides an introduction to the role and responsibilities of an Industrial Graduate employed in industry. The principles related to human, quality, organizational, legal, and ethical aspects of professional practice are introduced.

ID 2307 Production Processes **2-3-3**
An introduction to basic production processes and systems from the view point of industrial systems and design. A variety of production processes, machines, and tools are viewed and studied. The design and operation of production processes are studied as they relate to the other areas in manufacturing, such as materials handling, quality, safety, material, equipment, personnel, energy and information.

ID 2432 Engineering Product & Process Cost Estimating I **2-2-3**
Course includes the study and practices of basic double entry accounting, including development of basic financial statements. It also includes the development and study of cash flow statements.

ID 3334 Production and Inventory Control **2-2-3**
Prerequisites: IET 2227, IET 3322
The concepts of a basic production and inventory control system are central to this course. Material requirements planning and master production scheduling are covered. Inventory planning from outside vendors or internal production are considered. Various forecasting techniques are examined.

ID 3410 Principles of Team Dynamics **3-0-3**
Prerequisite: IET 2227
Students will learn the skills and techniques to succeed as a team member in the workplace. Topics include leadership and communication skills, social influences, decision making and problem solving techniques, and team development.

ID 3430 Industrial and Consumer Marketing **3-0-3**
A detailed study into industrial marketing and the major factors that are involved in the successful marketing of an industrial product. This is compared and contrasted to the consumer marketing process. Emphasis is on industrial marketing from a technical sales perspective, and the techniques used to support a successful technical sales program. The similarities and differences to consumer sales are also discussed.

ID 3434 Distribution Channels **3-0-3**
Prerequisite: ID 3430
A study of the operational and control aspects of distributorships which market industrial products. Includes financial transactions of the wholesale distributors.

ID 4326 Wage and Salary Administration **3-0-3**
The study of basic principles underlying the development, administration, and control of a compensation system for a work force. Topics covered will include the planning, selection, and training of a work force, compensation and motivation,

and evaluation of personnel. Heavy emphasis will be placed on the essential stages of the compensation-reward system and the techniques that may be used to remain competitive.

ID 4350 Industrial Loss Control **2-2-3**
Prerequisite: IET 3322

A study of the industrial controls that assist engineers in the reduction of hazards associated with regulatory standards, occupational disease and injury. The course presents detailed information on how the provisions of the OSHAct may be implemented in the workplace. Rights and responsibilities under the OSHAct, the appeals process, and recordkeeping are covered. The course also includes an introduction to OSHA's general industry standards and an overview of the requirements of the more frequently referenced standards. A major course project (including oral and written presentations) involves an in-plant investigation into the application of OSHA standards to the work site.

ID 4375 Engineering Sales Law **3-0-3**
Prerequisite: ID 2303

The study of the general law of: property and bailments, sales and product liability; and patents, copyrights, and trademarks.

ID 4435 Fundamentals of Engineering Sales **3-0-3**
Prerequisite: ID 3430

A study of the basic fundamentals of personal selling in the context of selling industrial or technical products. Current readings and up-to-date selling techniques will be examined.

ID 4437 Industrial Sales Development and Control **3-0-3**
Prerequisite: ID 4435

A study of the basic principles underlying the development and control of a sales force. Topics covered include sales planning, selection and training of a sales force, sales compensation and motivation, establishment of sales territories and evaluation of sales personnel. Guest speakers will be invited to lecture the class.

ID 4447 Purchasing and Material Planning **3-0-3**
Prerequisite: ID 2303

A study of the planning of purchasing and materials activities. Topics covered will include specification and standardization, vendor evaluation, receiving and storage, pricing, reciprocity, negotiation, legal aspects, and computer based purchasing. Just-in-time (JIT) ordering, bar code labeling, and electronic data interchange (EDI) will be examined.

ID 4449 Logistics Planning and Control **3-0-3**
Prerequisite: ID 2303

A survey of the transportation systems available to industrial distributors. The different forms of transportation are analyzed in terms of service rendered, costs, transit time, reliability, capability, accessibility security, and traceability. Labor relations and current issues in national transportation policy will also be discussed.

ID 4460 Warehouse Operations **3-0-3**
Prerequisite: ID 2303

This course gives an in-depth approach to the proper ways to organize and operate a warehouse. Topics include warehousing, principles, site selection, facility design, facility size, JIT, automation, and advanced warehouse technology.

ID 4901-4905 Special Topics **variable credit-1 to 5 hours**
Prerequisite: Junior standing or consent of the department head

Special topics selected by the department. Offered on a demand basis.

Industrial Engineering Technology

IET 1000 Orientation **2-0-2**

A part of this course is devoted to an orientation to the department, to college policy, and to expectations for students. The rest of the course is devoted to an orientation to the field of Industrial Systems and Design.

IET 2227 Industrial Statistics **3-3-4**

Prerequisite: MATH 1113

A study of descriptive and inferential statistics and applied probability. Topics include measures of central tendency and variability, statistical sampling and estimation, standard probability distributions, and hypothesis testing. Industrial applications rather than theoretical developments are emphasized. Computer based solution techniques are used where appropriate.

IET 2303 Principles of Industrial Systems and Design **3-0-3**

This course provides an introduction to the role and responsibilities of an Industrial Graduate employed in either manufacturing or service industry. The principles related to human, quality, organizational, legal, and ethical aspects of professional practice are introduced.

IET 2307 Production Processes **2-3-3**

An introduction to basic production processes and systems from the view point of Industrial Systems and Design. A variety of production processes, machines, and tools are viewed and studied. The design and operation of production processes are studied as they relate to the other areas in manufacturing, such as materials handling, quality, safety, material, equipment, personnel, energy and information.

IET 2432 Engineering Product and Process Cost Estimating I **2-2-3**

Course includes the study and practices of basic double entry accounting, including development of basic financial statements. It also includes the development and study of cash flow statements.

IET 3322 Work Measurement and Analysis **3-6-5**

Prerequisites: IET 2227, IET 2307

A study of the tools and techniques used in the measurement and analysis of work in a contemporary economic system.

IET 3334 Production and Inventory Control **2-2-3**

Prerequisites: IET 2227, IET 3322

The concept of a basic production and an inventory control system are central to this course. Material requirements planning and master production scheduling are covered. Inventory planning from outside vendors or internal production are considered. Various forecasting techniques are examined.

IET 3339 Statistical Quality Control **3-2-4**

Prerequisites: IET 2227, MATH 2253

A study of the fundamentals of statistical quality control. Topics include statistical process control with emphasis on applications and techniques including control charts for variables and attributes, and process capability. Other topics include scientific sampling fundamentals, acceptance sampling by attributes and variables, and reliability.

IET 3401 Project Organization and Control **2-2-3**

Prerequisite: IET 2227

A study of planning and control methods for industrial and production projects, including Critical Path Methods (CPM) and Program Evaluation and Review Technique (PERT). Topics include scheduling, updating and controlling with schedules, time-cost tradeoff, resource allocation, cost control for projects, the

roles of project personnel in project organizations, and post-planning control. Commercially available project planning software will be examined.

IET 3403 Industrial Experimentation **3-2-4**
Prerequisite: IET 2227

A review of basic statistics including descriptive statistics, sampling, estimation and hypothesis testing. A study of the methods of gathering, analyzing, and presenting technical and engineering data. Topics include reliability, chi-squared contingency tables and goodness-of-fit tests, one- and two-way ANOVA, regression analysis, and design of experiment. Computer-based solution techniques are used where appropriate.

IET 3410 Principles of Team Dynamics **3-0-3**
Prerequisite: IET 2227

Students will learn the skills and techniques to succeed as a team member in the workplace. Topics include leadership and communication skills, social influences, decision making and problem solving techniques, and team development.

IET 3424 Engineering Economy **2-2-3**
Prerequisite: MATH 1113

An introduction to the effect of the time value of money and the tax consequences upon the economic analysis of engineering problems.

IET 3433 Engineering Product and Process Cost Estimating II **2-2-3**
Prerequisites: IET 2432, IET 3424

A study of cost measurement related to manufacturing and non-manufacturing sectors through cost measurement and control in job order, process, standard and variable costing systems. Content includes the recording and control of material, labor and overhead costs, absorption and direct costing, budgeting, and cost volume profit and analysis.

IET 4326 Wage and Salary Administration **3-0-3**

The study of the concepts and practices of compensation administration with emphasis on its motivational aspects. Essential stages of the compensation - reward system are included and emphasized individually.

