the functional requirements for work, recreation, and housing. Emphasis is on understanding the design process and acquiring the appropriate graphic, scientific, and technical skills. Opportunities include landscape design, service, landscape development and maintenance, garden center operation, allied sales, municipal and highway landscaping, park development, and teaching.

Landscape construction begins with a final design plan and involves implementing the plan with all the necessary construction steps including earthwork, paving surfaces, fences, pools, decks, patios, benches, and planting installation. Students learn about basic construction materials, drainage and irrigation, water features, outdoor lighting and other components of landscape construction.

Nursery management involves the growing of trees, shrubs and other ornamental plants for sale. Skills necessary to be a nursery manager include horticultural knowledge and management skills. Opportunities are in nurseries, garden centers, botanical gardens, and arboreta, and in landscape maintenance and installation.

The area of floriculture includes the science of producing flowering plants in field and greenhouse, and the art and science of using these plants for the benefit of humans. Opportunities are available as greenhouse managers, floral designers, retail salespersons, research workers, and related commercial areas. Interiorscape design is a significant new field relating to floriculture.

Turfgrass management includes all aspects of growing and caring for turfgrass. The increasing number of golf courses and home lawns and the emphasis on better quality make new opportunities for turfgrass managers. Such opportunities include golf course superintendents, park and recreational turf managers, operation of a lawn or grounds maintenance business, and sod production. Minor in Ornamental Horticulture and Landscape Design

A minor in Ornamental Horticulture and Landscape Design shall consist of 18 hours of courses in Ornamental Horticulture and Landscape Design. Three of the following four courses must be included: 280, 310, 330, 340. Any of the following may be taken as part of the nine additional hours: 210, 220, 230, 350, 360, 370, 380, 410, 440, 450, 460, 480, 490, 493.

Prerequisites, if any, to these courses will not be waived, but must be included in addition to the total of 18 hours.

PLANT AND SOIL SCIENCE

Professors:

J. E. Foss (Head), Ph. D. Minnesota; F. F. Bell (Emeritus), Ph. D. Iowa State; D. L. Coffey, Ph. D. Purdue; B. V. Conger, Ph. D. Washington State; H. A. Fribourg, Ph. D. Iowa State; L. M. Josephson (Emeritus), Ph. D. Wisconsin; W. L. Parks, Ph. D. Purdue; B. S. Pickett (Emeritus), Ph. D. Michigan State; J. H. Reynolds, Ph. D. Wisconsin; L. F. Seatz (Emeritus), Ph. D. North Carolina State; L. N. Skold (Emeritus), M. S. Kansas State; M. E. Springer (Emeritus), Ph. D. California (Berkeley); H. D. Swingler (Emeritus), Ph. D. Louisiana State; E. Winters (Emeritus), Ph. D. Illinois.

Associate Professors:


Assistant Professors:

J. G. Gravelle, Ph. D. Purdue; J. Logan, Nebraska; G. N. Rhodes, Jr., Ph. D. North Carolina State.

Advisors:

Allen, Coffey, Foss, Gravelle, Lessman, Reich, and Reynolds.

Plant and soil science deals with field and vegetable crops and soil resources. Plant science includes crop ecology and physiolo-
gy, crop breeding and genetics for crop improvement; introduction of new varieties, crop management for high quality products, and weed control for efficient crop production. Soil science includes studies in soil formation and classification for better understand-
ing of our soil resources; soil management for optimum crop production, conservation and environmental quality; soil fertility for efficient nutrient utilization; basic studies in chemistry, physics, and biology as they apply to the soil and to a better understanding of its properties and use.

The plant and soil scientist must have knowledge of the basic physical, chemical, and biological sciences and be trained in communication and computer skills. The scientist may be broadly trained or may specialize in a more specific phase of the subject.

Many employment opportunities are available for the well-trained plant and soil scientist including positions with public agencies such as Agricultural Extension Services, Soil Conservation Service, Forest Service, Federal Credit Service, and educational institutions. Many plant and soil scientists are also employed in private industry as technical specialists, consultants, supervisors, salespersons, appraisers, advisors, farm managers and in international agriculture.

Students selecting this major must complete the basic curriculum for the College of Agriculture and fulfill the major group requirements. A minor may be selected from among many related disciplines.

Required courses for a major in Plant and Soil Science are 210, 220, 230, 240, and 471 plus 3 courses from Group A and 3 courses from Group B. Of the 6 courses chosen from Groups A and B, one must be a soil science course and one must be a plant science course.


Appropriate selection of the many electives available in the Plant and Soil Science curriculum permits students to select options that meet their interest and career goals. A departmental advisor will assist in designing a program to meet the student's individual objectives. Possible options include field crops, fruits, vegetables, soil and water conservation, plant breeding, pest management, agrribusiness, international agriculture, etc.

A minor in Plant and Soil Science consists of 16 credit hours including 210, 230, and at least 9 elective hours to be taken by selecting at least one course from each of Group A and Group B. A minor in Plant and Soil Science 471 will not be accepted as a course to meet minor requirements.

Hours Credit

Freshman

Agriculture 101........................................... 3
English 101, 102..................................... 6
Botany 110, 120...................................... 8
Mathematics 119, 121................................. 6
Ornamental Horticulture and Landscape Design 110 3
Social Science or Humanities Elective............. 3
Elective.................................................. 3
Sophomore

Chemistry 100, 110.................................... 8
Economics 201......................................... 4
Speech 210 or 240.................................... 3
Social Science or Humanities Elective............. 3
Ornamental Horticulture and Landscape Design 220, 280 5

Plant and Soil Science 210.................................. 3
Computer Science 100.................................. 3
Electives.................................................. 3

Junior

Ornamental Horticulture and Landscape Design 310, 330, 340, 370............................... 12
Botany 321............................................. 4
Entomology and Plant Pathology 313, 321............ 6
Agriculture Elective.................................... 3
Writing or Speech Elective......................... 3
Ornamental Horticulture and Landscape Design Elective........................................... 3

Senior

Ornamental Horticulture and Landscape Design 410, 490........................................... 4
Ornamental Horticulture and Landscape Design Elective........................................... 3
Social Science or Humanities Elective............. 3
Biological Science or Physical Science Elective 6
Electives.................................................. 17-18

Total: 132 hours

General Biology 110, 120 may be substituted for Botany only if taken before entering Ornamental Horticulture and Landscape Design.

Students should consult with departmental advisor for suggested electives and suggested course of study.
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 110 or 350</td>
<td>3-4</td>
</tr>
<tr>
<td>Botany 321</td>
<td>4</td>
</tr>
<tr>
<td>Plant and Soil Science Electives</td>
<td>12</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
</tr>
<tr>
<td>Plant and Soil Science 401, 471</td>
<td>4</td>
</tr>
<tr>
<td>Animal Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Plant and Soil Science Electives</td>
<td>6</td>
</tr>
<tr>
<td>Non-Departmental Agricultural Electives</td>
<td>6</td>
</tr>
<tr>
<td>Social Science or Humanities Elective</td>
<td>2-3</td>
</tr>
<tr>
<td>Electives (open)</td>
<td>11-16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>132</td>
</tr>
</tbody>
</table>

1 Students with a Mathematics ACT or 26 or more or a satisfactory placement test score should take Mathematics 151-152 or 141-142.
School of Architecture

William J. Lauer, Acting Dean

Professors:

Associate Professors:

M. Kaplan, M. Arch. Harvard; J. E. Reno, M. Arch. California (Los Angeles); P. Von Buelow, B. Arch. Tennessee; L. Wells-Bowie, M. Arch. California (Berkeley).

Assistant Professors:

Instructor:
S. M. Ware, B. Arch. Tennessee.

The School of Architecture offers a program of professional studies which prepares its graduates for the practice of architecture. While emphasizing knowledge and skills required by architects in guiding the processes of building, the School is especially concerned that its students learn that process of building, the School is especially concerned that its students learn that the principles by which our physical universe appears to operate in order to know the science of building as fully as possible. It is important for the student to learn the characteristics of the natural environment while learning the physical behavior of materials in structures. Because of the special demands an architect faces, the program of the School emphasizes the process of learning with the intent of enabling its graduates to adapt to the changing circumstances of our world. How to learn about architecture is as important a matter for the student as learning itself.

FACILITIES

In the spring of 1981, a new building housing the School of Architecture and shared with the Art Department was completed. The Art and Architecture Building contains all the primary activities of the School. Expressly designed for the School in an open architectural competition, the building has received widespread recognition and has become one of the models sought out by other schools. The building was designed by the Knoxville architectural firm of McCarty, Bullock, Holkamp, Inc. It contains as its major feature a large interior mall or street. Opening off this gathering space, which serves as a campus focal point, are amply designed classrooms, a reference library which contains extensive slide collections and other reference materials, computer rooms, faculty offices, lecture rooms, administrative offices, an elaborate darkroom, workshop, and the C. Kermit “Buck” Ewing Art and Architecture Gallery.

The principal library holdings of the School are located in the James D. Hoskins Library, with additional volumes in the Undergraduate Library, with the Undergraduate Library serving as a campus focal point. A reading and reference room is maintained in the Art and Architecture Building.

FINANCIAL ASSISTANCE

A number of scholarships are made available each year through the Architecture Endowment Fund and the Tennessee Foundation for Architecture. Other scholarships have been funded by the Masonry Institute of Tennessee, the General Shale Corporation and other architectural firms, manufacturers of building materials, and other construction related industries. Scholarships are also available through the national headquarters of the American Institute of Architects. Honor students in all the upper four years are eligible for this aid, but it is primarily awarded to students of third and fourth-year standing.

LECTURE PROGRAM

Throughout the academic year, the School organizes an extensive series of special lectures by experts in architecture and related subjects. Students are expected to attend regularly and benefit from this opportunity to hear the leading people of the field. The lectures are open to the University community and the public as well.

Included in the series is the ROBERT B. CHURCH MEMORIAL LECTURESHIP. Named for the School’s second dean, it has become widely recognized in the field as an honor to be appointed to this lectureship. The most prominent architects from around the world are brought to the School with income from the endowment.

Other important lectures are sponsored by the General Shale Corporation, the Masonry Institute and the Architecture Annual Fund. Annually in the spring term a special program, TAASS: “The Annual Architecture Spring Thing”, is presented. Within a period of one week the students participate in special lectures, seminars, exhibits and informal gatherings. Featured are discussions by a series of visiting experts. TAASS is organized by the students.
PUBLICATIONS

Students in the School each year publish The University of Tennessee Journal of Architecture. Continuing several years of excellent publications covering work of the School and current thinking in the field, this journal has become a widely recognized part of the School's participation in the profession.

FOREIGN STUDIES PROGRAM

Each year the School offers at least two opportunities for foreign study to its students. In cooperation with the Danish International Student Committee a program is regularly offered in Copenhagen taught by outstanding Danish architects and educators. Exchange programs are established with Royal Melbourne Institute of Architecture, Melbourne, Australia and Chongqing Institute of Architecture and Engineering, Chongqing, Sichuan Province, China. One member of the School faculty leads a program in Europe each year at varied locations. These are designed to include visits to prominent new architectural sites and major historic locations. Most recently the School has offered a program in Yugoslavia in which students and faculty from the Universities of Belgrade and Zagreb join students and faculty from Tennessee to study. Studies abroad, arranged to include a full semester's credit for advanced students, include design, history and theory of architecture and directed independent study.

MEMPHIS AND KNOXVILLE COMMUNITY DESIGN CENTERS

Each year, throughout the year, advanced students may be given opportunity to work at locations off-campus while enrolled in a course; Architecture 492 Off-Campustudy or Architecture 493 Independent Study. These programs enable students to gain first-hand experience and work alongside outstanding professional architects while dealing with actual community based projects. Students may enroll in additional courses at off-campus locations to complete a full semester's program of study in keeping with curriculum requirements. During 1986-1989 the School is participating in Knoxville's "Mainstreet" program funded by the National Trust for Historic Preservation, the United States Department of Housing and Urban Development and the City of Knoxville.

GENERAL INFORMATION

Students are advised to consult the University's general requirements as stated in the front section of this catalog as well as the requirements described in the School of Architecture's Student Handbook. Self advising is not permitted in the School of Architecture. Students must plan their schedule by consulting with an assigned advisor. Electives will be chosen with the concurrence of the advisor and with full consideration of the necessary prerequisites.

FRESHMAN ADMISSION REQUIREMENTS

The School of Architecture, being a professional program and having limited resources, has restricted enrollment based on the following criteria: (1) Accept applicants with an ACT composite score of 27 (SAT 1100) or above; (2) Accept applicants with a total of 55 or above using the formula of the high school grade point average times 10 plus the ACT composite score. A minimum ACT composite score of 20 (SAT 840) is required; (3) Refuse all applicants with an ACT composite score of 18 (SAT 720) or below; and (4) Refer applicants not falling into items 1, 2, or 3 to the Committee on Admissions which meets periodically beginning in the fall semester. Applicants will be advised promptly of the decision of the committee following receipt of high school records and test scores.

DEADLINES FOR APPLICATIONS

Deadlines for application to the School of Architecture coincide with those set forth by The University of Tennessee. All applications must be received by August 1 for fall semester admission, and no later than three weeks before the start of classes for admission to any other semester. It should be noted that due to the strong sequential character of the curriculum and certain prerequisites, entry in any semester other than fall may be difficult.

TRANSFER STUDENTS

Transfer students as well as intercollegiate transfer students are required to have at least a 2.3 grade point average to be considered.

REQUIREMENTS FOR PROGRESSION TO SECOND-YEAR ARCHITECTURE

(1) Satisfactory completion of first-year architecture program with grade point average at least 2.3; exceptions may be made only by petition. (2) Application for progression must be submitted no later than June 15 preceding the start of the second year. Students must maintain an overall 2.3 grade point average by the end of 32 hours (attempted) in order to maintain "full status" in the program. Delinquent students must be put on "temporary status" for one semester. These students will have one semester to raise the overall GPA to 2.3 or have minimum 2.3 on each semester's work until overall average is raised to 2.3. If the GPA is not brought up to 2.3, the student will be dropped from the architecture program.

THIRD-YEAR PREREQUISITES

Students are required to have all first and second-year courses satisfactorily completed before entering the third-year design courses. Architecture 371-372. Students' progress and design work in second-year will be reviewed by a committee of the faculty to determine their readiness for advancement to third-year. Students who register for a third-year design course holding first or second-year deficiencies may be required to drop the course at any point during the semester.

PROGRESSION TO 400-LEVEL COURSES

Architecture students must have attained third-year standing in the School before being admitted to any 400-level course, with the exception of Architecture 400 Service Practicum. Students must complete all requirements of the curriculum through the third year before entering Architecture 471.

MINOR

An undergraduate minor in architecture is offered in order to enable students in other colleges to pursue studies in architecture which are relevant to their major areas of concentration. The minor will consist of not less than 12 hours. Persons interested must obtain the consent of the School of Architecture Academic Standards Committee and the Dean of the School of Architecture, who will approve specific programs of study proposed by students.

COURSE LOAD

The average course load in any semester is 16 credit hours. The minimum which may be taken by full-time students is 12 hours; the maximum which may be taken without approval of the Dean is 19 hours.

SATISFACTORY/NO CREDIT COURSES

This option applies only to approved elective courses. Courses that are a part of the specific requirements of the School of Architecture cannot be taken as Satisfactory/no credit.

Courses evaluated as "satisfactory" will count as hours towards graduation but will not be calculated in the student's grade point average. A student who desires to take a course S/NC should indicate this intention at the start of registration.

CURRICULA FOR ARCHITECTURE

The curriculum for the Bachelor of Architecture Degree includes a combination of required and elective courses which offer the student both a solid professional program of study and a sound general education. While the majority of the courses are designated as required, students may use the available architecture electives to expand their knowledge in areas of special interest. Academic non-architecture electives allow students to broaden their education in areas of general interest: the humanities, natural sciences, social sciences, arts and multicultural studies. All electives are to be taken only with the approval of the student's advisor.

All students studying for a Bachelor of Architecture degree will include the following requirements in their course of study, Stu-
Students are not allowed to enroll simultaneously in two design courses. For any additional specialized requirements, the student should refer to the Student Handbook of the School of Architecture and the student's advisor.

SERVICE PRACTICUM REQUIREMENT

A three-month, non-credit internship in an architect's office is required. Upon petition, work in an engineer's or contractor's office or related work may be approved by the School. This work must be evidenced by a letter from the employer indicating type and quality of student's work and time of employment prior to the fifth year. (See course description for Architecture 400.)

Foreign students may need to obtain Immigration and Naturalization Service Employment Authorization before service practicum begins. To obtain authorization, foreign students should take their I-94 form to the Office of International Student Affairs not more than 60 days nor less than 30 days before the anticipated starting dates. Beginning service practicum employment without INS authorization constitutes unauthorized employment and may jeopardize a foreign student's continued stay in the United States.

FIVE YEAR PROGRAM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture 101, 102</td>
<td>5</td>
</tr>
<tr>
<td>English 101, 102</td>
<td>7</td>
</tr>
<tr>
<td>Mathematics 141, 142</td>
<td>6</td>
</tr>
<tr>
<td>Option Mathematics 121, 122</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture 211, 212</td>
<td>6</td>
</tr>
<tr>
<td>Architecture 231, 232</td>
<td>6</td>
</tr>
<tr>
<td>Architecture 271, 272</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture 213, 312</td>
<td>5</td>
</tr>
<tr>
<td>Architecture 331, 332</td>
<td>6</td>
</tr>
<tr>
<td>Architecture 341, 342</td>
<td>6</td>
</tr>
<tr>
<td>Architecture 371, 372</td>
<td>12</td>
</tr>
<tr>
<td>Total: 150 hours</td>
<td></td>
</tr>
</tbody>
</table>

Students are not allowed to enroll simultaneously in two of these design courses.

BACHELOR OF ARCHITECTURE AS A SECOND DEGREE

A curriculum leading to a Bachelor of Architecture degree is available to students who already hold a bachelor's degree or an advanced degree in another field.

This program begins with intensive initial studies in architecture and is possible to complete within three years. A minimum of 6 semesters residency is required. The degree is the first professional degree recognized for purposes of eventual qualification for the license to practice architecture.

Applicants must provide a transcript of previous academic work and must have attained at least a 2.5 overall grade point average. Credit for a year of each of calculus and physics at the college level is a prerequisite for admission to the program.

Appropriate goals and abilities must be shown by the applicant as well.

Second Degree students are required to submit a portfolio which demonstrates a proficiency in freehand and constructed drafting techniques prior to taking Architecture 281 Second Degree Program: Design I. If an otherwise qualified student does not have these skills, he or she can come to the School of Architecture the summer before entering the Second Degree Program and take an intensive drawing course which will fulfill the prerequisite.

SECOND DEGREE PROGRAM

<table>
<thead>
<tr>
<th>Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>First Year</td>
</tr>
<tr>
<td>Architecture 203, 204</td>
</tr>
<tr>
<td>Architecture 211, 212</td>
</tr>
<tr>
<td>Architecture 231, 232</td>
</tr>
<tr>
<td>Architecture 281, 282</td>
</tr>
<tr>
<td>Architecture electives</td>
</tr>
<tr>
<td>Second Year</td>
</tr>
<tr>
<td>Architecture 213, 312</td>
</tr>
<tr>
<td>Architecture 331, 332</td>
</tr>
<tr>
<td>Architecture 341, 342</td>
</tr>
<tr>
<td>Architecture 371, 372</td>
</tr>
<tr>
<td>Third Year</td>
</tr>
<tr>
<td>Architecture 431</td>
</tr>
<tr>
<td>Architecture 471, 482</td>
</tr>
<tr>
<td>Architecture 462, 480</td>
</tr>
<tr>
<td>Architecture electives</td>
</tr>
</tbody>
</table>

Total: 95 hours

1Students are not allowed to enroll simultaneously in two of these design courses.

2To be admitted to the third year the student must submit work for review by a designated committee of faculty of the School. A GPA of 3.0 in Architecture 281, 282, 371, 372 is required along with an overall 2.5 GPA.
The College of Business Administration

C. Warren Neel, Dean
Roger L. Jenkins, Associate Dean for Graduate Programs
John R. Moore, Associate Dean
Richard C. Reizenstein, Associate Dean for Undergraduate Programs
David A. Hake, Director, Center for Business and Economic Research
John E. Riblett, Director, Management Development Center

Size and breadth of program immediately distinguish the College of Business Administration at UTK from the other such programs in Tennessee and in most of the surrounding states. Despite the size, emphasis is placed on quality at all levels. The harmonious blending of undergraduate and graduate programs, of teaching and research, and of development of technical skills on the one hand and broad concern for individual, social and economic values on the other makes the college a vital and exciting place to study and work.

College programs are fully accredited by the American Assembly of Collegiate Schools of Business. The UTK program in business was the first in Tennessee to be so recognized and one of the first ten in the South to receive accreditation.

UNDERGRADUATE PROGRAMS

General education, a business "core," and area specialization: this trinity underlies the UTK business program. Building on a firm foundation in written and oral communications, mathematical and statistical methods, and an understanding of the methodology and accomplishments of the social, behavioral, and natural sciences, the business core seeks to expose students to the realms of financial and managerial accounting, micro- and macro-economics, and the functional fields of business. Specialization comes through intensive study in one of the seven majors offered.

The combination of breadth and depth in the undergraduate program produces graduates who are prepared to grow in their personal and professional lives and employees who are well educated in one of the professional or functional fields of business. In the preparation of graduates for roles in society, the size of the college is an important advantage. Included among the nearly 140 faculty are many generalists, but also a rich variety of those with specialized knowledge and interests. Furthermore, the comprehensive nature of the University and the combined teaching/research/service mission of the institution and the college mean that the faculty are almost certainly on the cutting edge of their disciplines.

While size and diversity can be important advantages, those advantages can be overwhelmed if the personal touch is lost. In an attempt to avoid the pitfalls of impersonal education, the college embarked in the fall of 1980 on a plan of administered enrollments, designed to assure that the numbers enrolled would not exceed the limited capacity of the college to provide a quality education. The plan calls for admission to the programs of the college in two stages: at the lower division level (freshmen and sophomores) and at the upper division level (juniors and seniors). Admission to the upper division is limited to those who have successfully completed the prescribed lower division courses, who have shown seriousness of interest and purpose, and who have records of substantial academic achievement.

A further aspect of the college which helps in the development and maintenance of "personal scale" is found in the many student organizations in the college. More than a dozen clubs and professional fraternities and sororities represent a broad spectrum of student interest and provide continuing opportunities for the development of leadership skills and involvement with small groups on an intensive basis.

Success of any academic program is both difficult to define and hard to measure. In the final analysis, the building of character is probably the most valuable product of academe. On a more mundane level, however, we take a great deal of pride in our success in placing our graduates with local, regional, and national employers, and in the record of our graduating seniors on the nationwide Business Assessment Test, administered by the Educational Testing Service, which placed UTK students well within the top twenty percent of business school seniors nationally.

STUDENT ADVISING CENTER

The College maintains a Student Advising Center staffed with full-time academic advisors to assist freshman and sophomore students with their programs. Students who have been admitted to a major are advised by faculty members from the selected major. The objective of the Advising Center is to provide students with the academic information they need.

PROGRESSION STANDARDS

Admission to the College of Business Administration does not guarantee acceptance into the chosen major. Admission to the upper-division (major) is based on the availability of space in the College as a whole and in the major requested. The academic progress of those admitted to the College is evaluated periodically. Those failing to make acceptable progress toward meeting the standards for progression to the upper-division are encouraged to seek alternative educational opportunities. Progression standards are adjusted periodically and current requirements can be determined by consulting with an advisor in the Undergraduate Programs Office.

PREMAJORS

Students who enter the College of Business as freshman or sophomores must apply for a major the semester after attempting 45 hours. The academic record presented will be assessed by the Associate Dean for Undergraduate Programs. The following minimum requirements must have been met in order to be considered for admission to a major:

1. Demonstrated readiness for the major by achieving an average grade point of 2.50 or better.
2. Demonstrated ability to meet the requirements of the major.
3. A statement of purpose outlining the student's goals and aspirations in the major.
4. Approval of the major advisor in the major department.

PREREQUISITES

Students must meet the following prerequisites for admission to a major:

1. Completion of 18 hours of prerequisite courses with a grade point of 2.00 or better.
2. A minimum grade of C in all prerequisite courses.
3. Approval of the major advisor in the major department.

ADMISSION TO MAJOR

Students who have been admitted to a major are advised by faculty members from the selected major. The objective of the Advising Center is to provide students with the academic information they need.
1. Must have followed a business curriculum.
2. Must have earned a minimum 2.75 average, cumulative, over the courses specifically required in the lower-division of that curriculum, excluding non-business and non-departmental electives. Some majors may have differing average requirements.
3. The overall record will be evaluated for quality and seriousness of purpose. An excessive number of withdrawals, incompletes, repeated courses or failures may result in denial of progression.
4. Progression standards are subject to change; current standards are available in the Undergraduate Programs Office, Glocker 52.

TRANSFERS FROM OTHER UTK PROGRAMS

Students in other colleges at UTK must apply for progression to a major in the College of Business Administration at the earliest possible date but at least 75 hours. As a minimum, all students must have been admitted to a CBA major for at least the last 30 hours of work. Only in exceptional cases will application be considered after 75 hours of coursework (at UTK or elsewhere) have been attempted. It should not be supposed that admission must be granted to those who accumulate a substantial number of hours in the CBA courses. On the contrary, an academic record reflecting substantial work after 75 hours in the Business Administration curriculum may be taken as prima facie evidence of an intent to evade this policy and may result in denial of admission.

The following minimum requirements must have been met in order to be considered for admission to a major:
1. Must have earned a minimum 2.75 average, cumulative, over the courses specifically required in the lower-division of that curriculum, excluding non-business and non-departmental electives. Some majors may have differing average requirements.
2. The overall record will be evaluated for quality and seriousness of purpose. An excessive number of withdrawals, incompletes, repeated courses or failures may result in denial of progression.
3. Progression standards are subject to change; current standards are available in the Undergraduate Programs Office, Glocker 52.

APPEALS

The College has established a Progression Appeals Committee to which those students who have been denied progression may address an appeal. Information on the appeals process may be obtained by calling the Undergraduate Programs Office, 974-5096, or contacting an advisor in that office.

BUSINESS MINOR FOR NON-BUSINESS STUDENTS

Students in other Colleges at UTK who wish to obtain a minor in Business Administration must successfully complete the following required courses: Accounting 201-202, Economics 201, and Statistics 201. Additionally, 12 hours of upper-division business electives must be taken at UTK. No more than three upper-division hours of accounting, economics, or statistics may be used for this minor. Students are responsible for meeting listed prerequisites of any upper-division courses taken in a particular concentration. Acceptance of the minor must have approval of the student's college of enrollment. Minors are unavailable to College of Business Administration students.