IET 4350 Industrial Loss Control **2-2-3**
Prerequisite: IET 3322

A study of industrial controls that assist engineers in the reduction of hazards associated with regulatory standards, occupational disease and injury. The course presents detailed information on how the provisions of the OSHAct may be implemented in the workplace. Rights and responsibilities under the OSHAct, the appeals process, and recordkeeping are covered. The course also includes an introduction to OSHA's general industry standards and an overview of the requirements of the more frequently referenced standards. A major course project (including oral and written presentations) involves an in-plant investigation into the application of OSHA standards to the work site.

IET 4356 Quality Concepts and Systems Design **3-0-3**
Prerequisite: IET 3339

A study of quality system principles, methodology, elements, and standards. Emphasis will be given to the management, organization, creation, and evaluation of quality systems necessary to assure organizational and functional compliance with stated quality system requirements (of national and international standards, including the ISO/Q 9000 Series) and extensions thereof. Alternative quality systems are also explored, including more comprehensive Total Quality Systems.

IET 4405 Principles of Operations Research **2-4-4**
Prerequisites: IET 2227, MATH 2253

To introduce the students to quantitative techniques used in the solution of industrial operations problems. Topics include linear programming, assignment and transportation techniques, queuing theory, decision analysis and computer simulation.

IET 4422 Plant Layout and Materials Handling **2-4-4**
Prerequisites: IET 3322, IET 3433

A study of the planning process for the construction of new physical facilities and improvement of existing facilities.

IET 4427 Methods-Time-Measurement **1-5-3**
Prerequisite: IET 3322

MTM-I is a predetermined time system which is used to establish labor standards on manual operations (machine operators, assembly operators, clerical operators, etc.). Emphasis is on the definitions and application rules of MTM-1. This course meets the MTM Association's prescribed format for MTM-1 Blue Card Certification. There is a lab fee for this course which covers the cost of the official MTM-1 textbook and registration as an MTM-1 Applicator for an initial three-year period.

IET 4451 Systems Simulation **1-5-3**
Prerequisites: IET 3403, IET 4405

An in-depth study of simulation as applied to manufacturing, inventory and distribution systems. Topics will include basic simulation and system modeling techniques, random sampling procedures, production modeling, simulation, inventory modeling/simulation and system evaluation. Emphasis will be upon hands-on simulation of various operations using the SLAM II, a PC-based general purpose simulation program and SIMFACTORY graphical simulation program.

IET 4475 Senior Project **1-6-3**
Prerequisite: IET 4422

This course focuses on the student completing a project that is a comprehensive application of the subject matter in the IET curriculum. A large scale feasibility study is to be performed to emphasize the interrelated topics of logistical and production processes for a fictitious company. The course requires a formal written report and a defended oral presentation before industrial and academic experts.

IET 4478 Senior Internship **2-6-4**
Prerequisites: IET 3403, IET 4422

The course focuses on the student's completing a project at an existing business under the joint supervision of the Southern PolyTech faculty and practicing professionals. The course requires a formal written report and a defended oral presentation.

IET 4901-4905 Special Topics **variable credit-1 to 5 hours**
Prerequisite: Junior standing or consent of the department head

Special problems selected by the department. Offered on a demand basis.

Management

MGNT 1115 Introduction to Management **3-0-3**

Broad analysis of the many facets of management; including the fundamentals of management and organization, managing people and production, marketing management and strategies, contemporary business and their responsibility, and management careers. Will also present students with strategies for developing personal, academic, and technology-management career directed goals.

MGNT 2201 Introduction to Computer Applications **3-0-3**

An introduction to word processing, spreadsheets, and database business applications using the personal computer. The course includes an introduction to the personal computer and operating systems.

MGNT 3105 Management and Organizational Behavior **3-0-3**

This course integrates the study of management principles and practices with the study of human behavior within organizations. The focus will be upon translation of management and organizational behavior theory to practices which result in organizational effectiveness, efficiency, and human resources development.

MGNT 3125 Basic Business Finance **3-0-3**

Prerequisite: ACCT 2101

An introductory course on financial analysis, budgeting, sources and uses of funds, management of assets, short and long run financial strategy and interpretation of financial data as these relate to the process of business decision-making.

MGNT 3135 Marketing Principles **3-0-3**

A study of the theory and principles of marketing. Emphasis will be placed upon the concept of customer satisfaction. Topics to be covered include total quality management (TQM), innovation, product distribution, cooperative associations, advertising and salesmanship, and the development of brands and trademarks.

MGNT 3145 Legal Environment **3-0-3**

An introduction to the legal system as it applies to commercial transactions and a study of the law of contracts and torts. Ethical issues in business will also be addressed.

MGNT 3155 Total Quality Management **3-0-3**

This course focuses primarily on the concepts, principles, methodologies, and implementation of Total Quality Management and continuous improvement. Through a continuous campus improvement project and/or an external industry project, the student shall gain experience at the direct application of the course material.

MGNT 3160 Management Science **3-0-3**

Prerequisite: MGNT 3505

A survey course of these analytical techniques available to the decision process. The student is introduced to modeling, linear programming, network models, decision making under uncertainty, deterministic inventory models, queuing models and simulation.

MGNT 3205 Management Information Systems **3-0-3**

Prerequisite: MGNT 2201

This course examines the sources and uses of information in the operation of productive organizations. Emphasis will be placed on data sources, creation and management of data bases, and utilization of information technology.

MGNT 3505 Managerial Statistics **3-0-3**

Prerequisite: MATH 2240

An introduction to the application of probability and statistics to business. Provides statistical techniques needed for managerial decision making. Course content includes descriptive statistics, statistical distribution, probability theory, and hypotheses testing.

MGNT 3901-3905 Special Topics **variable credit-1 to 5 hours**

Prerequisite: Junior standing

Special topics offered by the department on a demand basis.

MGNT 4115 Human Resources Management **3-0-3**
Prerequisite: MGNT 3105

The course introduces the technical and legal aspects of human resources management. Topics include: human resources planning, recruitment, selection, training and development, performance appraisal, compensation, labor relations, occupational health and safety, and the evaluation of human resources management programs.

MGNT 4125 Technology and Public Issues **3-0-3**
Prerequisite: MGNT 3105

An examination of the impact of private enterprise decisions on the commonweal. Consideration will be given to various technology policy topics and ethical considerations in business decision-making.

MGNT 4135 Project Management **3-0-3**
Prerequisite: MGNT 3105

This course will provide a comprehensive, balanced view, one which emphasizes both the behavioral and quantitative sides of project management. A study of the systems philosophy, systems development process, human organizations and behavior, methods and procedures, and managing systems will provide the background necessary for managers to "do" project management.

MGNT 4140 Management of Networks and Telecommunications **3-0-3**

This course deals with the components of a telecommunications/data communication system for business. Concepts associated with the development of communication networks include network structures, local area networks, PC communications, voice/data integration, and wide area networks.

MGNT 4145 International Management **3-0-3**
Prerequisites: Junior standing, ECON 1101, MGNT 3125, MGNT 3135

This course is designed to provide students with better understanding of the key issues, legal and socioeconomic environments, opportunities, challenges, and managerial processes that are unique to international business.

MGNT 4151 Production and Operations Management I **3-0-3**
Prerequisites: MGNT 3105, MGNT 3505

A first course in production/operations management. Topics include productivity, competitiveness, strategy, product and service design, process selection, capacity planning, facility layout, design of work systems, and location planning.

MGNT 4152 Production and Operations Management II **3-0-3**
Prerequisites: MGNT 4151

A second course in production/operations management. Topics include quality management, aggregate planning, inventory management, materials requirement planning, just-in-time systems, scheduling, and project management.

MGNT 4185 Technology Management **3-0-3**
Prerequisite: MGNT 3105

This course focuses on the management of technologies within organizations. Specific topics include the management of innovation, technological development, research and development, the justification and strategic implications of new technologies, and the development of a technological strategy. The management of both manufacturing and information technologies will be emphasized.

MGNT 4195 Current Readings in Management of Technology and Operations **3-0-3**
Prerequisite: MGNT 3105

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 4595 Business Strategy **3-0-3**
Prerequisites: Senior standing

An examination of the process of managing the total organization. Emphasizes innovations in structure, product, markets, and long-term organizational commitments as these relate to organizational success.

MGNT 4901-4905 Special Topics **variable credit-1 to 5 hours**
Prerequisite: Senior standing

Special topics offered by the department on a demand basis.

Management Information Systems

MIS 3500 Database Applications **3-0-3**
Prerequisite: MGNT 2201

This course provides an understanding of database analysis, design, and implementation in the end-user computing environment. The focus is on issues and principles of managing organizational data. Students will get extensive experience in developing data models, creating databases, and formulating and executing queries and reports.