COURSE LOAD

The normal course load for a semester is 15-18 hours. In unusual circumstances permission to take a course load in excess of this maximum may be granted by the Associate Dean for Undergraduate Programs in Business Administration.

SATISFACTORY/NO CREDIT

A maximum of 20 credit hours of satisfactory/no credit (S/NC) courses may be used toward degree requirements for a Bachelor of Science in Business Administration. Such credit hours may be used to meet only the requirements identified in the curriculum as "business or non-business electives", plus any business courses specifically designated as being available for S/NC grading.

BUSINESS CORE REQUIREMENTS

The following core courses are required in all business curricula: Computer Science 100 or 102, Economics 201, Statistics 201, Accounting 201-202, Marketing 301, Finance 301, Business Law 301, Management 301-303, 401. Students are advised to consult the University's degree requirements as stated in the front section of this catalog as well as the requirements for the college or department.

GENERAL EDUCATION REQUIREMENTS

The following courses are in fulfillment of the University General Education Standards and are required of all business students. Specific courses to fulfill an area may be required by individual curricula:
- English (6 hours) to be fulfilled by English 101-102;
- Mathematics (6 hours) to be fulfilled by Mathematics 121-122, or 141-142;
- Communication Skills (3 hours) to be fulfilled by courses from English, Speech Communications and Theatre. Consult an advisor in Glocker 52 for specific courses. In addition, at least two courses in each CBA program will contain a substantial writing assignment and be so identified in the catalog. This requirement may consist of a term paper, research paper, technical reports, comprehensive case reports, etc.
- Humanities (9 hours) to be fulfilled by courses selected from Philosophy, Religious Studies, Art, Music, Literature.

Consult an advisor in Glocker 52 for specific courses.

History (6 hours) to be fulfilled by courses selected from Biology, Botany, Chemistry, Geology, Physics, Zoology. Consult an advisor in Glocker 52 for specific courses.

FOREIGN STUDY

Several opportunities for study abroad are available to students in the college. One avenue is through group programs arranged and supervised by departments of the college on a full semester or summer term. A second is through group programs conducted abroad by another academic institution to which UTK students with approval may enroll for credit. Assistance in identification of and registration in such programs may be obtained through the Overseas Study Information Service located in the University's Division of International Education. A third opportunity is through individualized programs. The nature of this work as well as credit for it should be negotiated by students prior to departure with the appropriate department. Students should register for credit under the Foreign Study number BA 491. Credit will be awarded only after completion of all agreed upon requirements.

OFF-CAMPUS STUDY

Recognizing that learning is not restricted to formal class room situations, the college provides for students to earn credit toward graduation for approved off-campus study. Such study may be undertaken only with prior approval of the faculty member and the department of the student's major. It may include certain kinds of work experiences, community involvements, etc. Students should register for credit under the Off-Campus Study number BA 492. Credit will be awarded only after completion of all agreed upon requirements.

INDEPENDENT STUDY

Certain educational goals may best be met through independent study done by an individual under the direction of a faculty member. Students who wish to do such independent work should obtain the approval of the faculty members and the departments concerned prior to embarking upon their study. Students should register for credit.
under the Independent Study number BA 493, or the appropriate number in the department. Credit will be awarded only after completion of all agreed upon requirements.

ACCOUNTING AND BUSINESS LAW

Professors:

Associate Professors:

Assistant Professors:

Distinguished Lecturer:
S. B. Wolfe (Emeritus), B. S. Virginia Polytechnic.

Lecturer:
H. N. Hughes, B. S. Tennessee.

Freshman
English 101, 102 .................................................. 6
Mathematics 121, 122 ........................................... 6
Natural Science 1 .................................................. 6
General Education Electives 1 .................................. 9
Computer Science 100 or 102 ................................ 4
Sophomore
Accounting 201, 202 ............................................ 6
Economics 201 ................................................... 4
Statistics 201, 221 .............................................. 5
Communications 2 ............................................... 3
History 2 ......................................................... 6
General Education 3 ............................................ 6
Junior
Accounting 311, 312, 321, 341 ................................ 12
Marketing 301 .................................................. 3
Finance 301 .................................................... 3
Management 301, 303 .......................................... 6
Business Law 301 ............................................... 3
General Education 3 ............................................ 3
Senior
Management 401 ................................................. 3
Accounting 431, 411, 414 ..................................... 9
Business Law 401 ................................................. 3
Upper division Economics Elective 2 ...................... 3
Upper division Business Electives 2 ........................ 6
General Education 3 ............................................ 6
Total: 123 hours

Substitute Mathematics 141, 142, and 251 (4,4,3) for a total of 111 hours. Five semester hours credit may be applied toward general education (non-business) electives.

ECONOMICS

Professors:
A. Mayhew (Head), Ph. D. Texas; R. A. Bohrm, Ph. D. Washington (St. Louis); R. L. Bowlyt, Ph. D. Texas; S. L. Carroll, Ph. D. Harvard; H. S. Chang, Ph. D. Vanderbilt; W. E. Cole, Ph. D. Texas; P. Davidson (J. Fred Holly Professor of Political Science), Ph. D. Pennsylvania; G. R. Feiwell (Alumni Distinguished Service Professor), Ph. D. McGill; C. B. Garrison, Ph. D. Kentucky; H. W. Herzog, Jr., Ph. D. Maryland; H. E. Jensen, Ph. D. Texas; F. Y. Lee, Ph. D. Michigan State; J. R. Moore (Associate Dean), Ph. D. Cornell; W. C. Neale, Ph. D. London School of Economics; K. E. Quindry (Emeritus), Ph. D. Kentucky; A. M. Schiottmann, Ph. D. Washington (St. Louis); G. A. Spiva, Jr., Ph. D. Texas.

Research Professor:
W. F. Fox, Ph. D. Ohio State.

Associate Professors:
D. D. Clark, Ph. D. Michigan State; E. Glustoff, Ph. D. Stanford; K. E. Philips, Ph. D. Washington (Seattle).

Research Associate Professor:
J. W. Mayo, Ph. D. Washington (St. Louis)

Assistant Professors:
J. A. Gauger, Ph. D. Iowa State; M. Kunkin, Ph. D. Wisconsin; D. M. Mandy, Ph. D. Illinois; J. W. Mayo, Ph. D. Washington (St. Louis); M. N. Murray, Ph. D. Syracuse.

FINANCE

Professors:
H. A. Black (Head), Ph. D. Ohio State; W. W. Dottwerth (William Voigt Professor of Insurance), Ph. D. Pennsylvania; W. C. Goolsby, Ph. D. Wisconsin; G. C. Philippatos (Distinguished Chaired Professor of Banking and Finance), Ph. D. New York; R. E. Schiehes, Ph. D. California (Los Angeles); C. P. White (Emeritus), Ph. D. Pennsylvania.

Associate Professors:
A. L. Auxier, Ph. D. Iowa; T. P. Boehm, Ph. D. Washington; R. J. Clayton, Ph. D. Georgia; J. M. Wachowicz, Jr., Ph. D. Illinois (Urbana), C. P. A.

Assistant Professors:

Freshman
English 101, 102 .................................................. 6
Mathematics 121, 122 ........................................... 6
Natural Science 1 .................................................. 6
General Education 1 ............................................. 9
Computer Science 100 or 102 ............................... 4
Sophomore
Accounting 201, 202 ............................................ 6
Economics 201 ................................................... 4
Statistics 201 .................................................... 3
Communications 1 .............................................. 3
History 1 ........................................................ 6
General Education 1 ............................................ 6
Junior
Management 301 .................................................. 3
Marketing 301 .................................................. 3
Finance 301 .................................................... 3
Management 301, 303 .......................................... 6
Business Law 301 ............................................... 3
General Education 3 ............................................ 3
Electives ......................................................... 3
Senior
Management 401 ................................................. 3

Total: 121 hours

Consult an advisor in Glocker 52 for specific courses.

GENERAL BUSINESS

Freshman
English 101, 102 .................................................. 6
Mathematics 121, 122 ........................................... 6

Total: 121 hours

Consult an advisor in Glocker 52 for specific courses.

*Students with a strong interest in mathematics and those planning graduate study are encouraged to
Natural Science Electives
- Social Science Elective
- Humanities Electives
- Computer Science 100 or 102
- Sophomore Accounting 201, 202
- Economics 201
- Statistics 201
- Communications Skills
- Humanities Electives
- General Education
- Non-Business Elective

S. K. Reed (Emeritus), Ph. D. Alabama; A. H. Keally (Emeritus), M. B. A. (Management Science), Ph. D. Stanford; Other professors.

Consult an advisor in Glocker 52.

Non-Business Elective
- Business Elective
- Social Science Elective
- Statistics Electives
- Finance Electives
- Management/Transportation Elective
- Senior Business Elective
- Non-Business Elective

Total: 121 hours

1 Consult an advisor in Glocker 52 for specific courses.
2 To be fulfilled by six hours of foreign language or courses.
3 Upper division Statistics course.
4 Upper division courses.
5 Consult an advisor in Glocker 52 for specific courses.
6 Upper division courses.

MANAGEMENT

Professors:
- R. W. Boling (Emeritus), Ph. D. Stanford; H. D. Dewhurst, Ph. D. Texas; M. K. Ho (Management Science), Ph. D. Stanford; A. H. Keally (Emeritus), M. B. A. Pennysylvania;
- J. M. Larsen, Jr., (Emeritus), Ph. D. Purdue; C. W. Neel (Dean), Ph. D. Alabama; S. K. Reed (Emeritus), Ph. D. Edinburgh; D. Reed (Emeritus), Ph. D. Iowa; S. C. Vance, William B. Stokely Professor of Strategic Management (Emeritus), Ph. D. Pennsylvania; G. A. Wagener (Emeritus), M. D. J. Barnaby (Head), Ph. D. Purdue; E. R. Cadotte, Ph. D. Ohio State; F. W. Davis, Jr., Ph. D. Michigan State; G. N. Dicer, Ph. D. A. Indiana; J. L. Frye (Emeritus), Ph. D. Florida; F. J. Hendrix (Emeritus), Ph. D. North Carolina (Chapel Hill); R. L. Jenkins (Associate Dean), Ph. D. Ohio State; C. J. Langley, Jr., Ph. D. Pennsylvania State; W. B. Locander (Distinguished Professor), Ph. D. Illinois; R. A. Mundy, Ph. D. North Carolina (Chapel Hill); R. B. Woodruff, D. B. A. Indiana.

Associate Professors:
- O. S. Fowler (Acting Head) (Management Science), Ph. D. Georgia; G. M. Dobbin, Ph. D. Virginia Polytechnic; K. C. Gilbert (Chair, Management Science Program), Ph. D. Pennsylvania; R. T. Ladd, Ph. D. Georgia; R. C. Maddox, Ph. D. Texas; M. C. Rush (Chair, Industrial-Organizational Psychology Program), Ph. D. Akron; J. E. A. Russell, Ph. D. Akron.

Assistant Professors:
- M. Bowers (Management Science), Ph. D. Clemson; P. G. Campbell, M. S. Austin Peay; D. R. Fox (Management Science), Ph. D. Purdue; G. E. Fryxell, Ph. D. Indiana; R. C. Hudson, M. B. A. Minnesota; L. Kaplan

MANAGEMENT SCIENCE PROGRAMS

Professor:
- J. K. Ho, Ph. D. Stanford.

Associate Professor:
- K. C. Gilbert (Chairperson), Ph. D. Tennessee.

Assistant Professor:
- D. R. Fox, Ph. D. Purdue.

GRADUATE
Consult the Graduate Catalog for information on graduate programs.

MARKETING, LOGISTICS, AND TRANSPORTATION

Professors:
- D. J. Barnaby (Head), Ph. D. Purdue; E. R. Cadotte, Ph. D. Ohio State; F. W. Davis, Jr., Ph. D. Michigan State; G. N. Dicer, Ph. D. A. Indiana; J. L. Frye (Emeritus), Ph. D. Florida; F. J. Hendrix (Emeritus), Ph. D. North Carolina (Chapel Hill); R. L. Jenkins (Associate Dean), Ph. D. Ohio State; C. J. Langley, Jr., Ph. D. Pennsylvania State; W. B. Locander (Distinguished Professor), Ph. D. Illinois; R. A. Mundy, Ph. D. North Carolina (Chapel Hill); R. B. Woodruff, D. B. A. Indiana.

Associate Professors:
- J. H. Fogg, Ph. D. Indiana; J. R. McMillan, Ph. D. Ohio State; R. C. Reizenstein (Associate Dean), Ph. D. Cornell, J. O. Rentz, Ph. D. Georgia.

Assistant Professors:
- S. F. Gardial, Ph. D. Houston; D. J. Faulds, Ph. D. Iowa; D. W. Schumann, Ph. D. Missouri (Columbia); P. S. Speck, Ph. D. Texas Technologic

LOGISTICS AND TRANSPORTATION

Freshman
- Mathematics 121, 122
- Natural Science
- Computer Science 100 or 102
- Sophomore Accounting 201, 202
- Economics 201
- Statistics 201
- Communications
- History
- General Education
- Senior Management 401, 431, 421
- Management Elective

Total: 121 hours

1 Consult an advisor in Glocker 52 for specific courses.
2 Concentration and/or elective courses as specified by the advisor.
3 Upper division courses.
4 Upper division Statistics course.
5 Consult an advisor in Glocker 52 for specific courses.
6 Upper division courses.

MARKETING

Freshman
- English 101, 102
- Mathematics 121, 122
- Natural Science
- Computer Science 100 or 102
- Sophomore Accounting 201, 202
- Economics 201
- Statistics 201
- Communications
- History
- General Education
- Junior Marketing 301
- Finance 301
- Management 301, 303
- Business Law 301
- Statistics
- Management 321, 311, 341
- General Education
- Senior Management 401
- Management Electives

Total: 121 hours

1 Consult an advisor in Glocker 52 for specific courses.
**PUBLIC ADMINISTRATION**

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**Total: 121 hours**

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**STATISTICS**

**Professors:**

D. L. Sylwester (Head), Ph. D. Stanford; D. S. Chambers (Emeritus), M. B. A. Texas; R. A. McLean, Ph. D. Purdue; J. W. Philpot, Ph. D. Virginia Polytechnic; C. C. Thigpen, Ph. D. Virginia Polytechnic.

**Associate Professors:**

R. G. O'Brien, Ph. D. North Carolina (Chapel Hill); G. B. Ranney, Ph. D. North Carolina State (Raleigh); R. D. Sanders, Ph. D. Texas; M. S. Younger, Ph. D. Virginia Polytechnic.

**Assistant Professors:**

M. G. Leitnaker, Ph. D. Kentucky; G. Legall, Ph. D. Cornell; J. L. Schmidhammer, Ph. D. Pittsburgh; G. Walker, Ph.D. Virginia Polytechnic.

**Instructor:**

S. P. Wright, M. S. Tennessee.

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**STATISTICS CONCENTRATION**

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<th>Level</th>
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**Center for Business and Economic Research**

**Staff:**

D. A. Hake (Director), Research Professor, Ph. D. Tennessee
K. E. Quinndy (Emeritus), Research Professor, Ph. D. Kentucky
W. F. Fox, Associate Director, Research Professor, Ph. D. Ohio State
S. E. Bott, Research Assistant, B. S. Nebraska (Lincoln)
J. W. Mayo, Research Professor, Ph. D. Washington (St. Louis)
B. B. Vickers, Research Associate, B. A. Mary Washington
P. A. Price, Research Associate, B. S. Tennessee
M. J. Cornelius, Research Associate, M. S. Tennessee
P. M. Gilmore, Research Associate, B. A. North Carolina
C. E. Lammers, Research Associate, B. S. Pittsburgh
V. C. Cunningham, Research Assistant
D. M. Mandy, Research Assistant Professor
M. N. Murray, Research Assistant Professor
M. A. Wood, Research Assistant
P. L. Bridgeman, Research Assistant
Communications media are a vital force in today's complex society. As a result, programs in the College of Communications acquaint students with the communications process and prepare them for professional work in many fields.

The College includes the School of Journalism and the Departments of Advertising and Broadcasting. The three academic divisions have a common core curriculum. That permits specialization at the junior and senior level.

The advertising, broadcasting, news-editorial, public relations and master's programs are accredited by the Accrediting Council on Education in Journalism and Mass Communications.

The College is a member of the Association of Schools of Journalism and Mass Communication and of the Broadcast Education Association.

SATISFACTORY/NO CREDIT OPTION

This option applies only to general elective courses. No course that is a part of the specific requirements of the College of Communications or a student's major department can be taken under this option. For example, social science, humanities and speech electives required by the various departments cannot be taken as S/NC.

Courses evaluated as "satisfactory" will count as hours toward graduation but not for calculating the grade point average. A student who wishes to take a S/NC course must indicate this at the time of registration. Under no circumstances may a student change from S/NC to regular credit or from regular credit to S/NC after the deadline for adding courses.

COURSE LOAD

The maximum number of hours an undergraduate may take without special permission is 18 hours. Permission to take 19 or more hours must be obtained from the dean or the undergraduate advisor with the recommendation of the student's advisor and department chairman or school director.

REQUIREMENTS FOR ALL CURRICULUMS

CORE COURSES

All students in the College take the following core courses:

- Communications 100 - Introduction to Mass Communications
- Communications 200 - Writing for Mass Communications
- Communications 300 - Mass Communications Research Methods
- Advertising 340 - Advertising Research Methods
- Communications 400 - Mass Communications Law and Ethics

REQUIREMENTS FOR GRADUATION

The Bachelor of Science in Communications is awarded to majors who complete a program of 128 hours prescribed under departmental requirements listed below. At least 90 of those hours must be taken in courses other than the major or related communications fields. At least 18 of the hours in the major must be taken at The University of Tennessee, Knoxville. Normally no more than 14 transfer credits in the major will be applied to the 128 hours.

PROGRESSION REQUIREMENTS

Entering freshmen are associated with the College as Pre-Majors. They may progress to a major in the School of Journalism or the Departments of Advertising or Broadcasting after they:

1. Pass Qualifications Examinations (should be accomplished) within the first 30 hours demonstrating proficiencies in spelling, grammar and typing. Students who have not passed the examination after three attempts must wait six months before attempting to pass the examination again, or present evidence of successful completion of specific remedial work. Students who do not pass the Qualification Examinations after a fourth attempt will be required to seek a major in another college.

2. Complete at least 30 hours of prescribed coursework with a 2.3 cumulative GPA.

3. Complete Communications 100 (Introduction to Mass Communications) with a least at "C" grade.

4. Submit an application form to the appropriate School or Department. Students who have not met these standards may remain in the College as Pre-Majors. They may enroll in non-communications courses but may not enroll in courses in the College numbered 300 or above.

Students who do not progress to a major by the time they have accumulated 80 credit hours will be dismissed from the College. Students must earn at least a "C" grade in all College of Communications courses used to fulfill graduation requirements.

During their last 32 hours prior to graduation, all students must have been accepted as majors in the College.

TRANSFER STUDENTS

Students from other colleges within the University are eligible to progress to a major in the College of Communications as soon as they pass the Qualifications Examination, complete at least 30 hours of prescribed coursework with a 2.3 cumulative GPA and complete Communications 100 (Introduction to Mass Communications) with at least a "C" grade and make application to the appropriate Department or School.
## COMMUNICATIONS

**Professors:**
- P. G. Ashdown, Ph. D. Bowling Green
- J. A. Crook, Ph. D. Iowa State
- G. A. Everett, Ph. D. Iowa
- H. H. Howard, Ph. D. Ohio
- R. K. Leiter, Ph. D. Southern Illinois
- N. R. Swan, Jr., Ph. D. Missouri

**Associate Professors:**
- D. A. Bowles, Ph. D. Wisconsin (Madison)
- C. M. Miller, Ph. D. Michigan State
- M. W. Singleterry, Ph. D. Southern Illinois
- R. E. Taylor, Ph. D. Illinois

**GRADUATE**
Consult the Graduate Catalog for listing of graduate level courses.

## ADVERTISING

**Professor:**
- R. Joel (Emeritus)

**Associate Professors:**
- D. Jackson, M. S. Tennessee
- M. M. Stankey, Ph. D. Illinois
- R. E. Taylor (Head), Ph. D.

### Hours Credit

<table>
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<tr>
<th>Freshman</th>
<th>English 101, 102</th>
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Total: 128 hours

1. Natural Science Electives are: Astronomy 151-152; Botany 110-120; Chemistry 100-121-131; Geophysics 131-132-330-334; Physics 121-122; Zoology 219-220

2. Social Science Electives are: Anthropology, Geography, Economics, History, Political Science, Psychology, Child and Family Studies and Sociology

3. General Electives: Subject to approval of advisor.

## BROADCASTING

**Professors:**
- D. W. Holt (Emeritus), Ph. D. Northwestern
- H. H. Howard, Ph. D. Ohio
- R. K. Swan, Jr., Ph. D. Missouri

**Associate Professor:**
- B. A. Moore, Ph. D. Ohio

**Assistant Professors:**
- J. G. Buchman, Ph. D. Indiana
- D. Ziegler, Ph. D. Southern Illinois

### Hours Credit

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<tr>
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<th>English 101, 102</th>
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</table>

Total: 128 hours

1. Professional Electives will be determined in consultation with the student's advisor.

## SCHOOL OF JOURNALISM

**Professors:**
- J. N. Adamson, M. S. Tennessee
- J. A. Crook (Director), Ph. D. Iowa State
- G. A. Everett, Ph. D. Iowa
- B. K. Leiter, Ph. D. Southern Illinois (Meeman Distinguished Professor)
- M. W. Singleterry, Ph. D. Southern Illinois

**Adjunct Professor:**
- Alex Haley

**Associate Professors:**
- D. A. Bowles, Ph. D. Wisconsin (Madison)
- M. Miller, Ph. D. Michigan State
- J. L. Morrow, Ph. D. Toledo
- S. L. Puett, M. S. Tennessee

### Hours Credit

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<tr>
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**Sophomore**
- Communications 300 | 3 |
- Communications 400 | 3 |
- Journalism Electives | 3 |
- Political Science | 3 |
- Communications Elective | 7 |
- General Elective | 3 |
- Mathematics Elective | 3 |

**Senior**
- Journalism 420, 430, 460, 492 | 11 |
- Communications Elective | 3 |
- Social Science Electives | 9 |
- General Elective | 3 |
- Humanities Electives | 6 |

Total: 128 hours

1. *Astronomy 131-132, Biology 131-132, Botany 131-132, Chemistry 131-132, Geology 131-132, Physics 131-132, Geography 131-132, 12 hours at the 200 level or above of the same language.

2. Mathematics or Philosophy electives: Mathematics 110, 115, 131; Philosophy 125; Accounting 201.


4. Journalism Electives: Journalism 310, 412, 414, 415


## NEWS-EDITORIAL CONCENTRATION

**Hours Credit**

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**Sophomore**
- Communications 200 | 3 |
- Journalism 250 | 3 |
- Political Science 300 | 3 |
- Journalism Electives | 3 |
- Communications Elective | 7 |
- General Elective | 3 |
- Mathematics Elective | 3 |

**Senior**
- Journalism 420, 430, 460, 492 | 11 |
- Communications Elective | 3 |
- Social Science Electives | 9 |
- General Elective | 3 |
- Humanities Electives | 6 |

Total: 128 hours


## PUBLIC RELATIONS CONCENTRATION

**Hours Credit**

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**Sophomore**
- Communications 200 | 3 |
- Journalism 250 | 3 |
- Speech 240 | 3 |
- Journalism Electives | 3 |
- Economics 201 | 4 |
- Accounting 201 | 3 |
- Humanities Elective | 3 |
- Foreign Language | 3 |
- Philosophy or Mathematics Elective | 3 |
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2 Six hours at the 200 level or above of the same language.
3 Mathematics or Philosophy electives: Mathematics elective or Philosophy 135.
4 Journalism electives: Journalism 310, 412, 414, 433.
6 Political Science electives: Political Science 315, 320, 321.
7 Business Administration electives: Marketing 310; Management 301; Economics 325.
8 Communications electives: Must be approved by advisor.
10 Humanities Electives - Art, Classics, Drama, English, Music, Philosophy, Religious Studies.
College of Education

Richard Wisniewski, Dean
Thomas W. George, Associate Dean for Undergraduate Studies
Timothy J. Petibone, Associate Dean for Research
C. Glennon Rowell, Associate Dean for Graduate Studies

Teacher education is historically a major function of The University of Tennessee. Beginning in 1903, when the first courses for teachers were offered, the University has increasingly fulfilled its responsibility to provide schools with competent teachers and service personnel and to improve the teaching profession by continually upgrading its membership. The College of Education was established in 1926, and all teacher preparation majors at The University of Tennessee are now coordinated within its eight departments. In 1984 the Institute for Teacher Education was established within the College of Education. The Institute has been responsible for implementing a series of reforms across all teacher education preparation majors. These reforms include increased admission standards, increased general education, redesigned professional education, and the creation of a mentoring team approach to undergraduate advising and progression through the major. In addition to teacher education majors, the College of Education has several non-teacher education majors. These majors include, but are not limited to, Dance, Industrial Education, Industrial Training, Physical Fitness, Public Health, Recreation, Sports Communication, Sports Management, and Human Services.

The College of Education holds membership in the American Association of Colleges for Teacher Education. All certification and degree programs through the doctoral level are fully accredited by the National Council for Accreditation of Teacher Education, the Southern Association of Colleges and Schools, and the Tennessee State Department of Education.

The faculty of the College of Education is committed to performing three major functions: (1) to provide professional preparation for teachers, administrators, and school service personnel at undergraduate and graduate levels; (2) to collaborate with school personnel, educational agencies, professional groups, and others interested in the evaluation and improvement of educational opportunities, programs, and services; and (3) to promote and conduct experimental and research studies in education.

The teacher preparation programs represent utilization of University-wide resources and cooperation of all appropriate units. Certain requirements are of basic importance: A broad cultural background in the arts and sciences (general education), mastery of professional knowledge and skills, and thorough preparation of specific teaching fields. Through a carefully planned program of combined academic and direct experiences, the prospective teacher acquires a depth and breadth of knowledge and understanding superior to that of the typical college graduate-superior in cultural and citizenship appreciation as well as in professional and scholarly accomplishment.

The Claxton Education Building and Claxton Addition contain many modern and functional facilities for the professional education of teachers including classrooms, laboratories, seminar rooms, faculty and administrative offices, the Instructional Services Center, the Reading Center, the Curriculum Laboratory, the Teacher Simulation Laboratory, and the Bureau of Educational Research and Service.