MIS 4100 Business Systems Analysis and Design **3-0-3**
Prerequisite: CS 1113 or equivalent programming experience.

This course provides practice in structured analysis and design of business processes with emphasis on the development of business applications. Methods of system documentation are examined through use of tools and techniques for describing process flows, data flows, files, input/outputs and program specifications.

Marketing

MKTG 3210 Professional Selling **3-0-3**
Prerequisite: MGNT 3135

A critical examination of the challenges and opportunities provided by professional selling. Selling concepts, tools, strategies and tactics will be discussed, observed and practiced. Students are exposed to and experience some of the problems faced and rewards earned by those in professional sales.

MKTG 3224 Business Marketing **3-0-3**
Prerequisite: MGNT 3135

In recent years, the role of marketing within corporate business has become more widespread and defined. With global markets has come increased competition that requires attunement to customer needs and demands in order to survive. This course focuses on the expanded contemporary marketing strategies that are essential for today's business graduate, who intends to serve the needs of organizations rather than households. Emphasis will be placed on case studies, group presentations, and class interactions.

MKTG 3228 Market Research **3-0-3**
Prerequisite: MGNT 3505

The purpose of marketing research is to generate information to improve decision making. This course focuses on determining when research should be conducted and designing the appropriate means for gathering and interpreting information. The course examines issues from the perspective of both the manager and the researcher by relying on extensive readings, cases, and assignments.

MKTG 4100 Marketing Management **3-0-3**
Prerequisite: MGNT 3135

The marketplace has been transformed from a historical production domination to a consumer driven catalyst based on abundant supplies of products and services and the emergence of a world marketplace. This transformation has created the

need for managers to understand the mechanisms that drive production and consumption; a process referred to as "marketing." This course will deliver the logic and common sense associated with sound marketing management principles under changing global conditions.

Mathematics

MATH 1111 College Algebra **3-0-3**
Prerequisite: Placement by the Mathematics Assessment Test

A functional approach to algebra which incorporates the use of appropriate technology. Review of symbolic manipulation and solutions of equations and inequalities. Linear, quadratic, polynomial, exponential, and logarithmic functions, graphs and applications. A grade of "C" or better is required for course credit.

MATH 1113 Precalculus **4-0-4**
Prerequisite: MATH 1111 or Placement by the Mathematics Assessment Test

This course is designed to prepare students for calculus and related technical subjects. Rational and transcendental functions and graphs. Triangle and analytic trigonometry including identities and equations. Systems of equations utilizing matrices. A grade of "C" or better is required for course credit.

MATH 2240 Survey of Calculus **3-0-3**
Prerequisite: MATH 1113 or Placement by the Mathematics Assessment Test

Derivatives and integrals of polynomial, rational, logarithmic and exponential functions. Variable rate of change, amount of accumulated change, and graphing. Applications to problems in business, management, and economics are emphasized, with some attention to problems in the social sciences.

No student may receive credit for both MATH 2240 and MATH 2253.

MATH 2253 Calculus I **4-0-4**
Prerequisite: MATH 1113 or Placement by the Mathematics Assessment Test

A beginning course in calculus. Topics include differentiation and integration of algebraic and trigonometric functions, with applications to graphs of functions, rectilinear motion, maxima and minima, areas, volumes, and work.

No student may receive credit for both MATH 2253 and MATH 2240.

MATH 2254 Calculus II **4-0-4**
Prerequisite: MATH 2253

A continuation of MATH 2253. Topics include differentiation and integration of transcendental functions, integration techniques, sequences and series, and parametric equations.

MATH 2255 Calculus III **4-0-4**
Prerequisite: MATH 2254

Topics include the calculus of vector-valued functions, functions of several variables, and multiple integrals.

MATH 2260 Probability and Statistics I **3-0-3**
Prerequisite: MATH 2240 or MATH 2253

A basic course in probability and statistics. Topics include expectation, independent and conditional probability, combinations and permutations, organization and analysis of data, standard probability distributions, and hypothesis testing. The emphasis is on the applications and methods with applicability in technical and managerial fields.

MATH 2306 Ordinary Differential Equations **3-0-3**
Prerequisite: MATH 2254

Methods of solving ordinary differential equations of first and higher order. Systems of linear differential equations and solutions using the Laplace transform. Fourier series. Mechanical and electrical engineering applications are included.

MATH 2335 Numerical Methods I **3-0-3**
Prerequisites: MATH 2254, knowledge of a higher level programming language

Methods of numerical computation. Error analysis, solutions of equations, interpolation, quadrature, and linear systems. The course emphasizes the effective application of numerical approximation techniques in the solution of problems frequently encountered in engineering and science.

MATH 2901-2905 Special Topics **variable credit-1 to 5 hours**

Special topics in mathematics. Either a course taught on a one-time basis or a pre-arranged project conducted by specific written arrangement with an individual instructor.

MATH 3256 Linear Algebra and Calculus **3-0-3**
Prerequisite: MATH 2255

A continuation of multivariable calculus from MATH 2255, with linear algebra.

MATH 3261 Probability and Statistics II **3-0-3**
Prerequisite: MATH 2260

A continuation of MATH 2260. Management of data, design and analysis of experiments distributions. Substantial time will be spent on the use of a standard software package in the analysis and solution of statistical problems. Intended as a terminal course for those who will use statistics in a professional field.

MATH 3268 Probability Theory **3-0-3**
Prerequisite: MATH 2254

Axioms of probability, counting techniques, discrete and continuous univariate and multivariate random variables, expectation, Markov Inequality, moment generating functions, and applications of probability to statistical decisions.

MATH 3312 Linear Algebra **4-0-4**
Prerequisites: MATH 2254, MATH 3345 or concurrently, or consent of the department head.

An axiomatic treatment of real vector spaces. Bases, subspaces, linear transformations, and related topics.

MATH 3320 The Real Line **4-0-4**
Prerequisite: MATH 2254

The structure of the real number system line from a topological and analytical point of view. Topics include the continuous nature of the real line, open and closed sets, sequences and formal convergence, compactness, topics related to functions of a real variable.

MATH 3321 Functions of a Real Variable **4-0-4**
Prerequisite: MATH 3320

A continuation of MATH 3320. Topics include continuity, uniform continuity, formal definitions of the derivative and integral, covers, and composite functions.

MATH 3336 Numerical Methods II **3-0-3**
Prerequisites: MATH 2306, MATH 2335

A continuation of MATH 2335. Systems of equations, approximation theory, and differential equations. Understanding the nature and limitations of each method is emphasized.

MATH 3345 Discrete Mathematics **4-0-4**
Prerequisite: MATH 2253

An introduction to the fundamentals of discrete mathematics. Topics include matrices, counting, logic, induction, systems of linear equations, relations, graphs and trees, finite state automata, and set theory.

MATH 3901-3905 Special Topics **variable credit-1 to 5 hours**

Special topics in mathematics. Either a course taught on a one-time basis or a pre-arranged project conducted by specific written arrangement with an individual instructor.

MATH 4406 Advanced Engineering Mathematics **3-0-3**
Prerequisite: MATH 2306

Topics include orthogonal functions, Sturm-Liouville problem, boundary value problems for partial differential equations, the heat equations, wave equation, Laplace equation and power series solutions. Included are Bessel functions, Legendre polynomials, and their applications.

MATH 4407 Vector Analysis **3-0-3**
Prerequisite: MATH 2255

Scalar and vector fields, the del operator, curl, divergence, line integrals, conservative fields and potentials, and surface integrals. Applications to electromagnetic fields and to heat and fluid flow.

MATH 4417 Functions of a Complex Variable **3-0-3**
Prerequisites: MATH 3321 , MATH 3256

An elementary introduction to complex analysis, the complex plane, mappings and analytical functions of a complex variable, continuity, differentiation, and integration.

MATH 4440 Abstract Algebra **4-0-4**
Prerequisite: MATH 3312

A first course in abstract algebra. Topics include operations, the concept of homomorphism, and a standard approach to groups, rings, and fields.

MATH 4451 Applications of Mathematics **3-0-3**
Prerequisites: MATH 2306, MATH 3256, Prerequisites or Corequisites: MATH 3321, MATH 4440

Projects in the application of mathematics to various problems, including those of business, industry and science. The emphasis is on the formulation and solution of problems using known mathematics.

MATH 4901-4905 Special Topics **variable credit-1 to 5 hours**

Special topics in mathematics. Either a course taught on a one-time basis or a pre-arranged project conducted by specific written arrangement with an individual instructor.

Mechanical Engineering Technology

MET 1000 Mechanical Engineering Technology Orientation **1-0-1**

An introduction to career opportunities in the Mechanical Engineering Technologies; familiarization with college and departmental policies, curriculum, and facilities.

MET 1311 Manufacturing Processes **3-0-3**

An introduction to industrial manufacturing processes used for converting raw materials into finished products. Various processes, machinery, and operations will be examined with emphasis placed on understanding engineering materials and processing parameters that influence design considerations, product quality, and production costs.

MET 1321 Manufacturing Processes Lab I **1-3-2**
Prerequisite: MET 1311 or concurrently

An introduction to the use and operation of selected industrial machinery, various machining operations, selected welding processes and precision measuring instruments. Laboratory projects will emphasize safety and apply selected manufacturing processes, various inspection processes, fixturing and engineering materials.

MET 2322 Manufacturing Processes Lab II **2-3-3**
Prerequisites: EG 1212, MET 1000, MET 1321

An introduction to the use and operation of selected Computerized Numerical Control (CNC) machine tools. Laboratory projects will apply selected manufacturing processes, geometric dimensioning and tolerancing and CNC programming logic. Emphasis is placed on the following: safety, operational planning, design considerations, bonus tolerance, virtual condition, work holding requirements and manufacturing problems associated with engineering materials.

MET 3101 Fluid Mechanics **3-3-4**
Prerequisites: ENGL 2010, MATH 2254, MET 3121

A study of the fundamentals of fluid statics and dynamics including hydrostatic forces on submerged plates, continuity of fluid flow and fluid flow principles. Applications of turbulent and laminar flow in conduits are emphasized. The systems approach is practiced in analyzing the application of flow measuring devices, piping, pumps and turbines. The laboratory reinforces the principles of fluid mechanics as they apply to incompressible fluid flow and low speed air flow. Developing experimental data into effective laboratory reports is emphasized.

MET 3121 Statics **3-0-3**
Prerequisites: MATH 2254 or concurrently, PHYS 1111K or PHYS 2211K

The calculation of forces and moments acting on machine parts, frames, and structures. The equilibrium of force systems, shear and moment diagrams for beams, and friction are studied.

MET 3122 Dynamics **3-0-3**
Prerequisite: MET 3121

A study of the mechanics of particles and rigid bodies. Topics covered include: kinematics and kinetics of particles; work and kinetic energy; impulse and momentum; rigid body motions; relative motion and moving coordinate systems; and an introduction to mechanical vibrations.

MET 3123 Dynamics of Machines **3-0-3**
Prerequisites: CS 2123, MET 3122

The analysis of motion, velocity, acceleration, and forces in mechanisms and machines. Emphasis is placed on the analytical methods suitable for computerized analysis as well as graphical methods for visualization and preliminary design studies. Mechanical vibration isolation is also discussed.

MET 3131 Strength of Materials **3-3-4**
Prerequisites: ENGL 2010, MET 3121

A study of stress and strain of deformable bodies in tension, compression, bending, and torsion. Topics covered include: axial stress and strain; thermal stress and strain; statically indeterminant systems; torsional stress and strain; power transmission in shafts; bending stresses in beams; beam deflections; combined stresses; elastic buckling in columns; and finite element analysis methods.

MET 3132 Engineering Materials **3-3-4**
Prerequisites: CHEM 1211K, MET 3131

A study of metals, ceramics, polymers, and composites as related to design. Areas include corrosion, atomic structure, mechanical properties, failure theories, fatigue, creep, cold working, heat treating, alloying, and non-destructive testing. The lab work includes tensile testing, heat treating, impact testing, hardness testing, and corrosion.

MET 3331 Tool Design **3-0-3**
Prerequisites: MET 2322, MET 3131

Jigs and fixtures for production machining processes are covered. Specific subjects include methods of gaging work pieces, ease and simplicity of operation, assembly methods, capital evaluation, techniques for locating and holding work

pieces, time studies, tool steels, bending allowances, and reverse engineering techniques. The course is design project oriented. Projects include calculations of tooling forces and costs as well as complete production drawings of the tool design.

MET 3400 Survey of Thermodynamics **3-0-3**
Prerequisites: MATH 2253, PHYS 1111K or PHYS 2211K

A study of the fundamental laws of thermodynamics and heat transfer for non-MET students. Properties of ideal gases, mixtures of ideal gases, real substances as related to heat engines, heat pumps, refrigerators, and heat exchangers are covered. Basic applications of thermodynamics in the study of power plants, internal combustion engines, refrigeration systems and air conditioning systems are included. Heat transfer topics are introduced with applications for conduction, convection, and radiation. (This course may not be taken for credit by MET students).

MET 3401 Thermodynamics I **3-0-3**
Prerequisites: MATH 2253, PHYS 1111K or PHYS 2211K

Covers the fundamentals of thermodynamics. Use of steam and gas tables is introduced. Property relations for ideal gases and incompressible liquids are introduced. Applications of the First and Second Laws to closed and open systems are studied. Heat engines, refrigerators, heat pumps, availability and irreversibility are studied.

MET 3402 Thermodynamics II **3-0-3**
Prerequisites: MET 3101, MET 3401

Continuation of Thermodynamics I with emphasis on applications. Transient flow analysis, combustion, internal and external combustion cycles, gas turbines, compressors, refrigeration and air conditioning processes are studied. Fundamentals of heat transfer are also covered.

MET 4124 Vibrations and Advanced Dynamics **3-0-3**
Prerequisites: MATH 2306, MET 3123

Theory of mechanical vibrations with applications to machinery and the kinematics and kinetics of three dimensional motion of rigid bodies are covered. Conventional and computer methods are used.

MET 4133 Advanced Engineering Materials **3-0-3**
Prerequisite: MET 3132

The course covers polymers, ceramics, composites, and advanced topics in ferrous and non-ferrous metallurgy. Advanced topics in mechanics of materials, including failure theories and analysis of composites are studied. Traditional methods and Finite Element Modeling and Analysis (FEM/FEA) are used.

MET 4141 Machine Design I **4-0-4**
Prerequisites: EG 1212, MET 3123, MET 3132

The design of machines and machine elements, and cost considerations. The course focuses on power transmission in machines including gears, belts, pulleys, bearings, lubrication, clutches, brakes, chains, power screws, and gear trains. Stress calculations and material selection are discussed. Broad design issues such as safety, ethics, patents, product liability, time value of money, return on investment, and breakeven analysis are covered. Students work in design teams on a major design project.

MET 4142 Machine Design II **3-0-3**
Prerequisite: MET 4141

A continuation of Machine Design I, with emphasis on topics related to the design of machine elements for structural integrity, reliability, and economy. Application of advanced topics in strength of materials to machine design. The course includes a major design project.

MET 4332 Advanced Tool Design **3-0-3**
Prerequisite: MET 3331

Basic principles of the design of the material removal tools are studied, including basic cutting tool mechanics and heat transfer effects. Turning, milling, drilling and punch press operations are covered both for selection of a cost effective manufacturing technique and for learning the intricacies of the technique. The case study approach is used to illustrate course materials.

MET 4341 Automation Systems and Controls **2-3-3**
Prerequisite: MET 4421

The technology of integrating automation equipment for use in manufacturing processes is covered. Students design demonstrations and complete projects involving the interfacing of Numerical Control machines, flexible automation devices, and other material handling systems. Programming and sensory techniques, as well as identification systems are investigated. Data collection, quality management and control are included.

MET 4342 Numerical Control of Machines **2-3-3**
Prerequisites: CS 2123, MET 2322

A course in tooling and programming for Computer Numerical Control (CNC) machines. The course includes G-Code, conversational, and Computer Aided Manufacturing (CAM) programming languages and systems. Considerable emphasis on the integration of NC planning and programming into automated manufacturing systems. Topics in communications and computer networking for Direct Numerical Control (DNC) are discussed.

MET 4351 Manufacturing System Design Project **0-9-3**
Prerequisites: MET 4332, MET 4342 or consent of the department head

The Manufacturing Design Project is the capstone course for the Manufacturing Concentration in MET. Projects are assigned based on interest, equipment and software availability, and the specific background of the student. Projects require planning, proposal presentation, scheduling, engineering, implementation, and written and oral presentations of project results. Students are encouraged to "design and build" and utilize concepts learned from the courses completed in the MET Manufacturing Concentration. Presentation and report writing skills are practiced.

MET 4411 Refrigeration **3-0-3**
Prerequisite: MET 3402

The theory and applications of commercial refrigeration systems are studied. The thermodynamic analysis of the refrigeration cycle, load calculations and selection of components for refrigeration systems are covered.