Requirements for All Teacher Education Curricula

The following professional core is required of students seeking teacher certification: Educational Curriculum and Instruction 302 (3), 303 (1), 304 (1), 402 (1); Educational and Counseling Psychology 315 (3), 325 (2); and Special Education 370 (2).

Progression toward Degree Completion and/or Certification in Teaching Fields

Progression toward completion of a degree and/or certification in a teaching field requires acceptance to the Teacher Education Program by a board of admissions. The admissions process begins at the time of matriculation to UTK, whether the student enters as a freshman, or transfer student.1

Minimum Requirements

Applicants will be evaluated by a board of admissions upon attainment of the following minimal criteria:

1. Academic Achievement: Applicants will be required to earn a minimum 2.5 undergraduate cumulative GPA. GPA computations, which include transfer grades, will be made at the time other requirements listed below are completed but not before the completion of at least 45 hours of academic work. Any professional education course, taken either before or after admission, must be passed with a minimum letter grade of ‘C’. Otherwise such a course must be repeated.

If this standard is not met: The applicant will improve his/her academic record by adding or repeating courses.

2. Pre-Professional Skills Test: The applicant will attain the minimum scores established by the State Board of Education on the Pre-Professional Skills Test.

1Community college students who anticipate transferring to the College should arrange to complete the admission to Teacher Education process prior to matriculating at UTK. Students should contact the Education Advising Center, 214 Claxton Addition.

2Students seeking admission to the following program areas, in addition, must complete specific courses before being granted a board review: (a) Mathematics Education - Mathematics 141-142; (b) Science Education - 8 semester hours of any laboratory science; (c) Music Education - at least one semester of applied study of music at the 200 level and Music Theory 210.
If this standard is not met: The applicant will retake the PPST until passed. (Note that it is not necessary to repeat subtests which were previously passed.)

(3) Hearing and Speech Evaluations: The applicant will perform within normal limits on hearing and speech evaluations.

If this standard is not met: The applicant will participate in therapy, as specified by and provided through the University's Hearing and Speech Center.

(4) Conduct Record: Each applicant will be screened by the University’s Conduct Office. Applicants who have established records of inappropriate conduct will be evaluated by the College’s Teacher Education Standards Committee.

If this standard is not met: The applicant’s disposition will be determined by the Teacher Education Standards Committee. BOARD OF ADMISSIONS

Applicants who successfully complete the minimal requirements will be interviewed by a board of admissions. Boards of admission will base admissions decisions on applicants’ academic qualifications, aptitude test scores, oral expression, written communication, perceived sense of social consciousness, expressed interest in teaching, pride, confidence, appearance, and goal directedness.

Certain boards will assess applicants in ways which are peculiar to their disciplines. For example, the Art Education Board requires applicants to submit portfolios. The Music Education Board requests a performance audition. ADMISSION DECISIONS

The College is committed to recruiting and preparing the strongest possible candidates for the Teacher Education profession. The admissions criteria summarized above are minimum expectations. Applicants should be aware that admission decisions are made by Boards of Admission and that selection is competitive, based upon available faculty resources and field placements. Posted GPA and basic skills test scores are minimums which are necessary to interview with boards of admission and do not ensure admittance into programs. Applicants are encouraged to achieve the highest GPA and test scores possible, and to confer regularly with the College’s Advising Center regarding admissions requirements.

Applicants who are denied admission to the specific teaching field of their choice are eligible to seek admission to other teaching fields within the College. Some applicants may be encouraged to interview again with the same board following remediation.

Applicants who are admitted, thus, become eligible to enroll in upper division Professional Education courses.

PROGRAM PROGRESSION

Each student’s progress will be reviewed each semester following admission to the Teacher Education Program and a determin-
Applications for teacher certification should be completed early in the final semester before graduation. Application forms may be obtained in the Registrar's Office, 215 Student Services Building, and in the Education Advising Center, 214 Claxton Addition.

It is important to note that Tennessee regulations stipulate that applicants for initial teacher certification must be recommended by an approved teacher training institution.

PROGRESSION TOWARD DEGREE COMPLETION IN NON-TEACHING FIELDS

HUMAN SERVICES

Progression and retention: Because the program in Human Services prepares students for entry into a service profession, the standards which must be met for progression and retention are professional in nature, as well as academic. Students who wish to pursue a major in Human Services must earn a grade of 'C' or higher in the introductory course before progressing to upper division work. Students whose average for courses taken in the major falls below 2.5 will be called in for advising, and must regain this required minimum average by the end of the subsequent semester in order to be retained in the major. A Board of Review will meet once each semester to interview students who wish to progress into the major, and to review the work of students who are not meeting the academic and/or professional standards of the program. Students who wish to do so may ask to be interviewed while taking the introductory course, and if they meet the standards for progression will be allowed to progress to upper division work upon completion of that course with a 'C' or higher. Students who in the judgment of the members of the Board are not meeting the professional standards of the program will not be retained in the major. Applications for Fall/Spring practicum sequence must be submitted at the beginning of the preceding Spring semester, and students who do not meet the standards for professional conduct during the course of their field work will not be retained in the major. (Note that any decision affecting progression or retention may be appealed to the head of the Department of Special Services Education.) Requests for information about the program, for appointments with the Board of Review, and for applications for the field practicum sequence should be directed to the program secretary in 127 Claxton Addition.

PHYSICAL EDUCATION MAJORS: NON-TEACHING CONCENTRATIONS

Progression toward degree completion in non-teaching Physical Education concentrations (e.g., Physical Fitness Specialist, Movement Sciences, Sports Management, and Sports Communications) requires successful attainment of the same criteria which are required of teaching majors, with the exception of completion of the socio-emotional assessment. Students who are granted progression are thereby permitted to enroll in upper division professional courses.

OPTIONAL MINORS

Education students may earn single or multiple minors either from a unit within the College of Education or from units of other colleges. The minor must be one which is officially approved and described in the General Catalog. Unofficial minors will not be recognized.

Courses taken to satisfy the minor will not necessarily meet certification requirements. Students are encouraged to seek the counsel of their advisors on matters pertaining to minors.

The intention to complete a minor must be declared at the time of application for a degree if the minor is to appear on the final transcript. (Degree applications are available in the Registrar's Office.)

The following minors are available to teacher education students who are seeking baccalaureate degrees in the College of Education:

- Minor in Health Education
  - Health 300 (3), 310 (3), 325 (3), 375 (3), 400 (3), 465 (3), Nutrition 100 or Health 420 or 435 (3), Public Health 305 (3), 310 (3), Safety 452 (3) for a total of 30 hours.
- Minor in Driver and Traffic Safety
  - Health 310 (3), 405 (3), 435 (3), Safety 441 (3), 442 (3), 452 (3) for a total of 18 hours.
- Minor in Coaching Physical Education
  - Physical Education 252 (2), 291 (3), 325 (3), 391 (2), 416 (1), 442 (2), Select two from 311 (1), 312 (1), 313 (1), 314 (1), 315 (1) for a total of 17 hours.
- Minor in General Special Education Special Education 270 (1), 451/480 (6), 452/490 (6), 454 (3), 481 (3) for a total of 19 hours.
- Minor in Dance
  - The following core courses are required for Concentration I and II: Dance 480 or 481 (3), 490 (3), Concentration I: Core (6); Select five from 310, 320, 330, 340, 410, 420, 430 (10); 201 (2-2) or 250 (3); 101 (1) for a total of 20 or 21 hours. Concentration II: Core (6); 495 (3); 415 (2); 250 (3); Select three from 310, 320, 330, 340, 410, 420, 430 (6) for a total of 20 hours.

EDUCATION MINOR AND TEACHING CERTIFICATION FOR NON-EDUCATION STUDENTS

- Teacher preparation, with the exception of programs in Business/Marketing and Industrial Education, is a five-year program (i.e., B.S. degree granted at the end of senior year). Undergraduate, non-Education students who are interested in earning teacher certification may earn a minor in Education and complete specific prerequisite courses before beginning the Professional Year (fifth year) of teacher preparation.
- Interested students should inquire in the Advising Center, 214 Claxton Addition, for details regarding admission to the Teacher Education Program and fulfillment of possible additional General Education courses.

Minor in Education

Educational Curriculum and Instruction 302 (3), 303 (1), 304 (1), Educational and Counseling Psychology 210 (3), 315 (3), 325 (2), 370 (2) for a total of 15 hours.

Secondary Education in addition to earning a minor in Education, undergraduate students majoring in English, foreign languages, mathematics, economics, history, geography, psychology, sociology, biology, chemistry, and physics should complete the following courses prior to entering the Professional Year: Educational Curriculum and Instruction 352 and Education 355 (3), 480 (3) (Required for Speech and English majors only) for a total of 5-10 hours.

During the Professional Year, students complete the following courses: Educational Curriculum and Instruction 481 (6); 482 (4); 402, 461, 517 (7); 456, 455, 454, 459, 485 or 496 (3); Foundations elective (3) for a total of 23 hours.

Students interested in Secondary Education certification may obtain information relative to specific Educational Curriculum and Instruction methods courses from the Department of Curriculum and Instruction, 301 Claxton Education Building, the Liberal Arts Advising Center, 220 Ayres Hall, or the Education Advising Center, 214 Claxton Addition.

Elementary Education

Non-education, undergraduate students interested in obtaining Elementary Education certification, in addition to earning a minor in Education, must complete the following courses before beginning the Professional Year: Health 305 (3), 306 (3), Music Education 300 (2), Art Education 300 (2), Physical Education 335 (3), Educational Curriculum and Instruction 326 (3), 328 (3), 335 (3), 351 (2-3), 476 (1) for a total of 23-24 hours.

Refer to Elementary Education major for Professional Year courses.

Information relative to specific courses may be obtained from the Department of Curriculum and Instruction, 301 Claxton Education Building, the Liberal Arts Advising Center, 220 Ayres Hall, or the Education Advising Center, 214 Claxton Addition.

General Special Education

In addition to earning a minor in Education, non-Education, undergraduate students interested in General Special Education certification must complete the following courses prior to enrolling in the Professional Year: Health 305 (2), Educational Curriculum and Instruction 428 (3), 430 (3), 443 (3), 475 (3), 434 (3), Special Education 270 (1), 451 (3), 452 (3), 454 (3), 410 (1), 481 (3), 480 (3), 490 (3) for a total of 37 hours.

Refer to Special Education major: concentration in General Special Education for Professional Year courses.

Information regarding specific courses may be obtained from the Instrumental Education major: concentration in General Special Education for Professional Year courses.

Music Education

Non-Education, undergraduate students interested in obtaining Music Education certification, in addition to earning a minor in Education, must complete the following courses prior to entering the Professional Year: All Music Education students may earn single or multiple minors either from a unit within the College of Education or from units of other colleges. The minor must be one which is officially approved and described in the General Catalog. Unofficial minors will not be recognized.

Courses taken to satisfy the minor will not necessarily meet certification requirements. Students are encouraged to seek the counsel of their advisors on matters pertaining to minors.

The intention to complete a minor must be declared at the time of application for a degree if the minor is to appear on the final transcript. (Degree applications are available in the Registrar's Office.)

The following minors are available to teacher education students who are seeking baccalaureate degrees in the College of Education:

- Minor in Health Education
  - Health 300 (3), 310 (3), 325 (3), 375 (3), 400 (3), 465 (3), Nutrition 100 or Health 420 or 435 (3), Public Health 305 (3), 310 (3), Safety 452 (3) for a total of 30 hours.
- Minor in Driver and Traffic Safety
  - Health 310 (3), 405 (3), 435 (3), Safety 441 (3), 442 (3), 452 (3) for a total of 18 hours.
- Minor in Coaching Physical Education
  - Physical Education 252 (2), 291 (3), 325 (3), 391 (2), 416 (1), 442 (2), Select two from 311 (1), 312 (1), 313 (1), 314 (1), 315 (1) for a total of 17 hours.
- Minor in General Special Education
  - Special Education 270 (1), 451/480 (6), 452/490 (6), 454 (3), 481 (3) for a total of 19 hours.
- Minor in Dance
  - The following core courses are required for Concentration I and II: Dance 480 or 481 (3), 490 (3), Concentration I: Core (6); Select five from 310, 320, 330, 340, 410, 420, 430 (10); 201 (2-2) or 250 (3); 101 (1) for a total of 20 or 21 hours. Concentration II: Core (6); 495 (3); 415 (2); 250 (3); Select three from 310, 320, 330, 340, 410, 420, 430 (6) for a total of 20 hours.
COURSE LOAD
Permission to enroll in more than 19 hours during a semester must be obtained from the Coordinator of Undergraduate Student Services, 202 Claxton Addition. A normal course load in the College is 16-19 hours.

COURSE SUBSTITUTIONS
It is sometimes necessary and advisable for students to substitute other courses for those required in a particular curriculum. This is particularly true of students who transfer to The University of Tennessee College of Education from another college or university. The general test is whether the course content is similar or, perhaps, more appropriate to that individual's needs.

To initiate a substitution request, the student should first meet with his/her advisor. If the advisor and student agree that the substitution is an appropriate one, the substitution request form should be forwarded to the Office of the Associate Dean for Undergraduate Studies, 202 Claxton Addition. Approved petitions are forwarded to the Dean of Admissions for final approval and for filing in the Records Office.

Professional education courses taken at junior or community colleges may be substituted for lower division (100/200 level) courses or may be used as electives. These courses may not be substituted for upper division (300/400 level) professional education courses.

ART AND MUSIC EDUCATION

Professors:

Associate Professors:

Assistant Professors:
J. R. Sparks, M. S. Tennessee.

EDUCATIONAL AND COUNSELING PSYCHOLOGY

Professors:

Assistant Professors:

Lecturer:
T. A. Hutchens, Ph. D. Georgia.

PHYSICAL EDUCATION AND DANCE

Professors:
E. K. Capen (Emeritus), Ph. D. Iowa; B. D. Franks, Ph. D. Illinois; E. T. Howley, Ph. D. Wisconsin; A. J. Kojar (University Professor), Ph. D. Michigan; N. E. Lay, Ph. D. Florida State; W. P. Lienohn, Ph. D. Iowa;
SPECIAL SERVICES EDUCATION

Professors:
L. J. Coleman (Head), Ph. D. Kent State;
E. E. Doll (Emeritus), Ph. D. Pennsylvania;
R. M. Frey, Ed. D. Illinois; T. W. George,
Ed. D. Tennessee; C. H. Hargis, Ed. D.
Northern Colorado; R. Kronick, Ph. D.
Tennessee; J. H. Miller, Ed. D. Auburn;
W. J. Schindler, Ph. D. Kent State;

Associate Professors:
S. M. Benner, Ed. D. Columbia; J. L. Cassell,
Ph. D. Kansas; C. R. Colvin, Ed. D. Virginia;
M. C. Hannum, Ed. D. Northern Colorado;
K. H. Kopp, Ph. D. George Peabody;
P. McClam, Ph. D. South Carolina;
W. Mulkey, Ph. D. Florida State; D. O. Welch,
Ed. D. Tennessee; M. Woodside, Ed. D.
Virginia Polytechnic Institute.

Instructors:
J. D. McLean, Ph. D. Chicago; M. K. Warden,
Ph. D. Tennessee.

Instructors:
D. H. Ashmore, M. S. Tennessee;
A. M. Griffin, M. S. Tennessee; G. D. Tyler,
M. S. Tennessee.

Lecturer:
H. K. Byrd, Jr., M. S. Tennessee.

TECHNOLOGICAL AND ADULT EDUCATION

Professors:
G. D. Cheek (Head), Ph. D. Kansas State;
W. A. Cameron, Ph. D. Ohio State;
C. P. Campbell, Ed. D. Maryland;
C. B. Coakley, Ph. D. Wisconsin; D. G. Craig,
Ed. D. Cornell; R. W. Haskell (Coordinator,
Industrial Education), Ph. D. Purdue;
J. I. Matthew, Ph. D. Arizona State;
K. O. McCullough, Ph. D. Florida State;
J. M. Peters (Coordinator, Adult Education),
Ed. D. North Carolina State; J. L. Reed
(Emeritus), M. S. Oklahoma State;
G. A. Wagoner (Emeritus), M. S. Indiana;
G. W. Wiegers, Jr. (Emeritus), Ed. D.
Missouri; R. J. Woodin (Emeritus), Ph. D.
Ohio State.

Associate Professors:
E. Brewer, Ed. D. Tennessee; R. G. Brockett,
Ph. D. Syracuse; R. Hanson, Ph. D. Purdue;
C. E. Kasworm, Ed. D. Georgia; B. J. Ledford,
Ed. D. Tennessee; E. C. Mann, Ed. D. Penn
State; G. C. Petty, Ph. D. Missouri;
B. J. Radcliff (Coordinator, Business and
Marketing Education), M. S. West Virginia.

Assistant Professors:
R. Pierce, Ph. D. Ohio State; T. L. Powell,
M. S. Oklahoma State.

Instructor:
C. W. Wright, M. T. Arizona State.

CURRICULA

ART EDUCATION

<table>
<thead>
<tr>
<th>YEARS</th>
<th>COURSES</th>
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<tbody>
<tr>
<td>Freshman</td>
<td>English 101, 102</td>
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<td>Art 101, 102, 103</td>
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<td>Studio Art electives</td>
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<td>Junior</td>
<td>Educational and Counseling Psychology 210, 230, 231</td>
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<td>Junior</td>
<td>Studio Art electives</td>
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<tr>
<td>Senior</td>
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<td>Senior</td>
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<td>Senior</td>
<td>Educational and Counseling Psychology 210</td>
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BUSINESS/MARKETING EDUCATION TEACHING CONCENTRATION

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Total: 137 hours

*Includes courses in Business Administration, Textiles and Apparel, Communications, etc. Consult advisor for specific requirement.

BUSINESS/MARKETING EDUCATION TRAINING CONCENTRATION

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Total: 164 hours
DANCE

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<tbody>
<tr>
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<tr>
<td>Dance Technique (Principals Area)</td>
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</tr>
<tr>
<td>Dance Technique (Secondary Area)</td>
<td>4</td>
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<tr>
<td>French (or) or Humanities electives</td>
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<tr>
<td>Sociology 100</td>
<td>3</td>
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<td>Sociology elective</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 110, 115</td>
<td>6</td>
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<tr>
<td>Dance 101</td>
<td>2</td>
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Sophomore

<table>
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<th>Hours</th>
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<td>Dance Technique (Secondary Area)</td>
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<tr>
<td>Dance 460</td>
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<td>Music electives</td>
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<td>Dance 430</td>
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<td>History 151, 152</td>
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<td>Dance 465</td>
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<tr>
<td>University Studies elective</td>
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Junior

<table>
<thead>
<tr>
<th>Hours</th>
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<tbody>
<tr>
<td>Dance Technique (Principals Area)</td>
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<tr>
<td>Dance 250</td>
<td>3</td>
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<tr>
<td>Dance 350</td>
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<tr>
<td>Dance 490</td>
<td>3</td>
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<td>Theatre elective</td>
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<tr>
<td>Dance 201</td>
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<tr>
<td>Dance Technique (Secondary Area)</td>
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<tr>
<td>Dance 495</td>
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<tr>
<td>Natural Science elective</td>
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Total: 128-129 hours

*The specific dance technique (ballet, modern, jazz/musical/theatre) and skill level will be determined through advising and/or placement audition.

ELEMENTARY EDUCATION

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
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</table>
| Freshman
| English 101, 102 | 6 |
| Foreign Language (Intermediate); Foreign Language (Intermediate); or Humanities elective | 6 |
| Mathematics 110, 115 | 6 |
| Physical Education Activities elective | 3 |
| Physical Science elective or Ecology 370 | 4-2 |
| Physical Science elective | 4 |
| Music 110 | 2 |

Sophomore

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Literature electives</td>
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<tr>
<td>Art 171, 172 or 173</td>
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</tr>
<tr>
<td>Biological Science elective or Ecology 370</td>
<td>4-2</td>
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<tr>
<td>Biological Science elective</td>
<td>4</td>
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<tr>
<td>Educational and Counseling Psychology 210</td>
<td>3</td>
</tr>
<tr>
<td>History 251, 252</td>
<td>6</td>
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<tr>
<td>Geography (physical, political and/or economic) elective</td>
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<tr>
<td>Sociology 100</td>
<td>3</td>
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<tr>
<td>Speech elective</td>
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Junior

<table>
<thead>
<tr>
<th>Hours</th>
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<tbody>
<tr>
<td>Physical Education 335, 345, or 356</td>
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<td>Library Science 330</td>
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<tr>
<td>Educational Curriculum and Instruction 303</td>
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<tr>
<td>Special Education 370</td>
<td>2</td>
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<tr>
<td>Health 305, 306</td>
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<td>Music Education 300</td>
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<tr>
<td>Communications elective</td>
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<tr>
<td>Content or Professional Specialty</td>
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Senior

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Educational Curriculum and Instruction 302, 304, 326, 329, 335, 351, 410, 476</td>
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<tr>
<td>Educational Counseling and Psychology 315, 325</td>
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<tr>
<td>Art Education 300</td>
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<tr>
<td>Content or Professional Specialty</td>
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Total: 122 hours

HEALTH EDUCATION: COMMUNITY HEALTH CONCENTRATION

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
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</table>
| Freshman
| English 101, 102 | 6 |
| Mathematics 110, 115 | 6 |
| Chemistry 100, 110 | 6 |
| Nutrition elective | 3 |
| Psychology 110 | 3 |
| University Studies or Foreign Language (Intermediate) | 6 |
| Social Science elective | 3 |

Sophomore

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Zoology 230, 240</td>
<td>8</td>
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<tr>
<td>Anthropology 130</td>
<td>3</td>
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<tr>
<td>Economics 251</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 151</td>
<td>3</td>
</tr>
<tr>
<td>Sociology or Psychology elective</td>
<td>3</td>
</tr>
<tr>
<td>University Studies or Foreign Language (Intermediate)</td>
<td>6</td>
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<tr>
<td>History electives</td>
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Junior

<table>
<thead>
<tr>
<th>Hours</th>
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<tbody>
<tr>
<td>Humanities electives</td>
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<tr>
<td>Health 300, 310, 325, 375</td>
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<tr>
<td>Public Health 305, 310</td>
<td>6</td>
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<tr>
<td>Physical Education 414</td>
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<tr>
<td>Safety 452</td>
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Senior

<table>
<thead>
<tr>
<th>Hours</th>
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<tbody>
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<td>Health 483</td>
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<tr>
<td>Educational Curriculum and Instruction 475, 487</td>
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<tr>
<td>Marketing 303</td>
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<td>Humanities elective</td>
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<td>Electives</td>
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Total: 122 hours

HEALTH EDUCATION: HEALTH CARE CONCENTRATION

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| Freshman
| English 101, 102 | 6 |
| Mathematics 110, 115 | 6 |
| Chemistry 100, 110 | 6 |
| Psychology 110 | 3 |
| University Studies or Foreign Language (Intermediate) | 6 |
| Social Science elective | 3 |

Sophomore

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoology 230, 240</td>
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<tr>
<td>Anthropology 130</td>
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<td>Sociology or Psychology elective</td>
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<tr>
<td>University Studies or Foreign Language (Intermediate)</td>
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<tr>
<td>History electives</td>
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<tr>
<td>Classics 273</td>
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Junior

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Humanities electives</td>
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<td>Health 300, 310, 325, 375</td>
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<td>Educational Curriculum and Instruction 487</td>
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<tr>
<td>Sociology elective</td>
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<tr>
<td>University Studies or Foreign Language (Intermediate)</td>
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<td>History electives</td>
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<td>Classics 273</td>
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Senior

<table>
<thead>
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<tbody>
<tr>
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Total: 120 hours

HEALTH EDUCATION: SCHOOL CONCENTRATION

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| Freshman
| English 101, 102 | 6 |
| Mathematics 110, 115 | 6 |
| Chemistry 100, 110 | 8 |
| Nutrition 100 | 3 |
| Psychology 110 | 3 |
| University Studies or Foreign Language (Intermediate) | 6 |
| Social Science elective | 6 |
| Zoology 230, 240 | 8 |
| Educational and Counseling Psychology 400 | 3 |
| Anthropology elective | 3 |
| Sociology 100 | 3 |
| University Studies or Foreign Language (Intermediate) | 6 |
| History electives | 6 |

Junior

<table>
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<tbody>
<tr>
<td>Sociology 152</td>
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<td>Special Education 370</td>
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<td>Social Science elective</td>
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<tr>
<td>Health 310, 325, 375</td>
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<td>Public Health 305, 310</td>
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<td>Health elective</td>
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Senior

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<th>Hours</th>
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<td>Educational Curriculum and Instruction 303, 304, 325</td>
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<td>Physical Education 414</td>
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<td>Safety 452</td>
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Professional Year

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<td>Health 481</td>
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<td>Health 482</td>
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Total: 147 hours

HUMAN SERVICES

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| Freshman
| English 101, 102, or 103 | 6 |
| Mathematics or Computer Science electives | 6 |
| History (Intermediate) | 3 |
| Natural Science electives | 8 |
| Foreign Language electives | 6 |
| Speech elective | 3 |
| Human Services 220 | 3 |
| Psychology 360 | 3 |
| Foreign Language electives | 6 |
| Electives | 3 |
| Humanities or Arts electives | 6 |
| Natural Science electives | 8 |
| Junior
| Special Services Education 360 | 2 |
| Humanities or Arts elective | 3 |
| Social Science elective | 3 |
| Human Services 330, 380, 390 | 12 |
| Electives | 6 |
| Professional elective | 3 |
| Sociology 330 | 3 |

Senior

<table>
<thead>
<tr>
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<td>Human Services 440, 441</td>
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Total: 122 hours

*Consult advisor for specific course requirements.
### INDUSTRIAL EDUCATION: INDUSTRIAL ARTS CONCENTRATION

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<td>Sophomore</td>
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### INDUSTRIAL EDUCATION: INDUSTRIAL TRAINING CONCENTRATION

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### INDUSTRIAL EDUCATION: TRADES AND INDUSTRIES CONCENTRATION

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### MUSIC EDUCATION: INSTRUMENTAL MUSIC CONCENTRATION

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<td>Sophomore</td>
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### MUSIC EDUCATION: VOCAL MUSIC (PIANO OR ORGAN PRINCIPAL) CONCENTRATION

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<td>Sophomore</td>
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### MUSIC EDUCATION: VOCAL MUSIC (VOICE PRINCIPAL) CONCENTRATION

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<td>Sophomore</td>
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<td>Junior</td>
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PHYSICAL EDUCATION:  EXERCISE PHYSIOLOGY/FITNESS CONCENTRATION

**Freshman**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395, 401 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- History elective ......................................... 6
- Humanities elective .................................... 3
- University Studies elective ............................ 6
- Total: 157 hours