MET 4412 Air Conditioning **3-0-3**
Prerequisites: MET 3101, MET 3402

The basic principles of residential and commercial air conditioning systems are introduced including the calculation of cooling and heating loads, and psychrometic processes. The student is exposed to relevant topics in heating, ventilating and air conditioning (HVAC) such as equipment selection, duct design, piping design, indoor air quality, energy code, HVAC systems, energy conservation options, automatic controls, and testing, adjusting and balancing (TAB) of air conditioning systems.

MET 4421 Instruments and Controls **3-3-4**
Prerequisites: ECET 3000, MATH 2306, MET 3101

This course covers the principles of engineering experimentation and process control. Students are instructed in current methods of data gathering, data regression, graphical analysis, result compilation, and report writing. Data gathering will include both manual techniques and computer data acquisition systems. An understanding of sensor selection, interfacing, and implementation is provided through lecture and laboratory assignments. The fundamentals of uncertainty

analysis along with the application of dimensional analysis and similitude are covered. Programmable Logic Controllers (PLC's) are used to introduce students to process control. Laboratory exercises illustrating the use of instrumentation for performance evaluation and control of mechanical systems are conducted.

MET 4431 Plant and Power Applications **3-0-3**
Prerequisite: MET 3402

A study of the applications of fluid mechanics, thermodynamics and heat transfer to industrial process plants. Fundamentals of piping design, selection of fans, heat exchangers and other components commonly used in industrial processes are covered.

MET 4801-4805 Special Projects **variable credit-1 to 5 hours**
Prerequisite: Consent of the department head

Independent study on topics of mutual interest to faculty and students. Assignments depend upon the specific background of the student, equipment availability, software availability, etc. Projects require a proposal presentation, scheduling, implementation and both written and oral presentations of study results.

MET 4901-4905 Special Topics **variable credit-1 to 5 hours**
Prerequisite: Consent of the department head

Special topics selected by the department. Offered on a demand basis.

Modern Foreign Languages

MFLA 1901-1903 Special Topics **variable credit-1 to 3 hours**

A course for individualized instruction of modern foreign languages.

MFLA 2901-2903 Special Topics **variable credit-1 to 3 hours**

A course for special study of modern foreign language or literature, above 1000 level.

Philosophy

PHIL 2000 Survey of Philosophical Thought **3-0-3**
Prerequisite: ENGL 1101

An exploration of the nature of philosophy. The course addresses such topics as knowledge and belief, God and the problem of evil, freedom and determinism, language and meaning, and appearance and reality.

Physics

PHYS 1111K Introductory Physics I **3-3-4**
Prerequisite: MATH 1113

An introductory course which will include material from mechanics, thermodynamics, and waves. Elementary algebra and trigonometry will be used. Laboratory exercises supplement classroom work.

PHYS 1112K Introductory Physics II **3-2-4**
Prerequisite: PHYS 1111K or PHYS 2211K

An introductory course which will include material from electromagnetism, optics, and modern physics. Elementary algebra and trigonometry will be used. Laboratory exercises supplement classroom work.

PHYS 2211K Principles of Physics I **3-3-4**
Prerequisite: MATH 2253

An introductory course which will include material from mechanics, thermodynamics, and waves. Elementary differential calculus will be used. Laboratory exercises supplement classroom work. This course may be substituted

for PHYS 1111K in any curriculum, but credit will not be allowed for both PHYS 1111K and PHYS 2211K.

PHYS 2212K Principles of Physics II **3-2-4**
Prerequisites: MATH 2254, PHYS 2211K

An introductory course which will include material from electromagnetism, optics, and modern physics. Elementary differential and integral calculus will be used. Laboratory exercises supplement classroom work. This course may be substituted in any curriculum for PHYS 1112K, but credit will not be allowed for both PHYS 1112K and PHYS 2212K.

PHYS 3210 Intermediate Mechanics **4-0-4**
Prerequisites: MATH 2306, PHYS 2211K

A survey of Newtonian dynamics of particles and systems of particles, including Lagrange's equations, central force systems, and the theory of small vibrations.

PHYS 3220 Electromagnetism I **3-0-3**
Prerequisites: MATH 2255, PHYS 2212K

A survey of fundamental principles of electricity and magnetism, including electrostatic fields, magnetic fields of steady currents, and time-dependent electromagnetic fields.

PHYS 3230K Optics **2-3-3**
Prerequisite: PHYS 2212K

A study of geometric and physical optics. The laboratory exercises supplement the classroom work.

PHYS 3410K Electronics Laboratory **1-3-2**
Prerequisite: PHYS 2212K

A study of discrete and integrated circuits that are commonly found in the physics laboratory.

PHYS 3500K Introduction to Computational Physics **1-3-2**
Prerequisite: PHYS 2212K

An introduction to computational physics problem solving, primarily using Windows-based MathCad but also including an introduction to Maple. Topics include equation solving, the use of vectors and matrices, 2-D and 3-D graphics, differential equation solving, simple programming, and the analysis and simulation of physical processes. Both numeric and symbolic methods are covered.

PHYS 3710 Modern Physics **4-0-4**
Prerequisite: PHYS 1112K or PHYS 2212K

An introduction to the concepts and calculations involved in understanding the structure of matter and the world of the quantum. Topics include the Planck theory of radiation, particle/wave duality, Schrodinger equation solutions for simple potentials, and properties of the one-electron atom. Applications of quantum principles to atomic, molecular, and nuclear structure are also considered as time permits.

PHYS 3720L Modern Physics Laboratory **0-3-1**
Prerequisite: PHYS 3710 or concurrently

A selection of experiments from Modern Physics that complement the material in PHYS 3710, Modern Physics.

PHYS 3730 Relativity **2-0-2**
Prerequisite: PHYS 1112K or PHYS 2212K

A thorough exposition of the principles of Special Relativity and an introduction to the General Theory of Relativity.

PHYS 3901-3905 Special Topics **variable credit-1 to 5 hours**
Prerequisite: Junior standing

Special topics selected by the department. Offered on a demand basis.

PHYS 4210 Quantum Physics **4-0-4**
Prerequisite: PHYS 3710
A systematic development of quantum mechanical laws, emphasizing solutions to Schrodinger's equation.

PHYS 4220 Electromagnetism II **3-0-3**
Prerequisite: PHYS 3220
A study of electromagnetic fields in matter, and of electromagnetic waves and their propagation. Emphasis will be given to calculational techniques.

PHYS 4230 Thermal Physics **4-0-4**
Prerequisite: PHYS 2212K
A study of the principles of thermal equilibrium, physical statistics, irreversible processes, and the approach to equilibrium.

PHYS 4240 Solid State Physics **2-0-2**
Prerequisite: PHYS 3710
Application of quantum mechanics to molecules and solids including such topics as molecular bonding, spectra of diatomic molecules, binding forces and bonding theory in solids, and application to solid state devices.

PHYS 4410K Advanced Measurements Laboratory **1-3-2**
Prerequisite: PHYS 3410K
An introduction to instrument control, data acquisition, and data analysis of the type used in research labs. The student will then incorporate these techniques in the design of experiments important to classical and/or contemporary physics. This course will be writing intensive and will require extensive formal reports.

PHYS 4430 Capstone Physics Project **1-0-1**
Prerequisite: Approved petition for graduation
Students will complete a capstone physics project during the last year on campus. The content and subject of this project will be negotiated between the student and the faculty supervisor of the project.

PHYS 4901-4905 Special Topics **variable credit-1 to 5 hours**
Prerequisite: PHYS 1112K or PHYS 2212K
Special topics selected by the department. Offered on a demand basis.

Political Science

POLS 1101 American Government **3-0-3**
A study of the structure and function of the federal government from its historical antecedents to its contemporary challenge. Satisfies U.S. and Georgia history and government requirement.

POLS 2401 Global Issues **3-0-3**
An introduction to international relations covering such issues as diplomacy, nuclear politics, war, secret intelligence, revolution, international development, debt, and dependence.

Psychology

PSYC 1100 Contemporary Issues in Psychology **3-0-3**
An introduction to major contemporary issues affecting society from a psychological perspective. Such issues as domestic violence, political terrorism, and immigration policy are examined to help foster critical thinking and objective analysis.

PSYC 1101 Introduction to General Psychology **3-0-3**

An introduction to the methods, theories, and research findings in psychology. The course examines the influence of biological, cognitive, and social factors on behavior.

PSYC 3901-3903 Special Topics **variable credit-1 to 3 hours**

Prerequisite: Consent of the department head

Special topics in psychology. Offered by the department on a demand basis.

Regents' Test Remediation

RGTR 0198 Reading for the Regents' Test **2-0-2**

(Institutional Credit Only)

Prepares the student for taking the Reading component of the Regents' Test by providing simulated experience in the test-taking situations. Covers general test-taking strategies, reading strategies, and strategies for controlling test anxiety.

RGTE 0199 Writing for the Regents' Test **2-0-2**

(Institutional Credit Only)

Prepares students for taking the Writing component of the Regents' Test by providing instruction in such skills as grammar, usage, and mechanics through the writing of practice essays.

Religion

RELG 1200 World Religion **3-0-3**

Survey of world religions including Hinduism, Buddhism, Islam, Judaism, and Christianity. Attention will be paid to historical development, basic tenets, and impact on culture.

Science, Technology, and Society

STS 2400 Science, Technology, and Society **2-0-2**

Prerequisites: Sophomore standing, ENGL 1101

An interdisciplinary course exploring the development and integration, both historical and contemporary, of science, technology, and society. The course seeks to help students better understand the world in which they live, the broader implications of their major course of study, and the complex social, ethical, and moral choices presented by modern science and technology.

Social and International Studies

SIS 2901-2903 Special Topics in Studies Abroad **variable credit-1 to 3 hours**

Special topics or projects for students participating in a studies abroad program. Offered by the department on a demand basis.

SIS 3100 Contemporary World Politics **3-0-3**

Prerequisite: HIST 1013 or consent of the department head

Examines existing world trouble spots through an analysis of their historical backgrounds and the current international system. Students will devise their own policy analyses and recommendations for resolving various conflicts of international interest.

SIS 3500 Contemporary International Economic Issues **3-0-3**

Prerequisite: ECON 1101 or consent of the department head

Examines national and international issues and policies that affect the world's economy, including factors influencing trade, development, and commerce.

Reviews historical development with special emphasis on contemporary problems and policies.

SIS 3600 Comparative Culture **3-0-3**

Prerequisite: Proficiency in second language or consent of the department head

Compares cultures of the Pacific Rim, the Americas, the Middle East, Europe, and Africa with that of the United States with the purpose of diminishing cultural conflict. Includes life-issues of a culture: ceremonies and customs of birth, death, marriage, dating, meals, body language, etc. Lab simulations provide students with experience in dealing with culturally-conflictive situations.

SIS 3700 International Issues in Science and Technology **3-0-3**

Examines the technical, social, and moral issues raised by current international advances in science and technology with special attention to comparative studies, technology transfer, and technological imperialism. Historical case studies allow students to develop perspective and analytical skills that are then applied to a broad range of contemporary issues.

SIS 3800 Contemporary World History since 1945 **3-0-3**

A topical survey of world historical developments since the end of the Second World War. This course will deal with the birth and death of the Cold War, decolonization, north/south rivalry, ethnic and cultural conflict, nuclear proliferation, trends in international trade, technological transfer and development, the rise of the Pacific Rim, and conflict in the Middle East, and international relations since the end of the Cold War.

SIS 3901-3903 Special Topics in International Studies **variable credit-1 to 3 hours**

Special topics in international issues. Offered by the department on a demand basis.

SIS 4000 Regional Studies/General **3-0-3**

Focuses on the political, economic, and social forces within a particular region or regions of the world to be designated by the instructor. A significant study abroad experience (e.g. a semester or more) may substitute for this course with Social and International Studies department approval.

SIS 4001 Regional Studies/Latin America **3-0-3**

Focuses on the political, economic, and social forces within Latin America.

SIS 4002 Regional Studies/Asia: China **3-0-3**

Focuses on the political, economic, and social forces within China.

SIS 4003 Regional Studies/Asia: Japan **3-0-3**

Focuses on the political, economic, and social forces within Japan.

SIS 4004 Regional Studies/Middle East **3-0-3**

Focuses on the political, economic, and social forces within the Middle East.

SIS 4005 Regional Studies/Russia/Central Europe **3-0-3**

Focuses on the political, economic, and social forces within Russia and/or Central Europe.

SIS 4006 Regional Studies/Western Europe **3-0-3**

Focuses on the political, economic, and social forces within Western Europe.

SIS 4007 Regional Studies/Africa **3-0-3**

Focuses on the political, economic, and social forces within Africa.

Social Sciences

SOCS 3901-3903 Special Topics **variable credit-1 to 3 hours**
Prerequisite: Consent of the department head
Special topics in social sciences. Offered by the department at its discretion.

Spanish

SPAN 1001 Elementary Spanish I **3-0-3**
Introduction to listening, speaking, reading, and writing in Spanish and to the culture of Spanish speaking regions. Not open to native speakers of Spanish.

SPAN 1002 Elementary Spanish II **3-0-3**
Continued listening, speaking, reading, and writing, in Spanish with further study of the culture of Spanish speaking regions. For those students who have completed SPAN 1001 or have had one year of Spanish in high school. Not open to native speakers of Spanish.

SPAN 2001 Intermediate Spanish I **3-0-3**
Prerequisite: SPAN 1002 or equivalent
A continuation of skills development of comprehension, speaking, reading of general and technical texts, writing, grammar and an introduction to Hispanic cultures. Not open to native speakers of Spanish.

SPAN 2002 Intermediate Spanish II **3-0-3**
Prerequisite: SPAN 2001 or equivalent
A continuation of SPAN 2001. Not open to native speakers of Spanish.

Speech

SPCH 2400 Public Speaking **2-0-2**
A general course in public speaking designed for students without experience. The course deals with effective delivery techniques; methods for handling nervousness, movement, and projection; and the development of different types of speeches. This course does not deal with professional presentations.

Surveying

SURV 2200 Construction Measurements **3-3-4**
Prerequisite: MATH 1113
Use and care of engineers level, transit and tape; leveling, traversing, stadia, contours, horizontal and vertical field layouts for buildings; reading and interpretation of site survey maps. (No credit for CET or Surveying and Mapping majors.)

SURV 2221 Surveying I **3-3-4**
Prerequisites: CET 2160, MATH 1113
Angles, distances, elevations; horizontal and vertical location using total station and level; simple horizontal and vertical curves; contouring; introduction to the Global Positioning System; introductory coordinate computations; simple topographic survey project.

SURV 2250 Applied Hydrology for Surveyors **4-0-4**
Prerequisite: MATH 1111
Analysis of surface water runoff, rational method, TR 55 Method, pipe sizing, storm sewer design, curb and gutter design, and basic fluid mechanics application to subdivision design. This course is intended to prepare students for the

Professional Land Surveyor Exam in the State of Georgia. (This course may not be used for credit by CET or Surveying and Mapping Majors.)

SURV 3222 Surveying II **3-3-4**
Prerequisite: SURV 2221
Route geometry computations and field techniques; automated data collection and reduction for topographic surveys; coordinate computations for intersections; route design project.

SURV 3320 Photogrammetry and Remote Sensing **2-3-3**
Prerequisite: SURV 3222
Analysis and interpretation of photographic and satellite imagery; vertical and orthography; ground control; project planning; digital softcopy methods.

SURV 3330 Construction Surveying **3-3-4**
Prerequisite: SURV 3222
Layout of designed structures from land boundaries, right of way parcels, applications of coordinate geometry, hydrographic surveying.

SURV 3421 Geographic Information Systems I **3-3-4**
Prerequisite: SURV 3222
GIS concepts; spatial data analysis; information systems; digital elevation models; surveying and mapping components of GIS development.

SURV 3901-3904 Special Topics **variable credit-1 to 4 hours**
Prerequisites: Junior standing, consent of the department head
Special topics offered by the department on a demand basis.

SURV 4410 Surveying Computations and Adjustments **3-3-4**
Prerequisites: MATH 2260, SURV 3222
Advanced surveying computations; matrix algebra; computer methods; statistical analysis of error propagation; variance and covariance; least squares adjustments.

SURV 4412 Applied Geodesy **3-3-4**
Prerequisite: SURV 3222
Figure of the earth; astronomy; geodesy; state plane coordinate computations; geodetic leveling; computer methods.

SURV 4413 Geodetic Positioning with GPS **3-3-4**
Prerequisite: SURV 4412
Applications of geodesy using GPS; project planning; networks; field operations; data analysis; computer methods.

SURV 4420 Remote Sensing **3-3-4**
Prerequisite: SURV 3320
Remote sensing systems; ground truthing; mapping applications; satellite imagery integration into GIS.