**Sophomore**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- History elective ......................................... 6
- Humanities elective .................................... 3
- University Studies elective ............................ 6
- Total: 157 hours

**Junior**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- History elective ......................................... 6
- Humanities elective .................................... 3
- University Studies elective ............................ 6
- Total: 157 hours

**Senior**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- History elective ......................................... 6
- Humanities elective .................................... 3
- University Studies elective ............................ 6
- Total: 157 hours

PHYSICAL EDUCATION:  MOVEMENT SCIENCES CONCENTRATION (Motor Behavior/Sport Psychology Option)

**Hours Credit**

**Freshman**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- History elective ......................................... 6
- Humanities elective .................................... 3
- University Studies elective ............................ 6
- Total: 157 hours

**Sophomore**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- History elective ......................................... 6
- Humanities elective .................................... 3
- University Studies elective ............................ 6
- Total: 157 hours

**Junior**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- History elective ......................................... 6
- Humanities elective .................................... 3
- University Studies elective ............................ 6
- Total: 157 hours

**Senior**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- History elective ......................................... 6
- Humanities elective .................................... 3
- University Studies elective ............................ 6
- Total: 157 hours

PHYSICAL EDUCATION:  MOVEMENT SCIENCES CONCENTRATION (Sport Philosophy Option)

**Hours Credit**

**Freshman**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- University Studies elective ............................ 6
- Total: 157 hours

**Sophomore**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- University Studies elective ............................ 6
- Total: 157 hours

**Junior**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- University Studies elective ............................ 6
- Total: 157 hours

**Senior**
- English 101, 102 ........................................ 6
- Mathematics 110, 111 ................................ 3
- Physical Education 290, 321, 355, 362, 372, 395 9
- Psychology 395 ........................................ 3
- Health Education 200 .................................... 2
- Physical Education 290, 321, 355, 362, 372, 395 9
- University Studies elective ............................ 6
- Total: 157 hours

PHYSICAL EDUCATION:  SPORT COMMUNICATIONS CONCENTRATION

**Hours Credit**

**Freshman**
- English 101, 102 ........................................ 6
- Mathematics 121, 122 or 141, 142 .................. 6
- Physical Education 101, 102 or 271 or 272 .......... 6
- Physical Education 103 or 273, 106, 104 or 274 .... 6
- Philosophy Education 105 or 275 .................... 1
- Humanities elective .................................... 3
- Psychology 110 ......................................... 3
- Computer Science 100 or 102 .......................... 4
- Communications 100 ................................... 3
- Social Science elective ................................ 3
- Total: 133 hours

**Sophomore**
- English 101, 102 ........................................ 6
- Mathematics 121, 122 or 141, 142 .................. 6
- Physical Education 101, 102 or 271 or 272 .......... 6
- Physical Education 103 or 273, 106, 104 or 274 .... 6
- Philosophy Education 105 or 275 .................... 1
- Humanities elective .................................... 3
- Psychology 110 ......................................... 3
- Computer Science 100 or 102 .......................... 4
- Communications 100 ................................... 3
- Social Science elective ................................ 3
- Total: 133 hours

**Junior**
- English 101, 102 ........................................ 6
- Mathematics 121, 122 or 141, 142 .................. 6
- Physical Education 101, 102 or 271 or 272 .......... 6
- Physical Education 103 or 273, 106, 104 or 274 .... 6
- Philosophy Education 105 or 275 .................... 1
- Humanities elective .................................... 3
- Psychology 110 ......................................... 3
- Computer Science 100 or 102 .......................... 4
- Communications 100 ................................... 3
- Social Science elective ................................ 3
- Total: 133 hours

**Senior**
- English 101, 102 ........................................ 6
- Mathematics 121, 122 or 141, 142 .................. 6
- Physical Education 101, 102 or 271 or 272 .......... 6
- Physical Education 103 or 273, 106, 104 or 274 .... 6
- Philosophy Education 105 or 275 .................... 1
- Humanities elective .................................... 3
- Psychology 110 ......................................... 3
- Computer Science 100 or 102 .......................... 4
- Communications 100 ................................... 3
- Social Science elective ................................ 3
- Total: 133 hours
Natural Science electives ........................................ 8
Physical Education 290, 291 .................................... 3
Accounting 201, 202 ........................................... 6
Statistics 201 ...................................................... 3
Physical Education or Recreation Activities elective .... 3
Junior
University Studies electives ................................ 6
Recreation 310, 410 .............................................. 6
Social Science elective .......................................... 3
Business electives (from required option) .................. 5
Physical Education 321, 372, 414 .............................. 6
Speech 210 .......................................................... 3
Advertising 250 ................................................... 3
Senior
Business electives (from required option) ................. 6
Physical Education 426 or Recreation 490 ................. 1-12
Recreation 440 ................................................... 3
General electives ............................................... 9
Physical Education 442 or Recreation 430 ................. 2-3
Total: 136 hours

PHYSICAL EDUCATION: TEACHING CONCENTRATION

Freshman
English 101, 102 .................................................. 6
Mathematics 110 .................................................. 3
Chemistry 100, 110 .............................................. 8
Speech 210 .......................................................... 3
Physical Education 100, 102, 104, 105, 271, 274 ........ 7
Art or Music elective ............................................. 3
Philosophy or Religious Studies elective .................... 3
Sophomore
Humanities elective (choose one): Literature, Foreign Language (Intermediate), Art, Music, Philosophy, Religious Studies 3
Zoology 230 .......................................................... 5
Economics or Sociology elective ............................. 3
Physical Education 103, 272, 273, 290 or 466, 106, 202 or 232, 275, 291, 292 .................................................. 15-18
Geology or Political Science elective ........................ 3
Educational and Counseling Psychology 210 ............ 3
Physical Education elective 239, 240, or 241 ............. 3
Junior
University Studies electives ................................ 6
History electives ............................................... 6
Technological and Adult Education 437 ................. 3
Physical Education 321, 332, 335, 345, 372, 414, 415 15
Health 310 .......................................................... 3
Educational and Counseling Psychology 315 ............ 3
Senior
Educational and Counseling Psychology 325 ............ 2
Special Education 370 .......................................... 2
Physical Education 356, 391, 409, 410, 411, 420, 422, 424, 433, 434, 443, 454, 466, 467, 474 ............... 23
Educational Curriculum and Instruction 302, 303, 304 5
Zoology 480 .......................................................... 3
Professional Year
Physical Education 481 ........................................ 4
Physical Education 482 ........................................ 4
Educational Curriculum and Instruction 402, 461, 462, 463, 467, Electives ........................................ 17
Total: 169-170 hours

RECREATION: PRIVATE/COMMERCIAL CONCENTRATION

Freshman
English 101, 102 .................................................. 6
History electives ............................................... 6
Mathematics 110 .................................................. 3
Recreation 310, 410 .............................................. 6
Computer Science 100 ........................................ 3
Humanities electives .......................................... 6
Sophomore
Recreation 250, 290, 320 ..................................... 7-8
Sociology 100 ..................................................... 3
Economics 201 .................................................... 4
Recreation 410, 210 ............................................. 6
Speech 240 .......................................................... 3
Economics 201 .................................................... 4
Humanities electives .......................................... 6
Junior
Recreation 310, 390, 450 ..................................... 7-8
Humanities electives .......................................... 6
University Studies electives ................................. 6
Senior
Recreation 410, 430, 440, 450 ................................ 12
Recreation 490 ................................................... 12
Business Administration or Management electives .... 6
Elective ............................................................. 9
Total: 128-130 hours

SPECIAL EDUCATION:
GENERAL SPECIAL EDUCATION CONCENTRATION

Freshman
English 101, 102 .................................................. 6
Biology 110, 120 .................................................. 6
Human Services 220, 320, or 330 .......................... 3
Art, Music, or Theatre elective .................................. 3
Psychology 110 .................................................... 6
Physical Education Activity elective ........................ 2
General Education elective ................................... 3
Sophomore
Mathematics 110, 115, 121, or 122 ....................... 6
Chemistry 100, Physics 141, Geology 100, or Astronomy 151 .................................................. 3-4
History 251, 252 ................................................... 6
University Studies electives ................................... 6
Educational and Counseling Psychology 210 .......... 3
Non-Education elective ......................................... 3
English Literature elective ...................................... 3
Special Education 270 .......................................... 1
Physical Education Activity elective ....................... 2
Junior
Health 305 .......................................................... 2
Educational Curriculum and Instruction 302, 330, 304, 475 .................................................. 8
Religious Studies, Philosophy, or Human Services elective 3
Sociology or Economics elective ............................. 3
Political Science, Sociology, Religious Studies, Women’s Studies, or University Studies elective ........ 3
Elective ............................................................. 3
Educational and Counseling Psychology 315, 325, 326 Special Education 370 .......................................... 2
Educational Curriculum and Instruction 428, 430, 434, 436 .................................................. 12
Special Education 410, 451, 452, 454, 461, 480, 485, 486, 501 .................................................. 19
Professional Year
Special Education 471 .......................................... 6
Special Education 506 .......................................... 6
Special Education 539, 541, 543, 553, 595 ............... 15
Educational Curriculum and Instruction 471 ........ 3
Educational Curriculum and Instruction 402 ........ 1
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<td></td>
<td>Educational Curriculum and Instruction 402</td>
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Total: 159-160 hours
William T. Snyder, Dean
William L. Grecco, Associate Dean

The cooperative program is open to all students in good standing in the college. In today's technology-based society, everyone feels the effects of the engineer's plans and decisions. Hence, there is a continuing and urgent need for engineering graduates who possess a thorough understanding of mathematical and scientific principles, who apply these principles to the solution of practical and high technology problems, and who can view the solutions in their overall social perspective so that the actions that they recommend will have long term benefits. It is the purpose of the College of Engineering to educate men and women to the high levels of technical competence and social understanding that will enable them to fulfill their responsibilities as professional engineers.

Graduates of the B. S. curricula offered by the college may enter directly into a position in industry, government, or private practice, or may pursue advanced study in graduate school. Their professional activities include research, development, design, operations analysis, construction, production supervision, and technical sales. Many practice their profession in Tennessee; but engineering knows no geographical bounds, and graduates of the college serve throughout the nation and in other countries as well.

The Cooperative Engineering Program was established in 1922. The University of Tennessee was one of the early pioneers in this valuable type of education, which originated at the University of Cincinnati in 1905. The cooperative program is open to all students in good standing in the college.

The college has ten major undergraduate curricula in which a student may specialize: aerospace engineering, chemical engineering, civil engineering, electrical and computer engineering, industrial engineering, materials science and engineering, mechanical engineering, nuclear engineering, engineering physics, and engineering science and mechanics.

Agricultural engineering is based in the College of Agriculture with facilities located on the Agricultural Campus. The agricultural engineering curriculum is offered cooperatively by the College of Agriculture and the College of Engineering. Details of the curriculum may be found in the College of Agriculture section of this catalog.

FACILITIES

The College of Engineering is housed in Ferris, Estabrook, Perkins, Dougherty, and Berry Halls, and in the Pasqua Engineering Building and East Stadium, all located on the southeastern end of the campus, and the Alumni Memorial Auditorium-Gymnasium.

TAU BETA PI NATIONAL HEADQUARTERS

The college is honored to have the National Headquarters of Tau Beta Pi, the National Engineering Honor Society, housed on our campus. This honor was earned in part through the untiring efforts of R. C. "Red" Matthews, who served as secretary-treasurer for the organization from 1905 to 1947. The suite of offices, located in Dougherty Hall, is occupied by Mr. J. D. Froula, secretary-treasurer, and his staff.

COOPERATIVE ENGINEERING PROGRAM

The five-year Cooperative Engineering Program is offered in order to provide an augmented engineering education that includes significant experience in industry as well as superior academic preparation.

Cooperative work assignments differ from part-time or summer employment in that they involve regularly scheduled cycles of full-time academic terms alternating with full-time work periods, normally resulting in fifteen to nineteen months planned, career-related assignments of progressive complexity and responsibility. In introducing the student in this manner to engineering employment, the College and the facilities of industry join together to offer a broader and richer preparation for postgraduate employment than can be provided by a conventional academic program. This experience in an industrial and professional environment contributes to the student's maturity, increases the scope of acquaintances and concepts, offers an opportunity to apply theory and skills in a real-world setting, and enables the student to define more clearly educational and career interests and objectives. Some of the experience is at a subprofessional level not available to an engineer after graduation, yet is of great significance in achieving a complete education and early effectiveness.

Participation in the Cooperative Engineering Program usually begins with application during the freshman year, and placement with a co-op employer during the sophomore year, after the student has met academic progress and grade qualifications required by employers and the Co-op Program. A single application period is held each academic year, and students interested in co-op should apply at the first opportunity open to them in order to receive full benefit of counseling available before placement and to establish priority in placement activities. Each class of applicants takes priority over succeeding classes for all positions for which the earlier applicants are qualified. Students undecided about participating should nevertheless apply during their freshman year if possible, and then request that their applications be held until they withdraw or are ready to make a definite commitment.

In general, students begin work after the first or second sophomore semester, although an exceptionally well qualified can-
courses are offered in engineering fields such as aerospace, chemical, electrical and computer, engineering science, industrial, mechanical engineering, engineering management, and mathematics and physics. All programs lead to the M.S. degree. Also, Ph.D. degrees are available in many of these fields. Information may be obtained from the Registrar, The University of Tennessee Space Institute, Tullahoma, TN 37388.

CURRICULA IN ENGINEERING

NATIONAL ACCREDITATION

Since 1936, engineering programs at institutions of higher learning have been accredited by an organization formed by many engineering societies and known as the Accreditation Board for Engineering and Technology (ABET). Currently accredited engineering programs at UTK include aerospace, agricultural, chemical, civil, electrical, engineering science and mechanics, industrial, mechanical, metallurgical, and nuclear. Co-op programs in the above areas are presently ABET accredited.

DESIGNATION OF A MINOR

An engineering undergraduate may declare a minor in a non-engineering subject area and have the minor listed on the permanent record under the following conditions:

1. Only one minor may be declared and officially designated.
2. The minor must be one officially approved and described in the UTK catalog. No unofficial minors will be recognized. Minors exist in Architecture and Business Administration, and in numerous departments in Agriculture and Liberal Arts. Presently no engineering student can minor in another engineering discipline, nor can a non-engineering student declare an engineering minor.
3. Courses taken to satisfy the minor may also be used to satisfy engineering degree requirements, provided that the courses would be a part of engineering degree requirements even if no minor was declared. Completion of a minor often involves the taking of some courses which cannot be used to satisfy the minimum requirement for an engineering degree.
4. A student should notify his or her advisor and major department office when beginning work on a minor. The intention to complete a minor must be declared at the time of application for a degree if the minor is to appear on the final transcript. Degree applications are handled by the UTK Records Office.

COURSE LOAD

The maximum number of hours which can be taken by an undergraduate engineering student without special permission is 19. The Associate Dean for Academic Affairs must give permission to take 20 hours or more. In general, this decision is based on the student’s previous performance at UTK.

DROP DEADLINE

The drop and add deadline for all undergraduate courses administered by any department in the College of Engineering is the end of the tenth calendar day of each semester counted from the beginning day of classes. Any drop action after this date on the part of any student (regardless of major) is subject to late drop regulations. Late drop requests which may be approved for reasons other than academic difficulties, are handled by the Office of Academic Affairs, 118 Perkins Hall. For other procedures refer to “Changes in Registration” in the general section of this catalog.

GENERAL REQUIREMENTS

Students are advised to consult the University’s degree requirements as stated in the front section of this catalog as well as departmental requirements.

Inspection Trip. Each candidate for graduation majoring in aerospace, mechanical, chemical, or metallurgical engineering must participate in inspection trips scheduled by the major department.

Transfer Students. All transfer students - Tennessee resident, out-of-state students and international students - are reviewed by a College Association Committee prior to an Association decision, regardless of transfer GPA. An evaluation majoring in aerospace, chemical, electrical and industrial engineering is presented by the Associate Dean for Academic Affairs of the College and the Head of the Department with which Association is desired. Factors considered in the decision include:

1. Overall academic performance in previous college work;
2. Incidence of withdrawals, incompletes, or other evidence of problems interfering with orderly academic progress;
3. The level of interest in engineering, as evidenced by the kinds of courses taken and institutions attended;
4. A statement of educational goals, which all transfer students are encouraged to submit as part of their admission to UTK; and
5. The restrictions on space and staff in the department applied for.

Transfer Credit. Every attempt will be made to give maximum credit for courses taken elsewhere and transferred to the College. Discussions concerning the evaluation of transfer credits should be conducted with the head of the department (or designee) in which the student proposed to transfer but only after receiving the evaluation of transfer credits by the Admissions Office. Program for Second and B.S. Degree. Upon approval by the Dean of Engineering and the Committee on Degrees of a program of study recommended by the major engineering department, a student who already holds a bachelor’s degree may obtain the appropriate first degree in engineering upon meeting all of the course requirements of the selected engineering program. In no case will the minimum requirement be less than 30 semester credits. The prevailing University regulations shall apply.

Satisfactory/No Credit Courses. An undergraduate engineering student may count towards a degree up to 9 semester...
hours obtained by Satisfactory/No Credit (S/NC) grading. Such hours must be used for humanities-sciences elective credit in engineering. Certain engineering courses carry only S/NC grading and do not count in this limit.

**Correspondence Courses.** A student should check with his or her major department to see what restrictions there are, if any, on the use of correspondence course credit to meet the minimum degree requirements.

**Humanities and Social Science Electives.** The college assumes an obligation to include in each of the engineering curricula a means whereby students gain greater insight into their interaction with society, both personally and professionally. For this purpose, a part of each engineering curriculum is devoted to humanities and social science electives. These electives serve a threefold need: to provide an expanded sensitivity to the human aspects of the practice of engineering; to enrich the student's knowledge of the world in which he or she lives - its culture, behavior patterns, history, and presentiments; and to provide a basis for the appreciation of and the ability to deal with complex interactions between technology and society in the contemporary world. Engineers are now working with new constraints that demand a consciousness of the social and political implications of their work. They are interacting with the public in explaining their work as the public demands greater participation in the decision-making process concerning the utilization of technology. Because of the significance of this technology-society interaction, engineering students are encouraged to seriously consider their selection of required electives in this area.

Students are urged to plan their Humanities/Social Science elective program in consultation with their advisor. Requirements:

1. Courses must be from this approved list
2. 18 hours minimum
3. 6 hours minimum in social sciences (12 hours maximum)
4. 6 hours minimum in humanities (12 hours minimum)
5. At least 6 hours must be in a single department
6. 6 hours maximum introductory courses (italicized)
7. Foreign languages (a) a foreign language will not be approved if it is the student's native language, (b) 6 hours minimum (if only 3 hours taken, that 3 hours may not be used as a H/SS elective, and (c) other foreign languages may be approved Introductory courses are in italics below (6 hours maximum)

**HUMANITIES**

* Afro-American Studies 201, 202, 322, 352
* American Studies 310
* Anthropology 110, 130, 410, 413

* Asian Studies 107, 102

* Foreign Languages: French 111, 112, 211, 212; German 101, 102, 201, 202; Greek 121, 122, 261, 262; Italian 111, 112, 211, 212; Portuguese 111, 112, 211, 212; Russian 101, 102, 201, 202; Spanish 111, 112, 211, 212


* Medical Studies 201, 261, 262

* Music General 110, 120

* Philosophy 110, 111, 120, 121, 322, 324, 326

* Religious Studies 101, 102, 212, 232, 235, 301, 302, 305, 309, 311, 312, 313, 315, 322, 326

* University Honors 237, 397, 437

**SOCIAL SCIENCE**

* Economics 201, 321, 323, 324, 325

* Geography 141, 320, 330, 361, 421, 441, 443

* Political Science 301, 310, 311, 320, 321, 330, 331, 340, 350, 355, 361, 365, 369, 370, 374

* Psychology 110, 210, 220, 360

* Sociology 110, 200, 310, 311, 321, 340, 343, 344, 345, 363

* University Honors 247, 347, 447

* University Studies 310, 320, 410, 420

**Technical Electives.** Technical electives are to be selected with the advice and approval of the student's major department. In some of the curricula tabulation a choice of such electives is indicated, and regulations in regard to their selection are stated.

**The Voluntary ROTC Program.** Engineering students may participate in the ROTC Program. Advanced ROTC courses (300 and 400 series) may be counted as technical elective credit toward an engineering degree up to a total of six (6) semester hours. Normally, Military Science courses cannot be used as humanities/social science electives. Individual departments determine the appropriate substitutions.

**Approval of Electives and Substitutions.** Each student shall discuss with an advisor the status of the program of study no later than the beginning of the second semester prior to anticipated graduation. Any necessary additions to or substitutions in the program, or electives requiring special approval, must be cleared in writing at that time, and it is each student's responsibility to see that all necessary approvals are secured. Inattention to such matters will most likely delay graduation.

**Agricultural Engineering (See College of Agriculture)**

**CHEMICAL ENGINEERING**

Professors:

- J. J. Parona (Head), Ph. D. Northwestern, PE.
- D. C. Bogue, Ph. D. Delaware; E. S. Clark
- Ph. D. California (Berkeley), L. W. Crawford
- (Space Institute, Tullahoma), Ph. D.
- Cincinnati; O. L. Culberson (Emeritus), Ph. D.
- Texas; J. F. Fellers, Ph. D. Akron
- J. M. Holmes (Emeritus), Ph. D. Tennessee;
- H. W. Hsu, Ph. D. Wisconsin; H. F. Johnson
- (Emeritus), Ph. D. Yale; C. F. Moore, Ph. D.
- Louisiana State; J. W. Prados, Ph. D.
- Tennessee, P. E.; C. D. Scott (Adjunct Status), Ph. D.
- Tennessee, P. E.; C. O. Thomas, Ph. D.
- Tennessee, J. S. Watson (Part-time), Ph. D. Tennessee.

Associate Professors:

- P. R. Bienkowski, Ph. D. Purdue
- J. W. Blackburn (Research), Ph. D.
- Tennessee; D. D. Bruns, Ph. D. Houston
- C. H. Byers (Adjunct Status), Ph. D. California
- Berkeley); R. M. Counce, Ph. D. Tennessee;
- T. L. Donaldson (Adjunct Status); Ph. D.
- Pennsylvania; M. G. Hansen, Ph. D.
- Wisconsin; A. C. Sheth (Space Institute,
- Tullahoma), Ph. D. Northwestern;
- F. E. Weber, Ph. D. Minnesota.

Assistant Professor:

- T. W. Wang, Ph. D. Massachusetts Institute
- of Technology.

**BACHELOR OF SCIENCE PROGRAM**

Chemical engineering is a discipline dedicated to the development, design, operation and management of plants and processes for economical conversion of chemical raw materials to useful products. It is a broadly based discipline, with heavy emphasis on chemistry and mathematics, and also including physics, materials and the humanities. Graduates of the program are quite versatile, with careers in fields such as food and pharmaceutical processing, biochemical engineering, fuels production and conversion, polymers and plastics, process control and instrumentation.

The curriculum provides a central core of required courses with flexibility in the upperdivision years to permit emphasis on preparation for graduate school or professional employment. A minimum grade point average of 2.0 for all departmental courses is required for graduation.

A minimum of 18 semester hours of humanities-sciences courses are required, which are to be selected from the list under "Curricula in Engineering".

**PROGRESSION TO UPPER-DIVISION**

Progression of chemical engineering students to departmental Upper-Division courses is competitive and is based on capacity. Factors considered include overall grade point average, performance in selected lower-division courses and evidence...
of satisfactory and orderly progress through the prescribed curriculum.

**UPPER-DIVISION STATUS:** A Lower-Division student may apply for progression to Upper-Division Status after completing 50 semester hours of Lower-Division engineering curriculum course work with an overall GPA of at least 2.4. This must include Chemical Engineering 200.

**PROVISIONAL STATUS:** Students who have completed 50 semester hours of Lower-Division engineering curriculum course work with an overall GPA between 2.0 and 2.4 may apply for provisional status. The granting of Provisional Upper-Division Status is based on the availability of space in the departmental programs after Upper-Division Status students have been accommodated. Provisional students are required to demonstrate their abilities to perform satisfactorily in upper-division courses by attaining a minimum GPA of 2.0 in at least 9 hours of 200 and 300 level required courses specified by the department. Further progression to upper-division courses is dependent upon this minimum level of performance.

Any student with an overall GPA below 2.0 will not be admitted to upper-division Chemical Engineering courses. Students who have not been admitted to an Upper-Division Status will be dropped from departmental class rolls.

Transfer students at the Upper-Division level are admitted on a Provisional Status basis only.

**GRADUATE STUDY PROGRAM**

Graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Chemical Engineering are offered. The University’s Graduate School operates a Resident Graduate Program at Oak Ridge and Kingsport. See the Graduate Catalog for detailed information.

**CIVIL ENGINEERING**

Including Environmental Engineering

Professors:

G. D. Reed (Head), Ph. D. Arkansas, P. E.;
E. G. Burdette (Fred N. Peebles Professor),
Ph. D. Illinois, P. E.;
A. Chatterjee, Ph. D. North Carolina State, P. E.;
W. T. Davis (Associate Dean - Graduate School), Ph. D. Tennessee;
D. W. Goodpasture (Tenneco Professor), Ph. D. Illinois, P. E.;
W. L. Grecco (Associate Dean - Engineering), Ph. D. Michigan State, P. E.;
K. W. Heathington (Associate Vice President - Research), Ph. D. Northwastern;
J. B. Humphreys, Ph. D. Texas A&M, P. E.;
H. L. Johnson, M. S. Tennessee, P. E.;
W. A. Miller (Director - SAMs), Ph. D. Georgia Institute of Technology, P. E.;
B. A. Tschanz (Condra Professor), ScD New Mexico State, P. E.;
C. R. Walker (Emeritus) M. S. Massachusetts Institute of Technology, P. E.;
D. W. Weeter, Ph. D. Purdue, P. E.;
J. Wegmann (IBM Professor), Ph. D. Northwestern.

Associate Professors:

B. J. Frederick, B. C. E. Clarkson University,
P. E.;
J. H. Hansen (Space Institute, Tulalahoma), Ph. D. Missouri;
G. D. Kressin, J. D. Tennesse;
A. B. Moore, M. S. Tennessee;
R. B. Robinson (Fisher Professor), Ph. D. Iowa State, P. E.;
R. F. Tiry (Emeritus), B. S. Marquette, P. E.

Assistant Professors:

R. M. Bennett, Ph. D. Illinois, P. E.;
E. C. Drumm, Ph. D. Arizona, P. E.;
W. F. Kane, Ph. D. Virginia Polytechnic Institute and State University.

**BACHELOR OF SCIENCE PROGRAM**

The curriculum in civil engineering is designed to provide training in fundamental engineering sciences and in certain basic subjects in various civil engineering fields to serve as a basis for entrance into civil engineering practice and/or for graduate study. By use of technical electives a student can emphasize areas of study in construction, environmental engineering, geotechnical/materials, structures, transportation, or water resources.

Students are required to maintain a cumulative grade point average of at least 2.0 in all civil engineering and environmental engineering courses taken at The University of Tennessee, Knoxville, and used to satisfy the graduation requirements.

**ELECTIVES**

The department maintains lists of acceptable technical electives at the departmental office. Students must consult this list prior to registering for elective courses.

**MASTER OF SCIENCE PROGRAM**

Graduate programs in civil engineering and environmental engineering leading to the degree of Master of Science are offered to graduates of recognized undergraduate curriculum.

The general requirements for the masters' degrees are stated in the Graduate Catalog.

**DOCTORAL PROGRAM**

Graduate work leading to the degree of Doctor of Philosophy with a major in civil engineering is offered. Major fields of study include environmental engineering, geotechnical/materials, structural engineering, transportation, and water resources.

The general requirements for the doctoral degree are stated in the Graduate Catalog.

**ELECTRICAL AND COMPUTER ENGINEERING**

Professors:

J. M. Googe (Acting Head), Ph. D. Georgia Institute of Technology, P. E.;
I. Alexeff, Ph. D. Wisconsin, P. E.;
J. M. Bailey, Ph. D.

**GEORGIA INSTITUTE OF TECHNOLOGY**

Electrical and Computer Engineering 77
is sufficiently flexible to allow a student to take several courses outside the chosen area of focus. A student must take at least one senior elective that is a designated design course.

Generally, all sophomore and junior course work is offered each semester. Senior work is scheduled so that the student may enter at the beginning of the Fall Semester. This arrangement allows maximum flexibility, since the student may elect the normal four-year schedule, may choose an accelerated schedule, or may participate in the Cooperative Engineering Program. In addition to the usual research and teaching facilities in machinery, electronics, micro-waves, solid state devices, and control equipment, the department has microcomputer, minicomputer and personal computer facilities.

PROGRESSION TO UPPER-DIVISION STATUS

Progression of electrical engineering majors to the upper-division programs of the department is based on the completion of all freshman courses prior to entering the sophomore level. Students applying for ECE 201 must have completed all courses listed in the freshman year of the ECE curriculum. Students must complete ECE 201, 202, Mathematics 200, 231, 241 and Physics 231, 232 before enrolling in junior level (300) courses in ECE. Prerequisites and corequisites as stated in the catalog are strictly enforced.

Students are evaluated during the second semester of the freshman year for enrollment in ECE 201, during the first semester of the sophomore year for ECE 202, and during the second semester of the sophomore year for enrollment in the junior level courses. Students must pre-register in the Department the previous semester to be evaluated for 201.

Passing grades in ECE 201, 202 and all of their corequisites and prerequisites are required for enrollment in all upper division electrical engineering courses.

Those selected into the junior level courses of the department will not be permitted to register for any upper division courses within the department. Students failing to satisfy the departmental requirements for course enrollment will be counseled and advised of educational alternatives. In the junior year, students may select any 4 of 6 electives during the second semester. These elective courses include electronics, energy, communications, computers, systems and plasma. Students must maintain an overall GPA of 2.00 on all ECE courses before obtaining a Bachelor of Science Degree.

GRADUATE

Comprehensive course and research programs for the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in Electrical Engineering are offered for students with career goals such as advanced design, research and teaching. Students admitted to the graduate program are expected to have a minimum point average of 3.0 for both all undergraduate study and for the senior year. Students with a B.S. or B.A. degree in a field other than Electrical Engineering are required to take certain ECE undergraduate courses before beginning the graduate program. See the Graduate Catalog for complete details on the graduate program.

ENGINEERING PHYSICS

Professor W. M. Bugg (Head); Physics staff as listed in the College of Liberal Arts.

The curriculum in engineering physics is designed to fulfill the educational requirements for professional work in various fields of applied science which are based upon a thorough knowledge of physics. The first two years are comprised of fundamental courses in engineering, science, and mathematics. In the upper division, the curriculum allows some choice of courses in engineering and in physics depending upon the interest of the student. The undergraduate program is a complete, professional program, equipping the student for entry into a variety of work in industry and research. The program also leads to graduate work in either physics or engineering.

ENGINEERING SCIENCE AND MECHANICS


Assistant Professor: J. A. M. Boulet, Ph. D. Stanford.

BACHELOR OF SCIENCE PROGRAM

The curriculum in engineering science provides students an opportunity for education with breadth in engineering science, mathematics, and physical or biological science. The program prepares students for a career in engineering development, research or additional graduate study leading to the master's or the doctoral degrees. The curriculum provides students a broad engineering education which permits a strong emphasis on engineering principles and basic science.

In the first two years students in the engineering science program study engineering, science, and mathematics. The engineering science program in the upper-division years contains a sufficient number of electives to provide for those special interests of students that cannot be accommodated in other programs. Examples of special interest elective groups available are engineering mechanics, biomedical engineering, environmental sciences, engineering materials, and non-destructive evaluation. Other elective groups are currently being developed and will be available in the future.

The engineering mechanics elective group focuses on analytical, computational and experimental methods used in investigating practical engineering problems. It is designed especially to develop engineers capable of engaging in research and development in industrial and governmental research laboratories. Because such preparation involves emphasis on the link between the basic sciences and engineering fundamentals, the engineering mechanics elective group provides a good background for students wishing to pursue engineering graduate studies.

The biomedical engineering elective group provides the basic background for an engineer to contribute to the fields of biology and medicine in technical areas as the design of research and diagnostic equipment, the development of artificial organs, and the application of the engineering sciences to further the basic understanding of biological systems. With some modifications, the program can emphasize other areas such as the use of computer systems to automate hospital operations, analyze medical data, and contribute to the broad area of health care delivery systems. Interested and qualified students may choose to use this program as a background for graduate study in engineering or the life sciences. The program includes the courses required for entrance into most medical schools, including The University of Tennessee Center for the Health Science in Memphis.

The environmental sciences elective group provides the opportunity for the student to apply engineering principles to the solution of environmental problems. This program gives the necessary background to achieve a high level of competence in professional practice or graduate study.
The engineering materials elective group provides background in the use of materials for various engineering applications including the selection of the proper materials to support the anticipated loads during the design life of the industrial need for individuals with a combined background in both structural analysis and materials properties.

The non-destructive evaluation elective group provides background in the application of techniques for evaluation material properties and determining material flaws. Demand for this background is increasing in high technology industries. Techniques studied include ultrasonics, X-rays, dye penetration, photoelasticity.

The basic engineering sciences curriculum provides an opportunity to study those engineering science areas recognized by the American Society for Engineering Education such as (1) mechanics; (2) electrical science, electric and magnetic fields, circuits, and electronics; (3) thermodynamics and statistical mechanics; (4) materials and momentum transfer; and (5) information science; (6) transfer and related processes such as heat, mass, and momentum transfer; and (7) environmental sciences. No student will study all the engineering sciences but must structure a course plan to provide depth in some of the engineering sciences.

Because of the large number of elective courses to be selected in the engineering science degree program, faculty advising plays an essential role in the process of developing the student's course of study. Before the end of the sophomore year, students in the engineering science program are required to develop, in concert with a faculty advisor, a statement of objective and a course plan for the upper-division years.

For students with more than 70 semester hours, this course plan must be filed with the office of Admissions and Records before they can register for additional courses, and before a senior standing sheet can be prepared.

**MASTER OF SCIENCE AND DOCTORAL PROGRAMS**

Graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in a major in engineering sciences are available to graduates of recognized curricula in engineering, mathematics, or one of the physical or biological sciences. Program options include solid mechanics, fluid mechanics, biomedical engineering, and other engineering sciences. In the biomedical and engineering science option, interdisciplinary programs are arranged to meet individual needs or interests. Each applicant is advised as to any prerequisite courses before entering a program; the student's program of study must be approved by his or her advisory committee, and must comply with the requirements of the Graduate School. The student's major professor may be selected from a department other than the Department of Engineering Science and Mechanics.

The flexibility and interdisciplinary aspects of the program options are intended to be of particular interest to prospective students currently employed in research, development, or design activities and whose interests in continuing education (either full-time or part-time) lie at one of the interfaces between science and engineering, or can best be met by interdisciplinary study in engineering. The department's course offerings and research activities are also intended to meet the needs of students who seek preparation for employment in engineering areas requiring specialization in mechanics, or in related interdisciplinary studies.

General policies of the Graduate School relating to admission, residence, examinations, and research are described in the Graduate Catalog.

**INDUSTRIAL ENGINEERING**

**Professors:**
J. N. Snider (Head), Ph. D. Ohio State, P. E.;
W. W. Claycombe, Ph. D. Virginia Polytechnic Institute, P. E.;
E. L. DePorter (IBM Professor), Ph. D. Virginia Polytechnic Institute;
D. C. Doulet, M. S. Tennessee, P. E.;
H. P. Emerson (Emeritus),
S. B. Massachusetts Institute of Technology, P. E.;
G. Garrison (Part-time, Space Institute, Tullahoma), Ph. D. North Carolina State;
R. M. LaForge (Emeritus), M. S. Georgia Institute of Technology, P. E.;
E. L. Loveless, M. S. North Carolina State, P. E.;
W. G. Sullivan, Ph. D. Georgia Institute of Technology, P. E.;
J. D. Westbrook, Ph. D. Virginia Polytechnic Institute, P. E.

**Associate Professors:**
D. H. Hutchinson, Ph. D. Georgia Institute of Technology, K. E. Kirby, Ph. D. Tennessee.

**Assistant Professors:**
C. H. Aiken III, Ph. D. Tennessee, P. E.;
J. C. Hungerford, Ph. D. Ohio State.

**Instructor:**
D. F. Jackson, M. S. Tennessee.

**Lecturers:**
J. A. Bontadelli (Part-time), Ph. D. Ohio State;
S. Douglass (Part-time), Ph. D. Tennessee;
J. C. Mitchell (Part-time, Space Institute, Tullahoma), Ph. D. Vanderbilt.

The undergraduate curriculum in industrial engineering provides a strong background in both fundamental engineering principles and the analytic methods necessary for solving the multi-faceted problems associated with the production, maintenance, and delivery of goods and services. In particular, this curriculum emphasizes the knowledge and skills necessary to design integrated systems of people, materials, equipment, and energy wherever they are found, such that the overall system functions at an optimal level and such that the needs of the human components of the system are adequately met.

This curriculum, which is built upon a strong background in mathematics and statistics, includes fundamental course work in all of the engineering sciences, introductory economics and accounting, training in fundamental human factors which influence engineering design, the economic analysis of alternative design choices, quality control techniques, manufacturing processes and materials, production and inventory systems design and control, material handling systems and facilities design, the mathematical modeling and simulation of complex systems, and the design and installation of information acquisition and control systems. The technical and non-technical electives further allow the students to specialize in an area(s) which meets particular needs.

The solid, broad base in engineering, combined with training in applying engineering methodology to traditionally non-engineering problem areas as provided through the industrial engineering curriculum, leads to participation by industrial engineers in an unlimited range of fields, including, among others, retail distribution, banking, health care delivery, corporate management, municipal management, aerospace systems, research groups, and government as well as in the traditional area of manufacturing.

**MASTER OF SCIENCE PROGRAM**

A graduate program leading to the degree of Master of Science is open to graduates of A. B. E. T.-accredited undergraduate curricula in Industrial Engineering or to graduates of other technical curricula who take an approved list of prerequisite course work. A non-thesis degree requires 30 hours of course work plus a 3-hour project is available. Graduate work in Industrial Engineering provides for concentrations in operations research, engineering management, manufacturing and production systems, human factors engineering, information systems, reliability and quality control and traditional industrial engineering. Either one or two minors can be elected in Engineering, Mathematics, Psychology, Business, Computer Science, Statistics or Economics.

**MASTER OF ENGINEERING PROGRAM**

This professional degree program is intended as a culmination year in a five-year baccalaureate-master program which emphasized engineering design and professional practice. Admission requirements include those presented above plus the requirement of a Bachelor's degree from an A. B. E. T.-accredited Industrial Engineering program. This 30-semester hour program requires 12 hours of course work in an industrial engineering core, 6 hours of technical methods electives, 8 hours of Industrial engineering design electives and 6-hour thesis or design project.

**MATERIALS SCIENCE AND ENGINEERING**

**Professors:**
J. E. Spruiell (Head), Ph. D. Tennessee;
K. H. G. Ashbee, Ph. D. Birmingham (England);
D. C. Bouge, Ph. D. Delaware;
B. S. Boris (Part-time), Ph. D. Massachusetts Institute of Technology, C. R. Brooks, Ph. D.
Tennessee; R. A. Buchanan, Ph. D.; D. Vanderbilt; E. S. Clark, Ph. D. California (Berkeley); D. A. Canonico (Adjunct Status); Ph. D. Lehigh; J. F. Fellers, Ph. D. Akron; J. S. Lin (Adjunct Status); Ph. D. Kansas; D. H. Louis (Research Professor, Part-time), Ph. D. Colorado; C. D. Lundin, Ph. D. Rensselaer Polytechnic Institute; C. J. McHargue (Part-time), Ph. D. Kentucky; B. F. Oliver, Ph. D. Pennsylvania State; P. J. Phillips, Ph. D. Liverpool (England); E. E. Stansbury (Emeritus), Ph. D. Cincinnati.

Associate Professors: W. T. Becker, Ph. D.Illinois; C. T. Liu (Adjunct Status), Ph. D. Brown University; T. T. Meek, Ph. D. Georgia Institute of Technology; J. S. M. McDaniel, Ph. D. University of Alabama; D. C. Murdock, Ph. D. Wisconsin; W. R. Perrett, Ph. D. Texas A&M; E. S. Clark, Ph. D. California Institute of Technology; E. S. Clark, Ph. D. Penn State; J. D. Fawcett, Ph. D. Ohio State; W. W. Jewett, Ph. D. California State; R. J. Carley, Ph. D. Arizona State; W. J. Day, Ph. D. Texas A&M; J. M. D. Gough, Ph. D. Michigan State; C. E. Keating, Ph. D. Massachusetts Institute of Technology; F. W. Schaub, Ph. D. Stanford University; R. W. Holland, Ph. D. South Carolina; C. H. Koo, Ph. D. Johns Hopkins University; J. W. Hunter, Ph. D. Georgia Institute of Technology; D. S. H. Hsu, Ph. D. California Institute of Technology; M. E. A. George Washington; C. F. Lo (Space Institute, Tullahoma, Research Professor), Ph. D. Corneli; R. L. Maxwell (Emeritus), M. S. Case Western Reserve, P. E.; M. W. Milligan, Ph. D. Tennessee, P. E.; M. K. Newman (Emeritus, Space Institute, Tullahoma), Ph. D. Columbia, P. E.; M. Parang, Ph. D. Oklahoma, P. E.; J. R. Parsons, Jr., Ph. D. North Carolina State, P. E.; C. Peters (Space Institute, Tullahoma), D. Applied Science Brussels; F. Shakthi, Ph. D. (Space Institute, Tullahoma), Ph. D. Oklahoma; G. V. Smith, Ph. D. Pennsylvania State, P. E.; F. H. Speckhart (IBM Professor), Ph. D. Georgia Institute of Technology, P. E.; W. K. Stair (Emeritus), M. S. Tennessee; J. M. Tucker (Emeritus), M. S. Illinois; H. J. Wilkerson, Ph. D. Tennessee, P. E.; C. C. Wilson, Ph. D. Purdue; J. M. Wu (Space Institute, Tullahoma), Ph. D. California Institute of Technology; R. L. Young (Space Institute, Tullahoma), Ph. D. Tennessee, P. E.

Associate Professors: S. E. Becker, Ph. D. North Carolina State, P. E.; R. A. Crawford (Space Institute, Tullahoma), Ph. D. Tennessee, T. H. Mounfield (Space Institute, Tullahoma), Ph. D. Tennessee; R. J. Schulz (Space Institute, Tullahoma), Ph. D. Tennessee, P. E.; A. A. Vakil (Space Institute, Tullahoma), Ph. D. Tennessee.

Assistant Professors: R. V. Dubey, Ph. D. Clemson, S. M. Jeng (Space Institute, Tullahoma), Ph. D. Penn State; R. Keyhani, Ph. D. Ohio State; K. E. Nguyen, Ph. D. Colorado.

BACHELOR OF SCIENCE PROGRAM
Separate curricula are offered in aerospace engineering and mechanical engineering; however, the first two years of these curricula are identical. During the first two years, the curricula provide for training and study in the basic sciences of physics, mathematics, chemistry, and engineering common to these fields. The third year of both programs continues with the development of the particular engineering sciences of the aerospace and mechanical engineering fields. In the senior year an opportunity is provided for the student to apply this fundamental knowledge to mechanical and aerospace engineering problems. Both curricula are arranged in the upper-division years to prepare the student for graduate study or technical employment.

Aerospace engineering has scientific foundations close to those of mechanical engineering. The aerospace engineer, however, devotes attention particularly to the research, development, design, testing, and production of aerospace vehicles - aircraft.

MECHANICAL AND AEROSPACE ENGINEERING
Professors: D. R. Pitts (Head), Ph. D. Georgia Institute of Technology; R. V. Arimiili, Ph. D. Virginia Polytechnic Institute and State University; J. F. Bailey (Emeritus), Ph. D. Lehigh, P. E.; G. W. Braun (Emeritus, Space Institute, Tullahoma), Ph. D. Gotingten; F. G. Collins (Space Institute, Tullahoma), Ph. D. California (Berkeley), P. E.; A. J. Edmondson, (Associate Head), Ph. D. Texas A&M; J. A. Eular, Ph. D. Purdue, P. E.; W. Frost (Space Institute, Tullahoma), Ph. D. Washington; G. W. Garrison (Space Institute, Tullahoma), Ph. D. North Carolina State; K. E. Harwell (Space Institute, Tullahoma).

PROGRESSION TO UPPER-DIVISION PROGRAMS
Progression of students to departmental Upper-Division courses is competitive. Factors considered include overall grade point average, performance in selected lower-division courses and evidence of satisfactory and orderly progress through the prescribed curriculum. Upper-Division Status: A Lower-Division student formally applies for Upper-Division Status after completing 50 semester hours of Lower-Division engineering curriculum course work with an overall GPA of at least 2.4. This must include Materials Science and Engineering 201.

PROVISIONAL STATUS: Students who have completed 50 semester hours of Lower-Division engineering curriculum course work with an overall GPA between 2.0 and 2.4 may apply for provisional status. The granting of Provisional Upper-Division Status is based on the availability of space in the departmental programs after Upper-Division Status students have been accommodated. Provisional students are required to demonstrate their ability to perform satisfactorily in upper-division courses by attaining a minimum GPA of 2.0 in at least 8 hours of 300-level required courses specified by the department. Further progression to upper-division courses is dependent upon this minimum level of performance.

TRANSFER STUDENTS: At the Upper-Division level students are admitted on a Provisional Status basis only. Any student presenting more than 28 hours of Lower-Division engineering curriculum course work by transfer credit is considered to be a transfer student.

GRADUATE STUDY PROGRAMS
Graduate programs leading to the degrees of Master of Science and Doctor of Philosophy with a major in metallurgical engineering or polymer engineering are offered. Detailed information about graduate programs in materials science and engineering and the requirements for either M. S. or Ph. D. degrees are given in the Graduate Catalog.
spacecraft, missiles; auxiliary systems -
heating, cooling, guidance, control; and pro-
pulsion systems - piston engines, turbo-jets,
ramjets, rockets. Emphasis in the senior year
is directed toward these topics and the pro-
gram culminates in a major aerospace
project design.

Mechanical engineering, the most versa-
tile engineering discipline, has its foundation
in the basic sciences and requires an under-
standing of such areas of applied science as
solids and fluid mechanics, thermodynamics,
heat transfer, structures, vibrations, mechan-
ical design, manufacturing processes, and
instrumentation in order to resolve the com-
plex engineering problems of the real world.

A major design project in the senior year
builds upon this background in a capstone
experience.

PROGRESSION TO UPPER-
DIVISION PROGRAMS

Progression to Upper Division Programs is
competitive and is based on departmental
capacity. Factors considered include overall
grade point average, performance in
selected lower division courses, and evi-
dence of satisfactory and orderly progress
through the prescribed curriculum.

A minimum cumulative grade point aver-
age of 2.0 for all departmental courses taken
at UTK is required for graduation.

FULL STATUS: A Lower Division student in
the department may apply for progression to
upper Division Programs after completing 52
semester hours of Lower Division engineer-
ing curriculum or satisfactory progress with and overall
GPA of at least 2.4.

PROVISIONAL STATUS: Students who have
completed 52 semester hours of Lower Divi-
sion engineering curriculum course work
with an overall GPA between 2.0 and 2.4
may apply for provisional status. The grant-
ing of Provisional Status is based on the
availability of space in departmental pro-
grams after Full status students have been
accommodated. Provisional Status students
are required to demonstrate their abilities to
perform satisfactorily in Upper Division
courses by attaining a minimum GPA of 2.0
in at least 11 semester hours of 300 level
required engineering courses (included 8
specified hours in the department). Further
progression to upper division courses is
dependent upon this minimum level of per-
formance.

Any student with an overall GPA below
2.0 will not be admitted to mechanical or aero-
space engineering courses. Students who
have not been progressed to an Upper Divi-
sion Program will be dropped from
departmental class rolls.

TRANSFER STUDENTS: At the Upper Divi-
sion level students are admitted on a
Provisional Status basis only. Any student
presenting more than 28 semester is consid-
ered a Transfer Student.

LOSS OF FULL STATUS: Students who
progress to Upper Division Programs are
expected to maintain an overall GPA of at
least 2.0 and a concurrent GPA of at least 2.0
in departmental courses. Failure to main-
tain these minimum level of performance will
result in a review of the overall progress of
the student through the prescribed curricu-
lum and probable loss of Full Status.

GRADUATE STUDY PROGRAMS

Graduate programs leading to the
degrees of Master of Science and Doctor of
Philosophy with specialization in mechanical
engineering or aerospace engineering are
available to graduates of recognized under-
graduate curricula in mechanical or
aerospace engineering and to graduates of
the curricula who satisfy the necessary pre-
requisite courses. The general requirements
for advanced degrees are summarized in the
Graduate Catalog.

NUCLEAR ENGINEERING

Professors:

T. W. Kerlin (Head), Ph. D. Tennessee, P. E.;
H. L. Dodds, Ph. D. Tennessee, P. E.;
J. B. Fusseil (Part-time), Ph. D. Georgia
Institute of Technology; J. T. Mihalczko (Part-
time), Ph. D. Tennessee; P. F. Pasqua
(Penn State), Ph. D. Northwestern, P. E.;
R. B. Perez, Ph. D. Madrid (Spain);
H. C. Roland, Ph. D. Tennessee;
P. N. Stevens, Ph. D. Northwestern, P. E.;
J. E. Turner (Part-time), Ph. D., (Vanderbilt),
P. E.; N. Uckan (Part-time), Ph. D. Michigan,
R. E. Uhrig (Distinguished Professor), Ph. D.
Iowa State, P. E.

ASSOCIATE Professors:

E. M. Katz, Ph. D. Tennessee, P. E.;
L. F. Miller, Ph. D. Texas A&M, P. E.;
T. H. Scott, Ph. D. Florida, P. E.;
B. R. Upadhyaya, Ph. D. California, P. E.

BACHELOR OF SCIENCE

PROGRAM

The curriculum is designed to provide a
thorough educational experience for stu-
dents interested in careers in nuclear
engineering. The first two years are con-
cerned with the fundamental courses needed
as preparation for upper division courses. In
the last two years students take scientific
and engineering courses which equip them
for entry into industry, research, or graduate
studies.

MAJOR OF SCIENCE

PROGRAM

A graduate program leading to a degree of
Master of Science is available to gradu-
ates of recognized undergraduate curricula
in engineering and physics. Each applicant
will be advised as to the necessary prerequi-
site courses before entering the program.

The general requirements of the masters'
degree are summarized in the Graduate Cat-
galog.

DOCTORAL PROGRAM

A program leading to the Ph. D. degree is
available in nuclear engineering. For details,
see the Graduate Catalog.

CURRICULA

Course requirements for the various engi-
neering curricula are listed on the following
pages. The numbers in the columns indicate
the number of semester hours credit for
each course. Individual course prerequisites
should be strictly adhered to, even if courses
are not taken in the semester indicated.

Although the requirements for each degree
can be completed in four academic years
(five for the cooperative program), the quality
of the learning experience is much more
important than the speed with which the cur-
ricula are completed.

Questions about individual courses
should be directed to the department
responsible for the course; questions about
a particular curriculum should be directed to
the major department.

Prerequisites. Before registering for any
engineering course, a student should take
certain that any necessary background work
has been completed. In addition to specific
prerequisites listed, it is assumed that a stu-
dent taking sophomore engineering courses
has completed all freshman courses,
whether specifically listed as a prerequisite
or not. When this is not the case, a student
should seek advice from the advisor or
department responsible for the course in
question before registration so as to mini-
imize the chances of academic difficulty.

Students who do not have prescribed pre-
requisites may be dropped from a course at
any time during a semester when the lack of
prerequisites is discovered.