SURV 4422 Geographic Information Systems II **3-3-4**
Prerequisite: SURV 3421
Continuation of GIS I; data collection techniques; advanced systems and macro programming.

SURV 4423 Advanced Field Operations **2-6-4**
Prerequisite: SURV 3222
Emphasis placed on production surveying; use of codes to develop maps; extensive data collection; computer drafting and plotting.

SURV 4465 Legal Aspects of Land Surveying **4-0-4**
Prerequisite: SURV 3222
Cadastral systems; Georgia laws on surveying and property; boundary survey legal research; writing of legal descriptions; evidence evaluation; US Public Land System.

SURV 4470 Land Development Design **3-3-4**
Prerequisites: CET 4444, SURV 2221
Site analysis; subdivision design; drainage design; sewer design; legal requirements; platting; CAD computer methods.

SURV 4475 Land Surveying Practice **1-3-2**
Prerequisite: SURV 4465
Legal research; boundary analysis; boundary survey project; office procedures; business practice.

SURV 4901-4904 Special Topics **variable credit-1 to 4 hours**
Prerequisites: Senior standing, consent of the department head
Special topics offered by the department on a demand basis.

Technical Communication

TCOM 3000 Advanced Grammar and Editing **3-0-3**
Prerequisite: ENGL 2010
Study of standard English grammar and contemporary usage, with emphasis on traditional and transformational theories of sentence structure. Students also learn how to apply editing principles and techniques to technical subject matter with special emphasis on copy editing and working with authors and editors.

TCOM 3010 Science Writing **3-0-3**
Prerequisite: ENGL 2010
Examination of the types of writing produced in various scientific professions. Depending on the semester, possible topics may include one or more of the followings: environmental writing, public policy documents, and other scientific documents.

TCOM 3020 Proposals **3-0-3**
Prerequisite: ENGL 2010
Theory and practice of writing proposals for business and industry, with emphasis on external sales and in-house proposals. Course covers (1) persuasive theory and strategies, and (2) parts of the proposal writing process, including team writing techniques, sales letters, writing of the proposal text, proposal graphics, oral presentations, and negotiation strategies.

TCOM 3030 Technical Training **3-0-3**
Prerequisite: ENGL 2010
Course introduces students to principles of how adults learn and develop the skills required to plan lessons, produce materials, and deliver training about technical topics. Students will conduct a task analysis and develop an instructional unit including instructional objectives, lesson plans, student materials, and student assessments concerning a technical topic of each student's choosing.

TCOM 3040 Writer's Workshop **3-0-3**
Prerequisites: ENGL 1101, ENGL 1102
Course that gives students practice in writing for various audiences, purposes, and contexts. In addition to a workshop forum, this class provides an introduction to contemporary, practical theories of writing.

TCOM 3050 Journalism **3-0-3**
Prerequisite: ENGL 2010
Study of technical and scientific reporting, including mass media theory. Emphasis on making technical information understood by a general audience. Students practice many in-house and external forms of writing such as news releases, feature articles, bulletins, brochures, and pamphlets.

TCOM 3060 International Communication **3-0-3**
Prerequisite: ENGL 2010

Study of international cultural differences, especially as they influence oral and written communication in the workplace. Cultures will be analyzed using established models. Special topics will vary depending on faculty teaching the course. B.A. in International Technical Communication students strongly encouraged to take the course.

TCOM 3901-3903 Special Topics **variable credit-1 to 3 hours**
Prerequisite: Consent of the department head

Special topics in communications. Offered by the department at its discretion.

TCOM 4030 Foundations of Graphics **3-0-3**
Prerequisite: ENGL 2010

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. 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.

TCOM 4045 Foundations of Multimedia **3-0-3**
Prerequisites: ARTS 3000 or TCOM 4030, ENGL 2010

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.

TCOM 4070 Manuals **3-0-3**
Prerequisite: ENGL 2010

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 and (2) theory relevant to designing usable, readable manuals. 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.

TCOM 4100 Small Group Communication **3-0-3**
Prerequisite: ENGL 2010

Study of the theory and practice of group interaction and teamwork as it applies to group process. Focuses on such topics as the function of roles in groups, conflict resolution, leadership in the small group, gender differences, listening and negotiation skills, and managing meetings. A collaborative project and workshop activities reinforce these principles. 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.

TCOM 4130 Online Communication **3-0-3**
Prerequisite: ENGL 2010

Study of the design and development of effective online materials, such as help, online references, and web pages. Presents theories of human-computer interaction and principles of online communication. Students design and develop their own module of online communication. Although the course presents principles

of authoring, it does not teach tools for authoring online communication. 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.

TCOM 4160 Rhetoric: History, Theory, and Practice **3-0-3**
Prerequisite: ENGL 2010

Introduction to rhetoric as the relationship between thought and expression. Examines connections between rhetoric and writing, between a public act and a personal thinking process, by exploring 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 they have available to them as 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.

TCOM 4170 Video Production **3-0-3**
Prerequisite: ENGL 2010

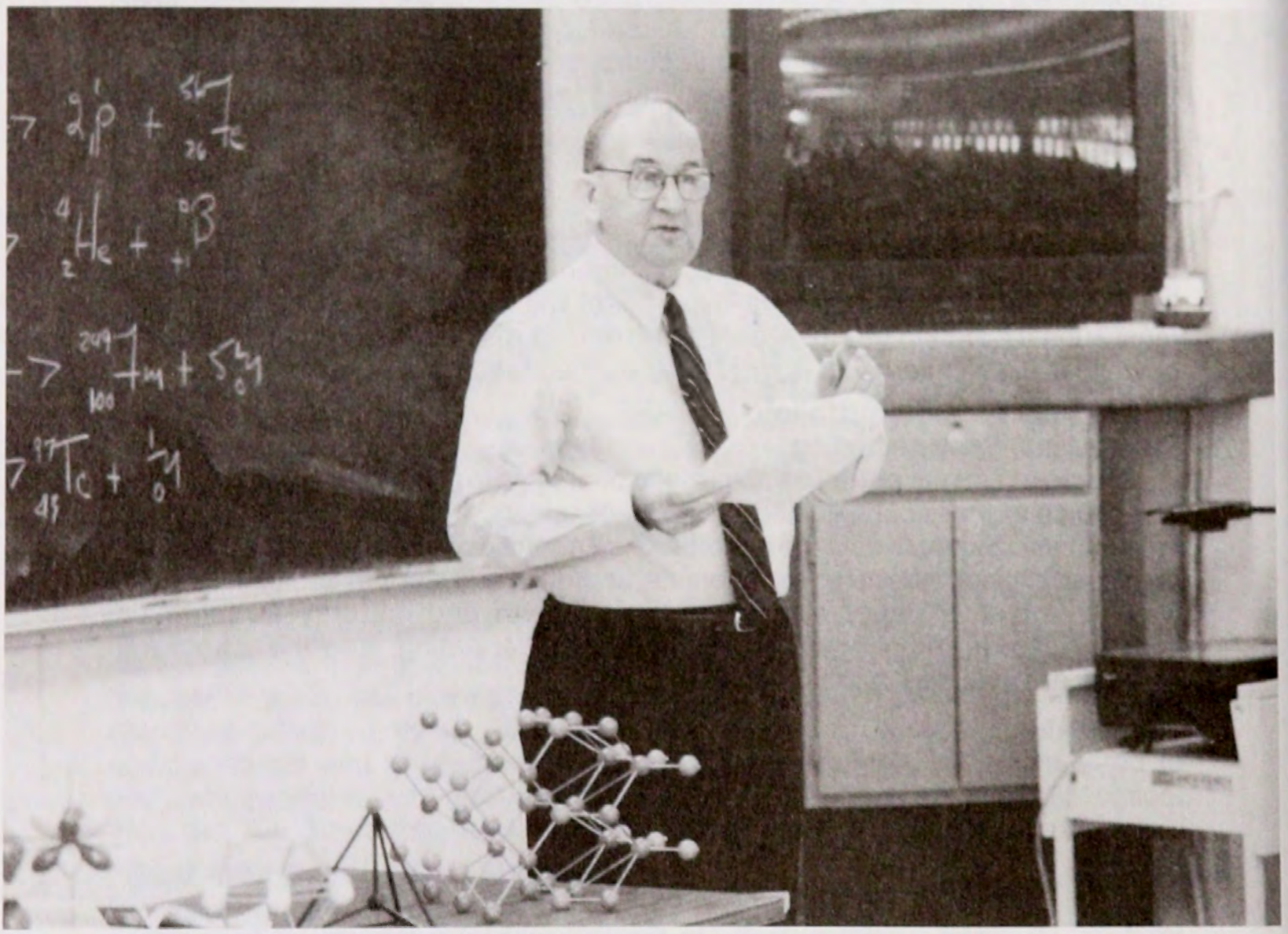
Introduction to the role and use of video production for technical and professional communication. Topics include scripts, storyboards, shot selection, continuity, lighting, sound, in-camera editing, and fundamental post-production techniques. Students will complete at least two assigned videos as individual 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.