FRESHMAN YEAR

The freshman year is common to all engi-
neering programs, except for engineering
physics. (See curriculum display which fol-
lows.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>English 101, 102</td>
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<tr>
<td>Chemistry 120, 130</td>
<td>8</td>
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<tr>
<td>Mathematics 141, 142</td>
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<tr>
<td>Basic Engineering 111, 101</td>
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<td>Basic Engineering 121, 131</td>
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<td>Basic Engineering 100</td>
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<tr>
<td>Total:</td>
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</tr>
<tr>
<td>Hours:</td>
<td>35</td>
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</table>

AEROSPACE ENGINEERING

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Mathematics 231, 241</td>
<td>7</td>
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<tr>
<td>Mathematics 200</td>
<td>1</td>
</tr>
<tr>
<td>Physics 231, 232</td>
<td>7</td>
</tr>
<tr>
<td>Engineering Science and Mechanics 231, 321</td>
<td>6</td>
</tr>
<tr>
<td>Basic Engineering 201</td>
<td>2</td>
</tr>
<tr>
<td>Material Science and Engineering 301, 311</td>
<td>3</td>
</tr>
<tr>
<td>Mechanical Engineering 331</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Social Science Elective</td>
<td>6</td>
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<tr>
<td>Aerospace Engineering 362, 363</td>
<td>6</td>
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<tr>
<td>Mechanical Engineering 332, 341, 391</td>
<td>8</td>
</tr>
<tr>
<td>Aerospace Engineering 345, 355, 370</td>
<td>9</td>
</tr>
<tr>
<td>Electrical and Computer Engineering 301, 302</td>
<td>6</td>
</tr>
<tr>
<td>Humanities/Social Sciences Electives</td>
<td>6</td>
</tr>
<tr>
<td>Aerospace Engineering 431, 449</td>
<td>4</td>
</tr>
<tr>
<td>Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Social Sciences Electives</td>
<td>6</td>
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<tr>
<td>Total:</td>
<td>136</td>
</tr>
<tr>
<td>Hours:</td>
<td>136</td>
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</tbody>
</table>

1Humanities/social science electives: minimum of
CHEMICAL ENGINEERING

Sophomore
Chemical Engineering 200, 240
Chemistry 310-319, 371
Mathematics 200, 221
Physics 231
Humanities/Social Science 3
Electrical Engineering 301
Junior
Chemical Engineering 330, 340, 310, 360, 380
Chemistry 350, 381
Material Science and Engineering 201
Chemistry Option
* Humanities/Social Science 3
Senior
Chemical Engineering 450, 440, 480, 410, 490
Technical Electives
Humanities/Social Science 3
Total: 132 hours

* Must be selected from approved college list.

CIVIL ENGINEERING

Sophomore
Mathematics 241, 231, 200
Physics 231
English 439
Geology 210
Engineering Science and Mechanics 231
Civil Engineering 210(261), 251
Mechanical Engineering 331
Humanities/Social Science 3
* Humanities/Social Science 3
*Humanities/Social Science 3
* Humanities/Social Science 3
* Humanities/Social Science 3
Senior
Civil Engineering 440, 471, 480, 400, 405
Engineering Electives
Civil Engineering Electives
Technical Electives
Humanities/Social Science 3
Total: 137 hours

* See College list of approved courses.

ELECTRICAL AND COMPUTER ENGINEERING

Sophomore
Mathematics 231, 200, 241
Physics 231, 232
Electrical and Computer Engineering 201, 202, 209
Material Science and Engineering 201
Basic Engineering 201
Humanities/Social Science Electives 3
* Junior
Electrical and Computer Engineering 311, 312, 314, 315
Electrical and Computer Engineering 321, 331
* Electrical and Computer Engineering 331(339), 342(349), 363(389)
* Electrical and Computer Engineering 341(339), 342(349), 363(389)
* Electrical and Computer Engineering 331(339), 342(349), 363(389)
* Humanities/Social Science Electives 3
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
* Senior
Electrical and Computer Engineering Senior Electives
Humanities/Social Science Electives 3
Mechanical Engineering 331
Total: 135 hours

* Must take 3 of these 5 courses which are 3 hour courses and 1 hour lab each.

ENGINEERING PHYSICS

Freshman
Physics 137 (131), 138 (132)
Mathematics 141, 142
Chemistry 120, 130
English 101, 102
Basic Engineering 100, 111
Sophomore
Physics 237 (231), 238 (232)
Mathematics 241, 231
Engineering/Techn. Elective
Humanities/Social Science Elective
Junior
Physics 311, 321, 312, 321
Physics Lab Elective
Engineering/Techn. Elective
Humanities/Social Science Elective
Senior
Physics 431, 432, 412
Physics 411
Engineering/Techn. Elective
Electives
Total: 128 hours

* Honors courses (137-38, 237-38) are recommended to qualified students. Transfer students from other engineering departments may substitute Basic Engineering 121-131 for Physics 137, but must show training in heat and thermodynamics or take Physics 138 (132).
* A total of 12 hours of engineering electives plus 9 hours of technical electives are required.
* Engineering electives should form a coherent group of courses taken in the College of Engineering. Technical electives may be taken in physics, engineering, math, other physical sciences, or astronomy.
* Non-technical electives are to be taken in the College of Liberal Arts from departments not included in the technical electives, with at least 10 hours taken in the humanities.
* From Physics 361-362 or Physics 461-462-463.
* Students not planning to pursue graduate studies may substitute Physics 340 and either 341 or 342.

ENGINEERING SCIENCE AND MECHANICS

Sophomore
Mathematics 241, 231, 200
Physics 231, 232
Material Science and Engineering 201
Engineering Science and Mechanics 231
Technical Electives
Junior
Basic Engineering 201
Electrical and Computer Engineering 301
Engineering Science and Mechanics 322 or 442
Engineering Science and Mechanics 301, 351
Material Science and Engineering 201
Electrical and Computer Engineering 331
Industrial Engineering 405
Technical Electives
Humanities/Social Science Electives
Senior
Engineering Science and Mechanics 431, 452, 453, 465
Material Science and Engineering 321
Engineering Science and Mechanics 331
Technical Electives
Humanities/Social Science Electives
Total: 136 hours

* Courses (including biomedical engineering courses) approved by the student's advisor and the department which, when taken together, form a biomedical engineering emphasis. Pre-med, pre-vet, and pre-dentistry programs include biology and organic chemistry courses as part of these electives.
* Appropriate course approved by the department.

INDUSTRIAL ENGINEERING

Sophomore
Physics 137 (131), 138 (132)
Mathematics 141, 142
Chemistry 120, 130
English 101, 102
Basic Engineering 100, 111
Sophomore
Physics 237 (231), 238 (232)
Mathematics 241, 231
Engineering/Techn. Elective
Humanities/Social Science Elective
Junior
Physics 311, 321, 312, 321
Physics Lab Elective
Engineering/Techn. Elective
Humanities/Social Science Elective
Senior
Physics 431, 432, 412
Physics 411
Engineering/Techn. Elective
Electives
Total: 128 hours

* Honors courses (137-38, 237-38) are recommended to qualified students. Transfer students from other engineering departments may substitute Basic Engineering 121-131 for Physics 137, but must show training in heat and thermodynamics or take Physics 138 (132).
* A total of 12 hours of engineering electives plus 9 hours of technical electives are required.
* Engineering electives should form a coherent group of courses taken in the College of Engineering. Technical electives may be taken in physics, engineering, math, other physical sciences, or astronomy.
* Non-technical electives are to be taken in the College of Liberal Arts from departments not included in the technical electives, with at least 10 hours taken in the humanities.
* From Physics 361-362 or Physics 461-462-463.
* Students not planning to pursue graduate studies may substitute Physics 340 and either 341 or 342.

ENGINEERING SCIENCE: BIOMEDICAL ENGINEERING CONCENTRATION

Sophomore
Mathematics 241, 231, 200
Physics 231, 232
Engineering Science and Mechanics 231
Statistics 251
Junior
Electrical and Computer Engineering 301, 302
Industrial Engineering 405, 302, 300, 400
Industrial Engineering 301, 304
Nuclear Engineering 310, 311
Economics 200
Accounting 201
Sophomore
Humanities/Social Science Electives
Technical Elective
Industrial Engineering 401, 402, 403, 404, 406, 421, 422
Industrial Engineering Elective
Total: 139 hours

MATERIALS SCIENCE AND ENGINEERING

Sophomore
Materials Science and Engineering 201, 202
Physics 231, 232
Materials Science and Engineering Concentration
Total: 2-4 hours
Senior Concentration Courses

A. Metallurgical Engineering (Materials Science and Engineering 421, 422, 423, 424, 470) 5 (Technical Elective) 3
B. Polymer Engineering (Materials Science and Engineering 442, 443, 444) 9 (Technical Elective) 3 (Materials Science and Engineering Elective) 3
C. Materials Engineering (Materials Science and Engineering 310, 470, 471, 472) 12 (Materials Science and Engineering Elective) 6

MECHANICAL ENGINEERING

Sophomore
Mathematics 231, 241, 200 ................................... 8
Physics 231, 232 ............................................ 7
Engineering Science and Mechanics 231, 321 ........... 6
Basic Engineering 201 ..................................... 2
Material Science and Engineering 201# .................. 3
Mechanical Engineering 331 ................................ 3
Humanities/Social Sciences Elective# ...................... 6
Junior
Electrical and Computer Engineering 320 .................. 6
Humanities/Social Sciences Elective# ...................... 6
Senior
Mechanical Engineering 451, 466, 475, 449, 431 ....... 13

Total: 136 hours
Jacquelyn DeJonge, Dean
Frances Andrews, Associate Dean,
Academic Administration
Kermit Duckett, Associate Dean, Graduate
Studies and Research
Joan W. Howell, Coordinator, Undergraduate
Services

The College of Human Ecology ranks
among the top five U.S. colleges of its kind
in student enrollment, and in the number of
master's and doctoral degrees granted. All
undergraduate programs of the College are
accredited by The American Home Econom-
ics Association and the Interior Design
program is accredited by the Foundation for
Interior Design Education Research (FIDER).
Students in the College are prepared as
specialists within the integrated professional
field of Human Ecology, which is focused on
investigating the interactions between indi-
viduals and families, and their near
environments. The faculty are not content
with studying and teaching "what is"; they
make the College's programs relevant to
career goals and aspirations of today's stu-
dents by promoting "what can and should
be."

Human Ecology graduates are employed in
professional positions that serve individu-
als, families, and consumers by helping them
predict and solve future-oriented problems.
The College's undergraduate programs pre-
pare individuals to work as career
professionals in fields like merchandising,
interior design, hospitality management, tex-
tile science, applied child development, and
dietetics.

All departments of the College conduct
basic and applied research supported by
grants and contracts, and by the Agricultural
Experiment Station. The diverse instructional
and research facilities feature state-of-the-art
equipment: closed-circuit television for
observing children in Child Development
Labs; an accredited small animal laboratory
for nutrition research; a quantity foods dem-
onstration facility for hotel, restaurant
administration; the only non-woven textile
processing laboratory with a melt-blown line
on a college campus in the world; and a
newly renovated microcomputer laboratory.

Fifty full-time faculty staff three depart-
ments in Child and Family Studies; Nutrition
and Food Sciences; and Textiles, Merchan-
dising, and Design. Curricula lead to a
Bachelor of Science degree in Human Eco-
logy, Hotel and Restaurant Administration, or
Interior Design.

TEACHER CERTIFICATION IN
VOCATIONAL HOME
ECONOMICS EDUCATION AND
EDUCATIONAL PROGRAMS FOR
HOME ECONOMICS EXTENSION
EDUCATION

A certification program for secondary
home economics teachers is available within
the College. The Extension and Community
Services program in Home Economics is also
available for individuals interested in
community-based home economics pro-
grams. Both programs include
comprehensive study in all areas of home
economics as well as in educational princi-
pies, and are housed in the Child and Family
Studies Department.

UNDERGRADUATE STUDY IN
HUMAN ECOLOGY

Curricula in the following majors lead
to a Bachelor of Science degree in Human
Ecology:
Child and Family Studies with concentra-
tions in Child Development and; Family
Science
Nutrition and Food Sciences
Textiles, Merchandising, and Design
with concentrations in Merchandising, Textile
Science, and Apparel
Home Economics Education leads to a
Bachelor of Science in Home Economics
Interior Design leads to a Bachelor of
Science in Interior Design
Hotel and Restaurant Administration
leads to a Bachelor of Science in Hotel Res-
taurant Administration

COLLEGE POLICIES

Students working toward degrees must
complete the last 30 hours of work (two
semesters) at UT, in a degree program
within the College of Human Ecology. Forty-
eight hours must be earned in 300-400 level
courses. Usual course loads of College
majors are 15-16 hours; course loads over
19 hours must be approved by the Dean's
Office at the time of registration. Prospective
transfer students are advised to plan a total
college program before starting any college-
level work to achieve maximum use of credit
and sequence of course work. All students
whose majors require chemistry must enroll
in the freshman chemistry sequence until
requirements are completed. Transfer stu-
dents are advised to complete freshman
chemistry requirements before transferring
to the College.

Students wishing to transfer to the Col-
lege must have at least a 2.0 grade point
average on a 4.0 scale. Progression require-
ments for each program must be met also.
All freshmen are advised by Dean's Office
staff; other students are assigned an advisor
in the specific program areas. New transfer
students are advised initially by Dean's
Office staff and then are assigned depart-
mental program advisors. Students meet
with academic advisors each semester.
These conferences are designed to help stu-
dents define choices to achieve academic
success; identify career choices available;
atain a balance between general education
and professional studies; and, identify prob-
lems and potential solutions early in the
academic program.

REQUIREMENTS FOR ALL
CURRICULA

All students take Human Ecology 200
Professional Orientation (3) and Human Eco-
logy 400 Professional Environments (3).
These undergraduate professional courses
emphasize an interdisciplinary, ecological
philosophy of the professional field. The pri-
mary elements of these courses in Human
Ecology are the central place given to the interdependent nature of social relationships; the reciprocal nature of the relationship between social beings and their environments; and a focus on these relationships to search for implications of and predictions for individuals and family well-being. Profession—

within the field have translated these key elements into the practical application of knowledge to manage human and material resources to help families maximize the potential for their members, individually and corporately.

PROGRESSION REQUIREMENTS

All programs in the College have specific requirements for progression.

CHILD DEVELOPMENT CONCENTRATION

For progression into the child development concentration, students must meet the following criteria:

1. Complete at least 30 semester hours
2. Attain a minimum grade of "C" in all CFS courses
3. Earn a cumulative GPA of at least 2.3 (transfer hours included)
4. Apply for review by the Early Childhood Education Review Panel
5. Successfully complete an interview, which includes evaluation of written and oral communication skills, with Early Childhood Education Review Panel prior to the junior year of methods (CFS 350, 351) courses. Students will perform within normal limits on speech and written evaluations. If these standards are not met, students will be denied progression and may choose to participate in specified remedial activities through the University Hearing and Speech Center and/or the University’s Writing Center. Students who participate in remedial activities may re-apply for progression into the program (one time only) after waiting at least two semesters. For progression into the Practicum in Family Science (CFS 480), students must meet the following:

- Progress into the concentration
- Complete prerequisites for family science practicum (15 hours of CFS courses)
- Complete at least 90 hours (senior standing)
- Obtain written permission from academic advisor
- Complete the practicum application during junior year
- Earn a minimum grade of "C" in all CFS courses
- Earn and maintain a cumulative GPA of at least 2.3 (transfer hours included)
- Complete the pre-practicum orientation in the semester prior to practicum

HOME ECONOMICS EDUCATION MAJORS

Home Economics Education major with Extension, Community Services Specialization must meet the following criteria:

For progression into Field Work (HEED 445) students must meet the following criteria:

1. Cumulative grade point average 2.0 or greater
2. A grade of "C" or better in CHE courses (CFS, HE, HEED, ID, NFS, TA prefixes) prior to progression into HEED 445
3. Senior standing
4. Many potential employment opportunities require a minimum CGPA 2.0 or greater (e.g., Cooperative Extension Service requires a CGPA 2.5 or greater).

Students with Teacher Education Specialization must meet College of Education progression requirements.

For graduation: Home Economics Education Major with Extension, Community Services Specialization must meet the following criteria:

1. Grade of "S" in HEED 445
2. Grade of "C" or better in all required course work in CHE (CFS, HE, HEED, ID, NFS, TA prefixes)
3. Students with Teacher Education Specialization should consult the College of Education.

TEXTILES AND APPAREL MAJORS

For progression into major, students must meet the following criteria:

1. Grade of "S" in HEED 445
2. Grade of "C" or better in all required NFS prefix course
3. Students with Teacher Education Specialization should consult the College of Education.

HOTEL AND RESTAURANT ADMINISTRATION

For progression into the program, students must meet the following criteria:

1. Complete at least 30 semester hours
2. Earn a cumulative GPA of at least 2.3 (transfer hours included)
3. Apply for review by the Family Science Review Panel
4. Successfully complete an interview, which includes evaluation of written and oral communication skills, with Family Science Review Panel prior to the junior year. Students will perform within normal limits on speech and written evaluations. If these standards are not met, students will be denied progression and may choose to participate in specified remedial activities through the University Hearing and Speech Center and/or the University’s Writing Center. Students who participate in remedial activities may re-apply for progression into the program (one time only) after waiting at least two semesters. For progression into the Practicum in Family Science (CFS 480), students must meet the following:

1. Progress into the concentration
2. Complete prerequisites for family science practicum (15 hours of CFS courses)
3. Complete at least 90 hours (senior standing)
4. Obtain written permission from academic advisor
5. Complete the practicum application during junior year
6. Earn a minimum grade of "C" in all CFS courses
7. Earn and maintain a cumulative GPA of at least 2.3 (transfer hours included)
8. Complete the pre-practicum orientation in the semester prior to practicum

NUTRITION AND FOOD SCIENCE MAJORS

For progression into major, students must meet the following criteria:

1. Cumulative grade point average 2.0 or greater
2. Grade of "C" or better in each required NFS prefix course
3. Students with Teacher Education Specialization should consult the College of Education.

INTERIOR DESIGN MAJORS

For progression into major, students must meet the following criteria:

1. Grade of "S" in HEED 445
2. Grade of "C" or better in all required NFS prefix course
3. Students with Teacher Education Specialization should consult the College of Education.

TEXTILES AND APPAREL MAJORS

For progression into major, students must meet the following criteria:

1. Cumulative grade point average 2.0 or greater
2. Grade of "C" or better in each required NFS prefix course
3. Students with Teacher Education Specialization should consult the College of Education.

INTERIOR DESIGN MAJORS

For progression into major, students must meet the following criteria:

1. Cumulative grade point average 2.0 or greater
2. Grade of "C" or better in each required NFS prefix course
3. Students with Teacher Education Specialization should consult the College of Education.
OPTIMAL MINORS

With the approval of their advisor and the Dean, students may earn a minor in one or more areas in this College or another college. To earn a minor, students must satisfy the requirements prescribed by the department offering the minor (see below). In addition, at least one-half of the hours required must be completed at UTK and all courses must be taken for a letter grade unless otherwise specified. It is assumed that prerequisite courses will be taken and will not apply toward the minor. A student seeking a minor in the College must declare this intention with the Dean’s Office by completion of the Declaration of a Minor Form. The minor is declared upon application for graduation. Minors are recorded on the student’s transcript without regard to overlap between major and minor course requirements.

Child and Family Studies:
A minor in Child and Family Studies consists of 18 credit hours: 210 Human Development (3); 220 Marriage and Family: Roles and Relationships (3); 320 Parent Education (3); 352 Family, School, and Community Relations (3); 360 Family Stress (3); and 3 credit hours selected from: 211 Development in Infancy and Early Childhood (3); 212 Development in Childhood (3); 240 Human Sexuality (3); 312 Adulthood and Aging (3); 345 Family Resource Management (3); 420 Families: Ethnicity, Race, Class, and Culture (3).

A minor in Child Development consists of 18 credit hours: 210 Human Development (3); 211 Development in Infancy and Early Childhood (3); 212 Development in Childhood (3); 213 Development in Middle Childhood and Adolescence (3) 320 Parent Education (3); 352 Family, School, and Community Relations (3); one 3 credit Child and Family Studies elective.

A minor in Family Studies consists of 18 credit hours: 210 Human Development (3); 220 Marriage and Family: Roles and Relationships (3); 320 Parent Education (3); 345 Family Resource Management (3); 360 Family Stress (3); and 3 credit hours from: 240 Human Sexuality (3); 312 Adulthood and Aging (3); 390 Family and Program Planning (3); 420 Families: Ethnicity, Race, Class, and Culture (3).

Nutrition and Food Sciences:
A minor in Nutrition and Food Sciences consists of 18 credit hours: 300 Fundamentals of Nutrition (3) or 313 Advanced Nutrition (4); 311-312 Science of Food (4,4); and 6-7 hours from: 411 Nutrition in Disease (4); 412 Food and Nutrition Resources Management (3); 413 Experimental Food Science (3); 414 Nutrient-Drug Interactions (2); 450 Special Topics: Nutrition and Food Sciences (1-3); 493 Directed Study: Nutrition and Food Sciences (1-3).

Textiles, Merchandising and Design:
A minor in Merchandising consists of 18 credit hours: 120 Textiles I (3); 340 Cultural and Functional Aspects of Apparel (3); 345 Fashion in History (3); 410 Retail Management (3); 415 Fashion Promotion (3); Textiles and Apparel Elective (3).

A minor in Textile Science consists of 18 credit hours: 120 Textiles (3); 320 Textiles II (3); 420 Textile Microscopy and Physical Testing (3); 422 Textile Fiber Chemistry (3); 450 Textiles and Apparel Economics (3); Textiles and Apparel Economics (3); Textile Science Elective (3).

CHAPTER AND FAMILY STUdIES

Professors:
M. L. Shop (Emerita), Ph. D. Cornell;
J. L. Cunningham, Ph. D. Michigan State;
G. L. Fox, Ph. D. Michigan; C. E. Gilbert (Emerita), Ed. D. Cornell;
R. L. Highbarger (Emerita), Ph. D. Iowa; N. P. Logan (Emerita), Ed. D. Tennessee;
V. M. Nordquist (interim Head), Ph. D. Tennessee;
E. L. Speer (Emerita), M. A. Columbia; S. Twardosz, Ph. D. Kansas; P. N. White, Ed. D. Tennessee.

Associate Professors:
J. E. Allen, Ph. D. Purdue; C. A. Buehler, Ph. D. Minnesota; J. H. McNiris, Ph. D. Florida State.

Assistant Professors:
B. Barber, Ph. D. Brigham Young; L. Blinn, Ph. D. Ohio State; C. Catron, Ed. D. Vanderbilt; R. Hailstorks, Ph. D. Ohio State;
G. Pettiti, Ph. D. Indiana; D. Tegano, Ph. D. Virginia Tech.

The Department of Child and Family Studies is concerned with the creation/discovery and dissemination of knowledge related to human development and family sciences. The focus is on integrative approaches to the study of child development, educational environments for people of all ages in both formal and informal settings, and family processes that facilitate effective interactions between individuals and society. In teaching, research, and service activities, efforts include facilitating individual and family development, strengthening family relationships, and integrating social and learning environments in which people can function more effectively and improving resource management and decision-making in families. Building on a basic understanding of normal development and the behavior of individuals, families, and institutions, attention is directed to the study of challenges faced by families.

Through a combination of classroom instruction and field-based experiences, the department prepares undergraduate students for entry-level positions in diverse occupations and for advanced education. The largest career specialization is work in day care centers as teachers or directors. Students also are prepared as family life educators/interventionists in social agencies, child life/child development specialists, and professional home economics educators in schools, Extension and business.

Within the curriculum of each undergraduate major, students have three objectives: they enhance their foundation for learning; they obtain a broad, general education; and they prepare to enter a specialized career field within the profession or graduate study. Each concentration has been constructed to provide a series of educational experiences from broad survey courses to advanced courses of specialized knowledge and from early applied experiences, such as observation and participation, to the professional practicum in work settings. All curricula have been structured by a sequencing of courses in which prerequisites have been established in a logical manner. Through faculty advise ment, each student develops an individualized set of specific courses, framed by the curriculum of the career specialization, to meet his/her educational goals. The curricula have been designed also to facilitate students' integration of knowledge and applied experiences into a unified program of study that will prepare competent professionals for their career roles and socially responsible citizens for life in a complex and changing culture.

CHILD AND FAMILY STUDIES: CHILD DEVELOPMENT CONCENTRATION

This concentration is designed to meet the educational needs of undergraduates whose career plans are focused on entry level positions in early childhood education programs, agencies delivering services to young children and their families, early childhood education programs that include children with special needs, hospital programs in Child Life directed to particular needs of young children, and similar career fields that recognize distinct developmental needs and opportunities for children, or whose plans include graduate education.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>Child and Family Studies 110, 210</td>
</tr>
<tr>
<td></td>
<td>English 101, 102</td>
</tr>
<tr>
<td>Humanities Electives</td>
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<tr>
<td>Mathematics 110, 115</td>
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<td>Natural Science Electives</td>
<td>6-6</td>
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<td>Sophomore</td>
<td>Child and Family Studies 211, 350</td>
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<tr>
<td>History Electives</td>
<td>6</td>
</tr>
<tr>
<td>Human Ecology 200</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>Nutrition and Food Sciences Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Textiles and Apparel or Interior Design Elective</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Junior</td>
<td>Child and Family Studies 220, 351, 352, 450</td>
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<tr>
<td>Child and Family Studies Specialization Electives</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science Elective</td>
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<td>Social Science Elective</td>
<td>3</td>
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<td>Electives</td>
<td>9</td>
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<tr>
<td>Senior</td>
<td>Child and Family Studies 470</td>
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<tr>
<td>Child and Family Studies Specialization Electives</td>
<td>3-9</td>
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</tbody>
</table>
Human Ecology 400 ........................................... 3
*Social Science Elective .................................. 3
Electives ................................................... 3-5

Total: 125 hours

°Courses are to be chosen from two of the following categories: literature; speech or oral interpretation; art or music appreciation; philosophy or religious studies.

*One of the following sequences is to be chosen: Astronomy 151 and 152, Biology 110 and 120, Botany 110 and 120, Chemistry 100 and 110, Chemistry 120 and 130, Geography 131 and 132, Physics 121 and 122, Zoology 210 and 220.

°One semester of American History and one semester of another history course. The evolution of artifacts will not satisfy this requirement.

*Select courses from at least two areas: economics, psychology, sociology, geography, and anthropology. Courses may not be selected from applied fields such as nursing, social work, and human services.

*Students must select one of the following specializations: Early Childhood Education, Early Childhood Education Administration, Early Childhood Special Education, Child Life, Child Development, or Human Development.

At least 48 hours in 300-400 level courses are required.

SPECIALIZATIONS AVAILABLE IN THE CHILD DEVELOPMENT CONCENTRATION

Students are encouraged to select the following electives for each specialization:

Early Childhood Education - 12 hours (Health 310 - 3 hours; Electives in CFS, Education or Psychology - 9 hours)'' Early Childhood Education Administration - 12 hours (CFS 475 - 3 hours; Health 310 - 3 hours; Business Electives - 6 hours) Early Childhood Special Education - 15 hours (CFS 451 - 3 hours; Special Education Electives - 12 hours) Child Life - 9 hours (CFS 320 - 3 hours; CFS 360 - 3 hours; Psychology 300 or 330 - 3 hours) Child Development - 12 hours (CFS 320 - 3 hours; CFS or Psychology Electives - 9 hours) Human Development - 15 hours (CFS 213 - 3 hours; CFS 312 - 3 hours; CFS or Psychology Electives - 9 hours) See Advisor for list of departmentally approved courses for this category.

CHILD AND FAMILY STUDIES: FAMILY SCIENCE CONCENTRATION

This concentration is designed to meet educational needs of undergraduates whose career plans are focused on entry level positions in agencies that deliver services to families and family members, intervening in family systems to offer skills, training, counseling, or other aid to help families deal with crises or to enhance family functioning, or whose post-baccalaureate plans include graduate education.

Hours Credit

Freshman

English 101, 102 ........................................... 6
*Humanities and the Arts Electives ................... 6
Mathematics 110, 115 ..................................... 6
*Natural Science Electives .............................. 6
*Social Science Elective ................................ 3
Electives ................................................... 3-5

Sophomore

Child and Family Studies 210, 220 ..................... 6
Computer Science Elective ............................. 3
*History Electives .............................. 6
Human Ecology 200 ..................................... 3
*Humanities and the Arts Electives ................... 3
Nutrition and Foods Electives ......................... 3

Textiles and Apparel or Interior Design Elective ... 3
*Elective .............................................. 3

Child and Family Studies 240, 312, 320, 345, 352 .... 9
*Child and Family Studies Specialization Electives 9
*Social Science Electives ................................ 9
Elective ................................................... 9

Senior

Child and Family Studies 360, 420 ..................... 6
*Child and Family Studies 480 ......................... 6-15
*Child and Family Studies Specialization Electives 6-15
Human Ecology 400 ..................................... 3
*Elective .............................................. 3

Total: 125 hours

°Courses are to be chosen from two of the following categories: literature; speech or oral interpretation; art or music appreciation; philosophy or religious studies.

*One of the following sequences is to be chosen: Astronomy 151 and 152, Biology 110 and 120, Botany 110 and 120, Chemistry 100 and 110, Chemistry 120 and 130, Geography 131 and 132, Physics 121 and 122, Zoology 210 and 220.

*Select courses from at least two areas: economics, psychology, sociology, geography, and anthropology. Courses may not be selected from applied fields such as nursing, social work, and human services.

*One semester of American History and one semester of another history course. The evolution of artifacts will not satisfy this requirement.

At least 48 hours in 300-400 level courses are required.

*Students must select one of the following specializations: Family Science or Family Life Intervention.

*Students electing Family Science specialization should enroll in CFS 480 for 6 hours; those electing Family Life Intervention should enroll in CFS 480 for 15 hours.

Specializations Available in the Family Science Concentration

Family Science Concentration Family Science - 21 hours (CFS 211 - 3 hours; CFS 213 - 3 hours; Electives in CFS, Psychology, or Sociology - 15 hours) Family Life Intervention - 12 hours (CFS 211 or 213 - 3 hours; CFS 440 - 3 hours; HS 360 - 3 hours; HS 430 - 3 hours) See Advisor for list of courses approved in this category.

HOMe ECONOMICS EDUCATION

Professors:

I. Brown (Emerita), Ph. D. Ohio State; N. P. Logan (Emerita), Ed. D. Tennessee.

Associate Professor:

J. H. McInnis, Ph. D. Florida State.

Assistant Professor:

L. Birn, Ph. D. Ohio State.

This major is designed for specialization in either Home Economics Teacher Education or Home Economics Extension, Business, and Community Education. The specialization in Home Economics Teacher Education meets the professional needs of students who seek certification for teaching consumer and homemaking programs in junior high, secondary and post-secondary schools; teaching in adult and continuing education. The specialization in Home Economics Education meets the professional needs of students whose career plans include work in community-based home economics programs offering families information and/or services related to Home Economics subject matter (family economics, home management, consumer education, child development, family relations, parenting skills, foods, nutrition, clothing and textiles).

HOME ECONOMICS EDUCATION

Hours Credit

Freshman

Chemistry 100, 110 ................................. 6
English 101, 102 ........................................... 6
Mathematics Elective ................................. 6
Nutrition and Food Sciences 100 ................. 6
Textiles and Apparel 101, 120 ....................... 6
Electives ................................................... 4

Sophomore

Art Related Elective ................................. 3
Child and Family Studies 210, 220 ............... 6
Economics 201 ............................................. 6
Home Economics Education 220 ................. 6
Human Ecology 200 .................................... 6
*History Elective ......................................... 3
Literature Elective ........................................ 3
Nutrition and Food Sciences 101 ................. 3
Zoology 230 ............................................... 5

Senior

Child and Family Studies 240, 320, 345, 380 ..... 12
*Educational and Counseling Psychology 315* .... 3
*Home Economics Education 320, 420* ......... 6
*Home Economics Education 445* .................. 6
Nutrition and Food Sciences 301 ................. 6
Textiles and Apparel 350 ............................. 6

Junior

Computer Science Elective ........................... 3
*Educational Curriculum and Instruction 461* .... 3
*Home Economics Education 430* ................. 15
Human Ecology 440 ...................................... 6
*Humanities Elective ..................................... 6
*Interior Design 310 ..................................... 6
*Special Education 570* ............................... 2

Total: 125 hours

*Must be chosen from Interior Design 150 or Textiles and Apparel 232 or art appreciation or art history.

*Must be chosen from one semester of American History and one semester of another history course. The evolution of artifacts will not satisfy this requirement.

*Courses required for teacher certification are noted with an asterisk. Students not seeking certification should take Home Economics Education 440 and 445 plus 17 hours for specialization in Home Economics Extension, business or community education.

*Must be chosen from the following categories: speech or oral interpretation; music appreciation; philosophy or religious studies.

*At least 48 hours in 300-400 level courses are required.

OCCUPATIONAL ENDORSEMENTS

The following endorsements may be added to the Vocational Home Economics Teaching Certificate. They are not part of the requirements for graduation.

Hours Credit

Care and Guidance of Children Endorsement...... 10
Child and Family Studies 350 .......................... 10
Child and Family Studies 351 .......................... 3
Home Economics Education 421 ..................... 3
Home Economics Education 445 ..................... 3
Clothing Management, Production and Services

Endorsement ............................................... 10
Textiles and Apparel 230 .............................. 3
Textiles and Apparel 232 .............................. 3
Home Economics Education 421 ..................... 1
Home Economics Education 445 ..................... 3
Food Management, Production and Services

Endorsement ............................................... 10
Nutrition and Food Sciences 220 ..................... 3
Nutrition and Food Sciences 320 ..................... 2
NUTRITION AND FOOD SCIENCES

Professors:
R. E. Beauchene, Ph. D. Kansas State;
B. R. Carruth, Ph. D. Missouri; H. W. Quinton, Ed.D. Duke; D. S. Sachan, Ph. D. Illinois;
J. T. Smith, Ph. D. Missouri; M. A. Smith (Memphis), Ph. D. Tennessee.

Associate Professors:
F. E. Andrews, Ph. D. Ohio State;
W. C. Morris (Acting Head), Ph. D. Iowa State; J. D. Skinner, Ph. D. Oregon State.

Assistant Professors:
J. W. Bailey, Ph. D., Iowa State; M. D. Brooks (Memphis), M. S. Alabama; C. Costello, Ph. D. Tennessee; B. Haughton, Ed. D. Columbia; D. L. Hentges, Ph. D. Purdue;
J. Powell (Memphis), MPH, North Carolina (Chapel Hill); J. Snead, Ph. D. Ohio State.

Instructors:
K. Jones, MBA East Texas State;
M. McGrath, M. S. Purdue.

The Department of Nutrition and Food Sciences provides individuals with concepts and skills required in a changing society. The philosophy of the department fosters an intensive familiarity with a main field of interest and the recognition of one’s responsibility to society. This philosophy is reflected in fields of study which integrate basic and applied sciences, humanities and social sciences. Students learn about properties of foods; nutritional needs from the smallest unit of the cell to the individual’s needs throughout the lifecycle; the ways that attitudes, and beliefs influence food patterns; and the management of resources in foodservice and lodging systems. Thus, Departmental programs service society through its ability to interpret and contribute to social needs in regard to foods, nutrition and wellness, lodging, foodservice and the related management areas, both as professionals and as responsible citizens.

The professional disciplines of Nutrition and Food Sciences and Hotel Restaurant Administration are rooted firmly in general education and provide a clearly defined base of knowledge. A foundation for the Nutrition and Food Sciences major includes basic sciences, i.e., chemistry, microbiology, physiology, psychology and sociology. The natural sciences provide a base for understanding food, its functions in the body and the social sciences to better understand cultural aspects of food and food related consumer needs. The study of basic business and management tools enables students in Hotel Restaurant Administration to understand managerial, marketing, technological and computer principles appropriate to the diversity of positions available to graduates entering the marketplace.

In addition, students with a strong research interest may prepare for research-oriented careers in laboratories and with food companies, or graduate students in nutrition and food sciences. Also, the Hotel Restaurant Administration program provides a good background for Master’s programs emphasizing food systems administration.

HOTEL AND RESTAURANT ADMINISTRATION

The Hotel and Restaurant Administration major focuses on meeting the middle- and upper-level management needs of the food and lodging industry. It is a program that assists students in getting the breadth of knowledge, responsibility and creativity to meet the changing environment of complex management problems in industry. Students who want more emphasis in business may complete a business minor by taking courses established by the College of Business Administration.

The two specializations are foodservice administration and lodging systems. The foodservice area emphasizes quantity food service in a variety of settings, including sanitation, all phases of food quality and cost control theory and practice. The lodging area emphasizes lodging administration, marketing of hospitality services, personnel management and lodging law. Both specializations incorporate knowledge about basic nutrition and the public’s concern with wellness.

Both specializations offer extensive field experience in food and lodging properties in Tennessee and in the Southeast. The major requires 9 semesters to integrate knowledge and practice. The curriculum provides a strong base in management, foodservice administration, computation, social sciences, and nutrition. General education electives help students to sharpen their analytical, conceptual and communication abilities. Graduates of these specializations may start as management trainees in large hotels, and in lodging and restaurant programs with subsequent upward mobility into property management, personnel or purchasing positions. The field experience in the senior years provides a combination of classroom instruction and field based experiences, which give the graduate a competitive edge in attaining career positions.

Economics 201

Hotel and Restaurant Administration 324

Human Ecology 210

Interior Design 310 or 315

Marketing 301

Psychology 110

Electives

Summer Before Senior Year

Hotel and Restaurant Administration 420

Senior

History Electives

Hotel and Restaurant Administration 326

Hotel and Restaurant Administration 422, 424

Human Ecology 400

Electives

Total: 128 hours

1 Courses must be selected from one of the following sequences: Biology 110-120; Chemistry 100-110; Physics 121-122.
2 Students interested in hotel/motel management should select Hotel and Restaurant Administration 126 and 426 for 8 of their elective hours.
3 At least 48 hours in 300-400 level courses are required.
4 Students interested in hotel/motel management should select Hotel and Restaurant Administration 322.
5 Courses must be selected from art, music, literature, speech, oral interpretation, philosophy, or religious studies.
6 Credit for these courses must be earned at UTK.
7 Courses used to meet this requirement must focus on fundamental historical processes and the roles of individuals in them or the connections and interactions between different aspects of the human experience through political, social, economic, intellectual and cultural developments. Courses in which the evolution of artifacts is traced will not satisfy this requirement.

NUTRITION AND FOOD SCIENCES

This major is designed for students interested in basic and applied sciences. Students are expected to acquire advanced education in chemistry, biology, food science, and behavioral sciences. The Nutrition and Food Sciences (dietetics) major is a course of study approved by The American Dietetic Association to meet Minimum Academic Requirements (DARD). These requirements are regarded as the basic education component for the preparation of persons entering the dietetic profession and there are stated competencies in several knowledge areas. The generalist emphasis of this program prepares individuals to enter the dietetic profession in general dietetics and includes foodservice systems management, management theory and principles and communication sciences including computer and statistical applications. Graduates are prepared to enter internships with a generalist emphasis. An internship, or an approved pre-professional practice experience or a graduate degree combined with an approved experience beyond the baccalaureate degree completes the requirement for eligibility as a member of The American Dietetic Association and qualifies the graduate to apply for the Registration Examination to become a Registered Dietitian (R.D.). Students may receive more information from the department about R.D. requirements. R.D.s work as members of health care teams in acute care hospitals and community-based settings, home health care programs, college and university foodservice facilities, wellness
The department is dedicated to providing quality undergraduate and graduate teaching, research and public service in the areas of Apparel, Interior Design, Merchandising and Textile Science around the focus of individuals in them or the connections and interactions between different aspects of human experience through political, social, economic, intellectual and cultural developments.

Through a combination of classroom instruction and field based experience, students prepare for entry level positions in diverse occupations and for advanced education. The largest career concentration in the department is Merchandising, which is one of the largest programs of this type in the Southeast. Retailing is one of the fastest growing segments of our economy, and opportunities for employment will be excellent through the 1990's.

The Interior Design program is accredited by the Foundation for Interior Design Education Research (FIDER), and is the only five year accredited Interior Design program in the State of Tennessee. Career opportunities are excellent wherever living and working spaces are being planned.

The Textile Science career concentration affords students with an interest in science a career application of technology in textile product development and evaluation.

The Apparel career concentration will qualify graduates for a wide range of management opportunities in the apparel industry in both production and distribution. All of these programs offer opportunities for field study experiences where students are guided by faculty in the selection of locations for on-the-job experiences related to their career area as a part of their education-program. Professional contacts made in field study experiences often lead to opportunities for career placement upon graduation.

**INTERIOR DESIGN**

This five-year major is designed for students whose career plans are focused on designing interior environments for living and work spaces. Through coursework and field study experiences, students develop specialized problem solving skills and knowledge for the analysis, planning and design of interior architectural environments. They apply the use of lighting, color and mechanical systems as they plan spaces for both residential and commercial settings. The program emphasizes human well-being and the behavioral aspects of people in their environments. Students will gain experience in a state-of-the-art computer aided design laboratory, as well as in Interior Design studios. Graduates can expect careers as interior designers for architectural firms or as space planners for hotel or retail chains, in addition to opportunities as product representatives for contract furniture manufacturers or in private practice handling residential or commercial design needs.

**TEXTILES, MERCHANDISING AND DESIGN**

**Professors:**
- S. J. Dillard, M. S. Tennessee; J. B. Havasy, Ph. D. Ohio State; T. L. Houser, E. Simpson, Ph. D. University of Oklahoma.

**TEXTILES, MERCHANDISING AND DESIGN**

**Professors:**

**TEXTILES, MERCHANDISING AND DESIGN**

**Professors:**

**TEXTILES, MERCHANDISING AND DESIGN**

**Professors:**

**TEXTILES, MERCHANDISING AND DESIGN**

**Professors:**
TEXTILE AND APPAREL:

TEXTILE SCIENCE CONCENTRATION

This concentration is designed for students whose career plans are focused on entry level positions in textile related industries. Students with a strong base in math and the natural sciences apply these areas to a study of the physical and chemical properties of fibers, yarns and finishes. The department's research facilities provide unique opportunities for undergraduate students to be exposed to opportunities in industry and the technological advances. Graduates have career opportunities in companies that produce and market textile chemicals, fibers and fabrics and supply apparel, home furnishings and other textile related products to the consumer. A graduate may expect a career as a textile technologist who tests fabric specifications for a major textile manufacturer or as a research assistant who develops product specifications and acts as a liaison between manufacturing of textiles and their applications in apparel.

APPAREL CONCENTRATION

This concentration is designed for students whose career plans are focused on entry level positions in the apparel production and management area. Students gain an appreciation for costume design's historic roots and a sense of tomorrow's fashion trends. The curriculum includes business courses for management of personnel and company resources, and the basis of the apparel production process from fabric selection to garment shipping. The use of the department's computer-aided-design laboratory for apparel production allows students to design and grade patterns and develop pattern layouts which interface with the rapidly expanding computer applications in the apparel industry. Students selecting this concentration may expect to take positions in apparel plants as supervisors securing fabrics, planning production procedures and evaluating garment sample operations, or in establishing quality control standards and managing human resources to assure worker satisfaction.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Credit</th>
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<tbody>
<tr>
<td>Economics 201</td>
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<tr>
<td>Human Ecology 200</td>
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<td>Humanities Electives</td>
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<tr>
<td>Textiles and Apparel 230</td>
<td>3</td>
</tr>
<tr>
<td>Junior</td>
<td></td>
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<tr>
<td>Marketing 301, 310</td>
<td>6</td>
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<tr>
<td>Nutrition and Food Sciences Elective</td>
<td>3</td>
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<tr>
<td>Speech 210 or 340</td>
<td>3</td>
</tr>
<tr>
<td>Textiles and Apparel 310, 320, 330, 345, 350, 390, 410, 415</td>
<td>22</td>
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<tr>
<td>Senior</td>
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<td>Human Ecology 400</td>
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<td>Marketing Elective</td>
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<td>Textiles and Apparel 340, 450, 490, 492</td>
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<tr>
<td>Electives</td>
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<tr>
<td><strong>Total:</strong> 128 hours</td>
<td></td>
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</tbody>
</table>

1Courses must be chosen from a 2 semester sequence selected from the following: art appreciation/history, music appreciation/history, political science, philosophy or religious studies.
2At least 48 hours in 300-400 level courses are required.
3A cumulative grade point average of 2.5 or greater is required for progression into TA 490-492; enrollment by application only.

<table>
<thead>
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<th>Hours Credit</th>
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<tbody>
<tr>
<td>Freshman</td>
</tr>
<tr>
<td>Child and Family Studies Elective</td>
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<tr>
<td>Chemistry 120, 130</td>
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<tr>
<td>Economics 201</td>
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<td>English 101, 102</td>
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<tr>
<td>Psychology 110</td>
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<td>Textiles and Apparel 120</td>
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<td>Elective</td>
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</tbody>
</table>

1Courses must be chosen from the following: art appreciation/history, music appreciation/history, political science, philosophy, or religious studies.
2At least 48 hours in 300-400 level courses are required.

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<thead>
<tr>
<th>Hours Credit</th>
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<tbody>
<tr>
<td>Sophomore</td>
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<tr>
<td>Accounting 201</td>
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<tr>
<td>Anthropology 130</td>
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<td>Economics 201</td>
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<td>Human Ecology 200, 210</td>
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<tr>
<td>Psychology 110</td>
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<tr>
<td>Speech 210 or 240</td>
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<tr>
<td>Textiles and Apparel 230, 232</td>
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<tr>
<td><strong>Total:</strong> 128 hours</td>
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</table>

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2At least 48 hours in 300-400 level courses are required.

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<td>Junior</td>
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<td>Human Ecology 200, 210</td>
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<td>Humanities Electives</td>
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1Courses must be chosen from the following: art appreciation/history, music appreciation/history, political science, philosophy, or religious studies.
2At least 48 hours in 300-400 level courses are required.
The College of Liberal Arts is home to a wide array of academic disciplines and interdisciplinary programs. Such diverse areas of study as Computer Science and Classics, Anthropology and Zoology, Women’s Studies and Latin American Studies are represented among the thirty-seven departments and twelve special programs that compose the College.

The faculty of the College is committed to providing both comprehensive general education and concentrated study in a particular field to all students enrolled at The University of Tennessee, Knoxville. General education offers opportunities to master the basic learning skills necessary to understand a specialized area of study and is essential for the continuation of learning throughout life. Liberal Arts faculty are also committed to educating students in a discipline. Education with a disciplinary focus prepares students for further study at the graduate level and for careers in business, public service, or any other endeavor. As our world becomes both more specialized and more changeable, the need to find the right balance between general and specialized knowledge becomes essential.

The central purposes of a liberal education include the encouragement of intellectual tolerance, a dedication to the quest for knowledge as a worthwhile goal in and of itself, and the cultivation of a responsible, creative individual mind. These qualities enable one to develop an ability to reason and to express oneself clearly, an incentive to absorb emerging knowledge, and a competence to confront the uncertainties of human experience. For the student whose interests and talents lead into research, scholarship, and teaching, a liberal education provides an invaluable foundation.

For the individual who enters business, industry, the professions, or government service, it furnishes a broadly useful and well-rounded educational background. For all, it offers the opportunity to share in a rich intellectual heritage, in the adventures of the mind, and in the life of the educated imagination. A liberally educated person is identified not so much by specific knowledge as by quality of mind and by creative response to the challenges of the times. The great universities of the world are so labeled because their faculties have earned the reputation of being renowned scholars. The University of Tennessee, Knoxville has earned such a reputation because of the quality of the research and creative activity of its faculty. The student who studies in the College of Liberal Arts has joined a community of scholars. To study with such a talented faculty is to experience the best education possible.

The faculty of the College of Liberal Arts provide to all students a general education and to thousands of students a year a more specialized education in any one of thirty-seven disciplines and a dozen or more interdisciplinary programs. The College’s faculty help their students prepare for any and all careers. Faculty research and creative activity is the foundation on which education in this College is built. As a result of that faculty endeavor the lives of students are enriched and the world’s body of knowledge grows. That is the basic mission of the College of Liberal Arts faculty in a research University.

DEGREES OFFERED

(1) BACHELOR OF ARTS

The Bachelor of Arts represents the attainment of a broad knowledge of the arts and sciences as well as a comprehensive understanding of one or more areas of special interest. Four programs leading to this degree are open to the student.

Basic Program - The program appropriate for most B.A. students is developed around the basic skills and distribution requirements plus intensive study in one or more of the specified departmental or interdepartmental major fields described below.

Individualized Program - Designed for students whose educational goals are best met by a program tailored to their particular needs, it is the same as the Basic program in broad area requirements but permits the student to develop an individual concentration incorporating work in two or more departments.

College Scholars Program - Intended for a limited number of students who are especially qualified and motivated and who have been selected to undertake this honors program, the College Scholars Program permits the students maximum freedom to design a curriculum to meet particular interests and goals.

Pre-Professional Program - The Pre-Professional Program is offered for those who wish to participate in one of the cooperative 3 + 1 curricula in the health sciences (medicine, dentistry, pharmacy, veterinary medicine, or medical technology) or in the 3 + 2 program in business and liberal arts. Students taking one of the health sciences curricula proceed directly to specialized training in the chosen area after the third year of liberal arts study and complete the first year of professional study in lieu of satisfying the requirements for the B.A. degree with a major concentration in the college. Students in the 3 + 2 business and liberal arts program take three years of coursework leading to a B.A. in Liberal Arts, followed by two years of study in the College of Business leading to the M.B.A.

PROGRAMS OF STUDY

Seeking the broad, general goals of a liberal education, students come into the college also with a wide variety of specific educational and vocational objectives. Recognizing this diversity, the college offers a number of different programs of study leading to the baccalaureate degree and also several pre-professional curricula which prepare the student for advanced study but do not lead to a degree from this college.
REQUIREMENTS FOR DEGREES

Bachelor of Arts and Bachelor of Science

Each student seeking a Bachelor of Arts or Bachelor of Science degree must develop a program which includes the following:

1. All University degree requirements as stated in the front section of the Undergraduate Catalog;
2. A minimum of 124 credit hours;
3. At least 40 credit hours in courses numbered 300 or above;
4. Appropriate work to satisfy basic skills and distribution requirements, counting no course in more than one area (not required in the College Scholars Program);
5. Completion of at least one major (24-40 credits at 200 level or above for B. S. majors and 24-37 credits at 200 level or above for B. A. majors) (up to 6 hours in the major may also be used, where listed, to satisfy basic skills or distribution requirements);
6. Students may choose to develop one or more minors (minimum 15 hours at the 200 level and above); and
7. Students may take up to 20 hours of courses Satisfactory/No Credit in any area outside the major or minor, basic skills or distribution requirements.

PROGRAMS LEADING TO BACHELOR OF ARTS AND BACHELOR OF SCIENCE DEGREES

The Bachelor of Arts and the Bachelor of Science Degrees share the same program of Basic Skills and Distribution Requirements (except where noted otherwise).

1. **Basic Skills**
   - **English Composition**
     - **Purpose:**
     - 1. To gain and improve the skills necessary to write English expository prose coherently and convincingly.
     - 2. To improve reading skills.
     - 3. To enhance critical and analytical abilities as applied to key issues and texts.
     - **Requirement:**
     - Students may meet this requirement in one of the following four ways: (0-6 credits)
   - **Purpose:**
   - 1. To develop the basic calculation skills necessary to full appreciation of the course of study at the university.
   - 2. To understand the logical processes involved in mathematics, inductive or deductive reasoning, or computing.
   - 3. To acquire the skills that will aid in the process of critical analysis, problem solving, and decision making.
   - **Requirement:**
   - One three-credit course chosen from those listed below:
     - Students with a Mathematics ACT score of 24 or above, or those who pass a waiver or proficiency examination on material equivalent to any of these courses, will be exempted from this requirement (0-3 credits).
     - Standards for waiver or proficiency examinations will be set by the appropriate department. Exemption from this requirement will also be granted to students who complete a two-course mathematics package under Divisional Distribution.
   - **Mathematics, Formal Reasoning, or Logic**
     - **Purpose:**
     - 1. To develop the basic calculation skills necessary to full appreciation of the course of study at the university.
     - 2. To understand the logical processes involved in mathematics, inductive or deductive reasoning, or computing.
     - 3. To acquire the skills that will aid in the process of critical analysis, problem solving, and decision making.
     - **Requirement:**
     - One three-credit course chosen from those listed below:

   - **Distribution**
     - **Divisional Distribution**
     - **a. United States History**
       - **Purpose:**
       - 1. To acquire an appreciation for the richness of the past as a statement of human capability, aspiration, and achievement.
       - 2. To develop a historical perspective on a civilization that differs from or serves as the foundation for studying one's own.
       - 3. To develop the ability to explore continuity and change among historical events and movements, and to be able to assess them critically.
       - 4. To learn to keep one's own place and time in proper perspective, and to appreciate it more fully because of an awareness of human creativity as revealed through a study of the past of a civilization.
     - **b. International Studies**
       - **Purpose:**
       - 1. To study the human condition in different cultural contexts.
       - 2. To develop an awareness of the complexities of human interaction and the importance of understanding cultural diversity.
       - 3. To learn to appreciate the diversity of human cultures and their contributions to world understanding.
     - **c. Philosophy**
       - **Purpose:**
       - 1. To develop critical thinking skills.
       - 2. To understand the logical processes involved in philosophy, inductive or deductive reasoning, or computing.
       - 3. To acquire the skills that will aid in the process of critical analysis, problem solving, and decision making.
     - **Requirement:**
     - One three-credit course chosen from those listed below:

   - **Programs Leading to Bachelor of Arts and Bachelor of Science Degrees**

   - **College of Liberal Arts**

   - **BACHELOR OF SCIENCE**
     - **Purpose:**
     - 1. By completing six credits in English writing coursework of the following series: (a) English 101 and 102 (English Composition), (b) English 118 (Honors: English Composition) and English 102 (English Composition). Students who obtain a grade of A or B in 118 will complete their freshman requirement by choosing 102, a sophomore literature course in the English Department, or English 355 Advanced Expository Writing. If the sophomore literature course appears on the list for Humanities distribution requirements, it may also be counted toward those requirements.
     - 2. By earning a score of 25 or above on the English ACT exam and a composite ACT score of 25 or above and by passing a proficiency examination in writing administered by the Department of English.
     - 3. By obtaining CLEP credit for English composition. (Details available from the English Department.)
     - **Note:** A student must complete the English Composition requirement prior to enrolling in 200 level (or above) English courses.
     - **Foreign Language**
       - **Purpose:**
       - 1. To learn the basic grammar, syntax, and vocabulary of a foreign language.
       - 2. To be able to use a foreign language independently as a tool for oral communication and reading.
       - 3. To acquire techniques of language learning.
       - 4. To develop insight into the phenomenon of language.
       - 5. To complement the study of certain aspects of a foreign culture or civilization.
     - **Requirement:**
     - Completion of the intermediate level sequence of a foreign language or demonstration of competence on a waiver or proficiency examination. A student who has taken two or more years of a foreign language in high school and takes the introductory level sequence in the same language (usually the 100-level sequence) may not use such credit to satisfy requirements for graduation (0-12 credits). However, if students elect to take a foreign language in which they have had no previous training, both the elementary and intermediate level sequence may be counted for graduation. Students whose native language is not English may meet this requirement by passing English 131 and 132 and by passing two English language literature courses at the 200-level. These literature courses may also be counted toward the Humanities distribution requirements. (Beginning Fall 1987, no credit for coursework completed in order to satisfy an association deficiency in foreign language may be used to satisfy graduation requirements.)