TCOM 4700 Internship **3-0-3**
Prerequisite: Junior standing

An opportunity for students to apply principles and techniques of technical and professional communication in a specific organization. The student is responsible for finding an internship, but the department will help in the effort. The student must submit a written proposal describing the internship according to department guidelines. Each internship is monitored by the student's advisor.

TCOM 4800 Project Portfolio **3-0-3**
Prerequisite: Senior standing

Course examines portfolios as professional tools for technical communicators. The course includes portfolio and writing theory along with a collaborative workshop environment. Students develop a professional portfolio of sample documents based on course project, internship experiences, and/or work history. In addition, students write a reflective paper examining their growth and maturity as technical communicators. Interviewing techniques, resume writing, and the job search process are included in the course.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Administrative Officers and Faculty

The University System of Georgia

The University System of Georgia includes all state-operated institutions of higher education in Georgia - 4 universities, 2 regional universities, 13 senior colleges, 15 junior colleges. These 34 public institutions are located throughout the state.

A 16-member constitutional Board of Regents governs the University System; which has been in operation since 1932. Appointments of Board members are made by the Governor, subject to confirmation by the State Senate. The regular term of Board members is seven years.

The Chairperson, the Vice Chairperson, and other officers of the Board are elected by the members of the Board. The Chancellor, who is not a member of the Board, is the chief executive officer of the Board and the chief administrative officer of the University System.

The overall programs and services of the University System are offered through three major components: Instruction; Public Service/Continuing Education; Research.

INSTRUCTION consists of programs of study leading toward degrees, ranging from the associate (two-year) level to the doctoral level, and certificates.

Requirements for admission of students to instructional programs at each institution are determined, pursuant to policies of the Board of Regents, by the institution. The Board establishes minimum academic standards and leaves to each institution the prerogative to establish higher standards. Applications for admission should be addressed in all cases to the institutions.

PUBLIC SERVICE/CONTINUING EDUCATION consists of non-degree activities, primarily, and special types of college-degree-credit courses.

The non-degree activities are of several types, including such as short courses, seminars, conferences, lectures, and consultative and advisory services, in a large number of areas of interest.

Typical college-degree-credit public service/continuing education courses are those offered through extension center programs and teacher education consortiums.

RESEARCH encompasses investigations conducted primarily for discovery and application of knowledge. These investigations cover matters related to the educational objectives of the institutions and to general societal needs.

Most of the research is conducted through the universities; however, some of it is conducted through several of the senior colleges.

The policies of the Board of Regents provide autonomy of high degree for each institution. The executive head of each institution is the President, whose election is recommended by the Chancellor and approved by the Board.

State appropriations for the University System are requested by, made to, and allocated by the Board of Regents. Matriculation and nonresidential tuition fees for all institutions are set by the Board. All resident students pay matriculation fees; out-of-state students pay nonresident tuition in addition to matriculation. Fees for student services and activities are established by each institution, subject to the Board's approval.

University System of Georgia
270 Washington Street, S.W.
Atlanta, Georgia 30334

Institutions of the University System of Georgia

Universities

Georgia Institute of Technology	Atlanta
Georgia State University	Atlanta
Medical College of Georgia	Augusta
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	Augusta
Clayton College & 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	Marietta
North Georgia College & State University	Dahlonega
Savannah State University	Savannah
Southern Polytechnic State University	Marietta
State University of West Georgia	Carrollton

Associate Degree Colleges

Abraham Baldwin Agricultural College	Tifton
Atlanta Metropolitan College	Atlanta
Bainbridge College	Bainbridge
Coastal Georgia Community College	Brunswick
Dalton College	Dalton
Darton College	Albany
East Georgia College	Swainsboro
Floyd College	Rome
Gainesville College	Gainesville
Georgia Perimeter College	Decatur
Gordon College	Barnesville
Macon State College	Macon
Middle Georgia College	Cochran
South Georgia College	Douglas
Waycross College	Waycross

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Southern Polytechnic State University
Administrative Officers

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Mary Stoy, Director of Counseling
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Ph.D., Florida State University; M.A., Middlebury College, Madrid; B.A., Florida State University; A.A., Palm Beach Junior College

Faculty Emeriti

Bannerman, James W., Professor Emeritus, Industrial Engineering Technology

Bennett, David M., Professor Emeritus, Civil Engineering Technology

Burton, Walter E., Professor Emeritus, Electrical and Computer Engineering Technology

Carter, Robert C., Professor Emeritus, Electrical Engineering Technology

Cheshier, Stephen R., President Emeritus

Cowan, Clifford W., Professor Emeritus, Electrical and Computer Engineering Technology

Franklin, Patricia S., Professor Emerita, Industrial Engineering Technology

Freeman, Charles R., Associate Professor Emeritus, Mechanical Engineering Technology

Haddle, Gillian P., Professor Emeritus, Mathematics

Hays, Robert W., Professor Emeritus, English

Hein, Virginia H., Professor Emerita, Humanities and Social Sciences

Holladay, Charles T., Head and Professor Emeritus, Civil Engineering Technology

Keown, John L., Professor Emeritus, Electrical and Computer Engineering Technology

Lee, Julian R., Professor Emeritus, Mechanical Engineering Technology

Maddox, Cyrus V., Dean of Students Emeritus

McClure, Hoyt L., Professor Emeritus, Industrial Engineering Technology

McCoy, Joan, Associate Professor Emerita, Humanities and Technical Communication

McGuire, Richard W., Professor Emeritus, Industrial Engineering Technology

McPherson, Jack, Professor Emeritus, Industrial Engineering Technology

Muller, Edward J., Professor Emeritus, Architectural Engineering Technology

Myatt, Robert L., Jr., Head and Professor Emeritus, Architectural Engineering Technology

Pattillo, John W., Director and Professor Emeritus, Library

Schenk, Harry M., Professor Emeritus, Physics

Shofner, Nancy, Librarian and Assistant Professor Emeritus, Library

Summers, David E., Professor Emeritus, Electrical and Computer Engineering Technology

Taylor, Leonard H., Head and Professor Emeritus, Mechanical Engineering Technology

Travis, Harris T., Vice President Emeritus

Vaughn, Wilton W., Professor Emeritus, Architectural Engineering Technology

Wimberly, Charles A., Professor Emeritus, Industrial Engineering Technology

Young, Ronald C., Professor Emeritus, Mechanical Engineering Technology

Youngblood, Ralph P., Professor Emeritus, Mathematics

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Campus Map Legend

A Wilson Student Center
- Bookstore
- Cafeteria
- Counseling Center
- Post Office
- Student Activities

B Administration Building
- Admissions
- Assistant Vice President
- Dean of Students
- President
- Public Relations
- Records
- Recruitment
- Veteran Affairs
- Vice President-Academic Affairs
- Vice President-Enrollment Management & Student Services

C Library

D Classroom Building
- Institutional Research, Planning, and Assessment
- International Student Services
- Mathematics Department
- Minority Affairs

E Laboratory Building
- Physics, Chemistry, and Biological Sciences Department

F Continuing Education Center

G Electrical Building
- ECET Department

H Academic Building
- Construction Department
- Information Technology

I Architecture Building
- School of Architecture

J Atrium Building
- College of Arts and Sciences
- College of Technology
- Computer Science Department
- Humanities and Technical Communication Department
- IET Department
- Learning Resources Center
- School of Management
- Social and International Studies Department

K Mechanical Building
- MET Department

L Modular Buildings
- Georgia Youth Science and Technology Center

M Apparel/Textile Manufacturing Center
- ATET Department

N New Architecture Building (Under Construction)

S Howell Hall
- Career Services
- Student Housing

V Norton Hall
- Business Services
- Cashier
- Financial Aid
- Human Resources
- Procurement
- University Police
- Vice President-Business and Finance

EP Plant Operations Building

EX Procurement Building
- Central Receiving

NC Recreation and Wellness Center
- Clinic

SJ CET Building
- CET Department

SM Wilder Communications Center

SP Intercollegiate Athletic Facility

Southern Polytechnic State University
Campus Map

Quantity: 30,000
Cost: $21,252

SOUTHERN
POLYTECHNIC
STATE UNIVERSITY

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