   - **Latin (Classics) 251 Intermediate Latin: Grammar Review and Reading; 252 Intermediate Latin: Vergil's Aeneid.**

   - **French 211-212 Intermediate French; 217-218 Honors: Intermediate French.**
   - **German 201-202 Intermediate German; 203 Honors: Intermediate German.**
   - **Italian 211-212 Intermediate Italian.**
   - **Portuguese 211-212 Intermediate Portuguese.**
   - **Russian 201-202 Intermediate Russian.**
   - **Spanish 211-212 Intermediate Spanish.**

   - **Mathematics, Formal Reasoning, or Logic**
     - **Purpose:**
     - 1. To develop the basic calculation skills necessary to full appreciation of the course of study at the university.
     - 2. To understand the logical processes involved in mathematics, inductive or deductive reasoning, or computing.
     - 3. To acquire the skills that will aid in the process of critical analysis, problem solving, and decision making.
     - **Requirement:**
     - One three-credit course chosen from those listed below:

   - **Philosophy**
     - **135 Formal Logic.**

   - **DISTRIBUTION**
     - **a. United States History**
     - **Purpose:**
     - 1. To acquire an appreciation for the richness of the past as a statement of human capability, aspiration, and achievement.
     - 2. To develop a historical perspective on a civilization that differs from or serves as the foundation for studying one's own.
     - 3. To develop the ability to explore continuity and change among historical events and movements, and to be able to assess them critically.
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     - **Purpose:**
     - 1. To study the human condition in different cultural contexts.
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     - **c. Philosophy**
     - **Purpose:**
     - 1. To develop critical thinking skills.
     - 2. To understand the logical processes involved in philosophy, inductive or deductive reasoning, or computing.
     - 3. To acquire the skills that will aid in the process of critical analysis, problem solving, and decision making.
     - **Requirement:**
     - One three-credit course chosen from those listed below:

   - **Writing Emphasis Courses**
     - **Purpose:**
     - To develop writing skills.
     - **Requirement:**
     - Completion of a six-credit, two-course, writing emphasis* lower-division sequence in non-United States History (6 credits). International students may fulfill this requirement with a United States History sequence. The following sequences satisfy this requirement:

   - **Asian Studies 101-102 Asian Civilization.**

   - ***Writing Emphasis Courses shall require out-of-class writing assignments of at least 3000 words plus at least one in-class essay examination.**
b. Natural Science

Purpose:
- To know and understand the basic vocabulary of at least one scientific discipline.
- To learn the basic discoveries and their significance in one or more scientific disciplines.
- To be able to use the tools (i.e., mathematics, laboratory equipment, computers, etc.) of one scientific discipline.
- To understand how to devise hypotheses and how to devise and perform experiments to test them.
- To learn how to apply the methods of at least one scientific discipline in a "hands-on" laboratory experience.

f. To be able to analyze a situation on a college level from one particular scientific perspective.

Requirement:
- a. Part I: A two-course physical or biological science sequence that includes laboratory work. The following sequences satisfy Part I of this requirement:
  - Astronomy 161-162 Introductory Astronomy with Laboratory; 217-218 Honors: Introductory Astronomy.
  - Chemistry 100 Principles of Chemistry; 110 Introduction to Organic and Biochemistry; 120-130 General Chemistry; 121-131 General Chemistry for Chemistry majors); 128-138 Honors: General Chemistry.
  - Geology 110-120 Geology of the Natural Environment. Geological Sciences 101-102 General Geology I, II.
  - Zoology 117-118 Honors: Fundamentals of Zoology. b. Part II: A two-course package in either the physical or biological sciences that includes laboratory work. The following courses or any sequence listed in Part I will satisfy this requirement:
    - Anthropology 110 Human Origins (package with 210); 210 Principles of Biological Anthropology (package with 110).
    - Astronomy 151-152 Introductory Astronomy (non-lab). Botany 306 Genetics and Society (package with 309) (Same as Anthropology 306); 308 Biology of Human Affairs (package with 308); 310-320 Plants: An Evolutionary Survey I, II; 330 Field Botany (can be taken as a package with 310 or 320).
    - Computer Science 111 Computer Organization (package with 112); 112 Data Structure (package with 111).
    - Geology 201, 203, 380 (two of the three); Mathematics 115 Statistical Reasoning (package with 121); 121 Calculus A (package with 115 or 122 or Statistics 201); 122 Calculus B (package with 115 or 121); 141-142 Calculus I, II (or 147-148 Honors); 151-152 Biocalculus I, II.
    - Microbiology 210 General Microbiology (package with Zoology 230).

- Zoology 210-220 Human Biology; 230 Human Physiology (package with Micro 210).

Social Science

Purpose:
- To promote understanding of society and individual relationships.
- To develop a critical understanding of one or more approaches, perspectives, or methodologies used in the social sciences.
- To develop analytical skills relevant to current social, economic, or political problems, their origins in society and individuals, and possible perspectives for their resolution.

Requirement:
- a. Bachelor of Arts students must complete a minimum of 12 credits from at least two departments or programmatic areas indicated below.
  - b. Bachelor of Science students must complete a minimum of 6 credits from at least two departments or programmatic areas indicated below.
  - Afro-American Studies 201-202 Introduction to Afro-American Studies.
  - Anthropology 120 Prehistoric Archaeology; 130 Cultural Anthropology; 230 American Cultures; 232 Principles of Archaeology.
  - Botany 305 Socio-Economic Impact of Plants.
  - Economics 100 Survey of Economic Ideas; 201 Introductory Economics: A Survey Course; 207 Honors: Introductory Economics.
  - Geography 101-102 World Geography; 320 Cultural Geography: Core Concepts; 323 Behavioral Geography.
  - Human Services 220 Introduction to Human Services.
  - Music History 310 Introduction to Afro-American Music (Same as Afro-American Studies 310); 390 World Music.
  - Psychology 110 General Psychology; 117 Honors: General Psychology; 220 Behavior and Experience: Humanistic Psychology; 390 Social Psychology.
  - Religious Studies 232 Varieties of Religious Community (Same as Sociology 232); 301 Religious Myth, Symbol, and Ritual.
  - Sociology 100 General Sociology; 110 Social Problems and Social Change; 344 Power in Society; 370 Social Psychology.
  - Speech Communication 100 Introduction to Speech Communication; 220 Interpersonal Communication; 300 Nonverbal Communication; 330 Group Communication.
  - Women's Studies 220 Women in Society; 375 Gender in Society. (Same as Sociology 375).

Purpose:
- d. Humanities
  - a. To learn to appreciate and interpret significant literary, philosophical, or religious texts by study and application of selected methods or traditions of thought.
  - b. To develop further abilities to reason critically, to construct arguments, to think creatively, to analyze objectively, to assess evidence, to perceive assumptions, and to respond to and appreciate values.
  - c. To develop further writing skills.
  - d. To learn to manipulate symbols (i.e., words, sounds, images, body movements) in a variety of ways and to employ these symbols critically, affectively, and evaluatively.
  - e. To develop abilities to participate as an enlightened observer or as an artist in a discipline within the visual, spatial, musical, theatrical, rhetorical, or written arts.

Requirement:
- a. Bachelor of Arts students:
  - 1. Part I: Literature or Philosophical Perspectives. A two-semester course package in either literature or a philosophical perspective. Writing Emphasis Courses.
  - 2. Part II: Arts, Literature or Philosophical Perspectives. Either one course in the study or practice of the arts; or one course in literature if a philosophical perspectives package is chosen to meet Part I, or one course in a philosophical perspective if a literature package is chosen for Part I. Writing Emphasis Courses, except for hands-on practice of the arts courses. Part I and Part II will be satisfied by selecting packages/courses from the following four lists in accordance with the instructions above.
  - b. Bachelor of Science students must complete a minimum of 6 credits from the courses listed below; not more than 3 credits may be taken in the Arts.

1. The following course packages are designated literature packages:
  - English 201 British Literature I: Beowulf through Johnson; 202 British Literature II: Wordsworth to the Present; 221 Literature of the Western World I: Ancient, Medieval and Renaissance; 222 Literature of the Western World II: Enlightenment, Romantic and Modern.
  - (two of three) 231 American Literature I: Colonial Era to the Civil War; 232 American Literature II: Civil War to the Present; 233 Major Black Writers.
  - (two of three) 251 Introduction to Poetry; 252 Introduction to Drama; 253 Introduction to Fiction.
  - French 291-292 French Literature in English Translation.
  - German 325 Modern German Novel in English Translation; 326 German Drama in English Translation.
  - Medieval Studies 261 Medieval Culture: Readings from the Early Middle Ages, 500-1000; 262 Medieval Culture: Readings from the Later Middle Ages, 1000-1500.
  - Russian 221-222 Russian Literature in English Translation.

Writing Emphasis Courses shall require out-of-class writing assignments of at least 3000 words plus at least one in-class essay examination.
Spanish 291 Spanish Literature in English Translation; 292 Spanish American Literature in English Translation.


1. The following course packages are designated philosophical perspectives packages.

2. The following course packages are designated philosophical perspectives packages.

3. The following courses are designated practice of the Arts courses:

   a. United States Studies

   purpose:
   a. To develop an appreciation and knowledge of United States culture and civilization.
   b. To provide a basis from which to compare foreign cultures and civilizations.
   c. To develop a critical understanding of the sources of values and traditions that constitute contemporary United States civilization.
   d. To develop an understanding of the relationship between individual and societal behavior in a highly interdependent world system.
   e. To further develop writing skills.

   1. Writing Emphasis Courses shall require out-of-class writing assignments of at least 2000 words plus at least one in-class essay examination.

   a. United States Studies

   purpose:
   a. To develop an appreciation and knowledge of United States culture and civilization.
   b. To provide a basis from which to compare foreign cultures and civilizations.
   c. To develop a critical understanding of the sources of values and traditions that constitute contemporary United States civilization.
   d. To develop an understanding of the relationship between individual and societal behavior in a highly interdependent world system.
   e. To further develop writing skills.

   b. To provide a basis from which a student can analyze her or his own culture.
   c. To develop a critical understanding of the sources of values and traditions that constitute a foreign culture and civilization.
   d. To develop an understanding of the relationship between individual and societal behavior in a highly interdependent world system.
   e. To further develop writing skills.

   The following courses are designated Foreign Studies courses:

   NOTE: If Western Civilization is taken to satisfy the non United States History requirement under Divisional Distribution, the European concentration may not be elected here. This option may also be satisfied by literature courses in Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Sanskrit, or Spanish. (Literature courses in English translation will not meet this requirement.)

   Asia

   Anthropology 314 Peoples and Cultures of Africa (Same as Afro-American Studies 314); 461 African Prehistory (Same as Afro-American Studies 461).
   Geography 379 Geography of Africa (Same as Afro-American Studies 379).
   Political Science 452 Black African Politics (Same as Afro-American Studies 452).
   Religious Studies 373 African Religions (Same as Afro-American Studies 373 and Anthropology 373).
   Asia

   Art 385 Chinese Art; 386 Japanese Art; 486 Art of Indian Asia.
   Economics 424 Political Economy of World Development (When topic is Asian).
   Religious Studies 374 Philosophy and Religion in India (Same as Philosophy 374); 376 Buddhist Philosophy and Religion (Same as Philosophy 376); 379 Religion and Philosophy in China (Same as Philosophy 379); 383 Religion in Japan.
   Europe and the Soviet Union

   Anthropology 462 Early European Prehistory.
   Classics 331 Archaeology of the Aegean Bronze Age and Early Greece; 334 Cities and Sanctuaries of the Ancient Greek World; 381 Greek Civilization; 382 Roman Civilization.
   Economics 325 Economic History of the North Atlantic Community.
   English 301 British Culture to 1660; 302 British Culture: 1660 to Present; 401 Medieval Literature.
   French 420 French Cinema; 431 Highlights of French Civilization; 432 Contemporary French Culture.
   Geography 375 Geography of the Soviet Union.
   German 323 German Film; 363 Modern German Culture.
   History 319 Modern Europe, 1750-1914; 320 Contemporary Europe, 1900-present.
   Medieval Studies 403 Seminar in Medieval Studies.
   Philosophy 320 Ancient Western Philosophy; 322 Medieval Philosophy; 324 Seventeenth- and Eighteenth-Century Philos-
ophy; 326 Nineteenth- and Twentieth-Century Philosophy.
Political Science 361 Politics in Western Democracies; 459 Government and Politics of the Soviet Union; 469 Soviet Foreign Policy.

Russian and East European Studies 410 Selected Topics in Russian and East European Studies.
Spanish 431 Spanish Civilization.
Women's Studies 324 Women in French Culture (Same as French 324); 383 Women in the Greek and Roman World (Same as Classics 383); 432 Women in European History (Same as History 342).

Latin America

Anthropology 313 Peoples and Cultures of Mesoamerica (Same as Latin American Studies 351).
Economics 424 Political Economy of World Development (when topic is Latin American).
Geography 372 Geography of Middle America (Same as Latin American Studies 372); 373 Geography of South America (Same as Latin American Studies 373).
History 360-361 History of Latin America (Same as Latin American Studies 360-361).

Political Science 355 Latin American Government and Politics I (Same as Latin American Studies 355); 455 Latin American Government and Politics II (Same as Latin American Studies 455).
Spanish 471 Latin American Civilization (Same as Latin American Studies 471).

Middle East

Anthropology 463 Rise of Complex Civilizations.
History 369-370 History of the Middle East.
Religious Studies 311 Ancient Hebraic Religious Traditions; 332 Islam.

Critical Issues in Foreign Studies

Economics 323 Economic Development (Third World); 324 Comparative Economic Systems.
History 374 The West and the Third World Since 1870; 375 Revolutions in Historical Perspective.

Political Science 350 Political Change in Developing Areas; 365 Introduction to International Relations.
Religious Studies 371 Eastern Religions and Western Thought.
Sociology 446 The Modern World System.

Class A Capstone Experience

Purpose
a. To offer an intensive integrative experience which will substantially broaden the student's comprehension of the major.
b. To increase significantly an understanding of the way in which the ideas, methods, and achievements in a major area of study have affected modern society.
c. To examine a major field of study from a value-oriented perspective.
d. To improve a student's mastery of prose communication within the professional context of their major.

The following courses are designated Capstone Courses: NOTE: Consult with major department for additional approved courses. Course credits must be taken in the major area unless otherwise approved by the department. It is recommended that this option be satisfied during the senior year.

Afro-American Studies 431 Research Seminar in Afro-American Studies.
Biochemistry 420 Advanced Topics in Biochemistry.
Chemistry 400 Research in Chemistry;
405 Topics in the Development of Chemistry;
Classics 422 Seminar in Classical Studies.
Computer Science 411 Senior Thesis I;
412 Senior Thesis II.
French 440 Capstone Experience in French.
Geography 499 Proseminar in Geography.
History 482 Colloquium in History.
Human Services 430 Working Within the System.

AREAS OF CONCENTRATION

1. Required Major

Requirements for specific majors vary by program and are discussed under each department or program. A major consists of at least 24-40 credit hours in courses numbered 200 or above as specified by the department or program. Up to 6 credit hours taken in the major may also be used to satisfy basic skills or distribution requirements where listed. In addition, students making A or B in English 118 may use a 200-level literature course in the English Department to satisfy both Writing and English 200 or above as specified by the degree granting institution.

2. Supplementary Elective Courses

At least one-fourth of each student's curriculum in the Basic Program will be made up of courses selected according to the individual's interests to supplement and support the work being done in the major and Basic Skills and Distribution requirements. Some of the choices which the student might make in selecting the elective courses are:

(1) Additional courses in the major field;
(2) A related minor;
(3) An area in the arts;
(4) An off-campus study.

Only the students' imagination and initiative and the willingness to conceive and develop a meaningful academic program limit the choices of supplementary elective courses.
INDIVIDUALIZED PROGRAM

The Basic Program described above will meet the educational needs of most students entering the College. However, some students may prefer to come with particular strengths in their preparation or with special interests which do not coincide with the departmental or interdepartmental majors specified in the Basic Program. In such cases the Individualized Program has been established as a means of attaining a closer correlation between student needs and academic programs.

Students in the Individualized Program will satisfy all the Basic Skills and Distribution requirements, just as do those in the Basic Program. The point at which the greatest degree of individualization takes place, however, is in the area of concentration. Although the quantitative aspect of the area of concentration is the same as for the major in the Basic Program (i.e., a minimum of 24 hours in courses numbered above 200), there is no restriction in principle on the choice of courses of which it is composed.

The student may design a program in consultation with an advisor and submit it for consideration to the Committee on the Individualized Program. The proposed courses of study must have some core central purpose, usually implemented through intensive work in two or three departments; an undirected scattering of courses will not be approved. For further information contact the Liberal Arts Advising Center.

COLLEGE SCHOLARS PROGRAM

A limited number of freshmen, entering transfer students with fewer than 42 credit hours, and resident students with fewer than 62 credit hours are invited each year to enter this distinguished honors curriculum. Selection is based on previous academic record, test scores, recommendations, a written essay, and a personal interview. Admission is provisional for two semesters; continuation of admission is dependent on satisfactory record (normally 3.25 or above) and evidence of ongoing motivation and interest.

The College Scholars Program affords the highest degree of freedom to the student in developing a meaningful curriculum. Each program is worked out individually with a special advisor (tutor) who under ordinary circumstances continues to advise the student throughout the college career. Together they determine what kind of course work and/or other learning experiences will best fulfill the student’s objectives, while at the same time achieving the kind of liberal education the college believes is important for every student. In the final two years of the program students will be heavily involved in independent study or research required of all College Scholars. When College Scholars fulfill departmental requirements for additional majors or minors, these will be recorded on the Scholars’ transcripts. Scholars will not be required to meet Basic Skills or Distribution requirements in order to have such majors or minor officially recognized.

Further information and applications may be obtained from the Liberal Arts Advising Center.

PRE-DENTAL PROGRAM

The college offers both a three-year program leading to a Bachelor of Arts degree and a four-year program leading to a Bachelor of Arts or Science degree for students preparing for the study of dentistry. Both programs are based upon the curriculum outlined below. In the three-year program the student must complete at least 93 hours while enrolled in the college, and the B. A. degree is granted upon satisfactory completion of the first year of study at UT-Memphis. In the four-year program the degree is granted upon completion of 124 or more credit hours while enrolled in the college, including a major of 24 or more hours in addition to the courses listed below. The requirement for a major is waivered for those completing their fourth year at UT-Memphis. Students in either the three- or four-year program must complete the last 30 hours of credit in residence at The University of Tennessee, Knoxville, before entering UT-Memphis.

Although the B. A. or B.S. degree is not required for admission to the College of Dentistry at Memphis, most of the students accepted into the study of dentistry have the baccalaureate degree upon admission. Therefore, pre-dental students are encouraged to plan to complete all requirements for the B.A. or B.S. degree before enrolling in the College of Dentistry.

Hours Credit
Freshman
1 English 101; 102 or equivalent
2 Biology 110-120 or Zoology 117-127
2 Chemistry 120-130
2 Mathematics
Sophomore
1 Chemistry 350, 360, 369
1 Physics 221, 222
1 Divisional Distribution Humanities (D) Part I...
1 Divisional Distribution (A) Non-U.S. History
1 Electives
1 Basic Skills (b) Foreign Language (Intermediate Level Sequence)
Junior
1 Divisional Distribution Humanities (D) Part II...
1 Divisional Distribution Social Sciences
1 Upper Level Distribution (A) U.S. Studies (B)
1 Foreign Studies or (C) Capstone Experience
1 Electives
Total: 89-105 hours

Senior
Completion of major program and B.A./B.S. requirements or completion of one year at UT-Memphis.

Total: 124 Minimum hours

Or equivalent honors courses.

Any student who has had two years of Biology or one very good year in high school should take the proficiency tests for Biology 110-120 to determine eligibility for going directly into Biology 210 or 220. Chemistry 120-130 is a prerequisite to Biology 210-220.

Math placement depends on high school courses and grades, ACT scores, and BA/BS requirements. A math placement handout is available in the Liberal Arts Advising Center, 220 Ayres Hall. Mathematics 141-142, 121-122 or 161-162 are prerequisites to Physics 111. Students must complete the Math Basic Skills requirements as outlined in the Liberal Arts curriculum.

This requirement assumes a student has had enough language background in high school to begin an intermediate language sequence at UTK.

B.A. students must take a two-semester course package in either biology or a philosophical perspective for Humanities, Part I and for Part II students must complete one course from the remaining two lists. BS students must complete a minimum of 6 credits from the four lists under the Humanities requirement, not more than 3 credits may be taken in the Arts.

*BA students must complete a minimum of 12 credits from at least two areas; BS students must complete a minimum of 9 credits from at least two areas for the Social Science requirement.

*BA students must complete a minimum of 6 credits in one of the three areas and 3 credits from one of the remaining two areas. BS students must complete a minimum of 6 credits in two of the three areas. (Upper Level Distribution).

Recommended courses in biology and zoology are genetics, cell biology, and comparative vertebrate anatomy.

PRE-MBA PROGRAM

The college offers a joint B.A./M.B.A. program with the College of Business Administration. Admission requirements are higher than those normally expected of M.B.A. applicants. Desired qualifications include a minimum of 3.4 G.P.A. and a Graduate Management Admission Test Score of 600 or higher.

Students in this program take their first three years of coursework in Liberal Arts, and their last two years in the College of Business Administration. Within their first three years, students will fulfill all general education requirements for the B.A. degree, both upper and lower division, along with a minor offered by one of the Liberal Arts departments. They may enter Economics course only to fulfill distribution requirements, and they are required to take a year of calculus as the only pre-requisite to the M.B.A.

Students interested in the Dual B.A./M.B.A. program are counseled initially in the Liberal Arts Advising Center regarding admission standards and Liberal Arts requirements. At the end of their second year, they will have a conference with the Associate Dean for Graduate Business Programs and be advised of their prospects for formal admission. If the student is a likely candidate, he/she will be advised to take the G.M.A.T. in October of the third year and to submit an application to the M.B.A. program. The admission decision will be made by January of the third year.

Upon Admission, students will begin M.B.A. coursework in the fourth year and be awarded a B.A. degree at the end of that year. Students will take 3 hours of graduate course work during their senior year under the senior privilege rule, which requires them to notify the Graduate School in advance of the course for graduate credit. Upon successful completion of the fifth year the student will receive the M.B.A. degree.

PRE-MEDICAL PROGRAM

The college offers a three-year program leading to a B.A. degree and a four-year program leading to a Bachelor of Arts or Science degree for students preparing for the study of medicine. Both programs are based upon the program outlined below. In the three-year program the student must complete at least 93 credit hours while enrolled in the college, and the B.A. degree is granted upon satisfactory completion of the
first year of study at UT-Memphis. In the four-year program the degree is granted upon completion of 124 or more credit hours while enrolled in the college, including a major of 24 or more hours in addition to the courses outlined below. The requirements for a major are waived for those taking their four-year study at UT-Memphis. Students in either the three- or four-year program must complete the last 30 hours of credit in residence at UTK before entering UT-Memphis.

Although the B. A./B. S. degree is not required for admission to the College of Medicine, most students accepted into the study of medicine have the baccalaureate degree before admission. Therefore, pre-medical students are encouraged to plan to complete all requirements for the degree before enrolling in the College of Medicine.

**SCIENCE-MEDICAL TECHNOLOGY CURRICULUM**

Students who complete the Science-Medical Technology Curriculum receive the B.S. degree with a major in medical technology from The College of Liberal Arts. The curriculum requires a minimum of 92 hours of credit which includes the Basic Skills and Distribution requirements of the college prior to application for admission to a final year of study at The University of Tennessee Memorial Research Center and Hospital in Knoxville (UTMRC). After completion of the course of study at UTMRC, a Certificate of Laboratory Training is awarded by UTMRC. Students are then eligible for examination by the Board of Registry of the American Society of Clinical Pathologists in order to be certified as registered medical technologists.

**PRE-PHARMACY PROGRAMS**

The college offers three programs preparing students for the study of pharmacy at UT-Memphis. The Doctor of Pharmacy (Pharm.D.) degree is conferred by UT-Memphis upon completion of four years of professional study. Students following any of the three programs, Bulletins describing the three pre-pharmacy programs in detail may be obtained from the Health Professions Office, 220 Ayres Hall.

The pre-pharmacy program prepares students to be admitted to the College of Pharmacy upon completion of 60 hours of a prescribed course of study in the College of Liberal Arts. Further information may be obtained from the Health Professions Office, 220 Ayres Hall.

The three-year program leading to a B.A. degree and the four-year program leading to either a B.A. or B.S. degree from The University of Tennessee, Knoxville, as well as to the professional degree in pharmacy from UT-Memphis, are based upon the program outlined below. In the three-year program, the student must complete at least 93 credit hours while enrolled in the College of Liberal Arts, and the B.A. degree is granted upon satisfactory completion of the first year of study in Memphis. In the four-year program the B.A. or B.S. degree is granted upon completion of 124 or more credit hours while enrolled in the college, including a major of 24 or more hours in addition to the courses outlined below. The requirement for a major is waived for those taking their fourth year at UT-Memphis. Students in either the three- or four-year program must complete the last 30 hours of credit in residence at The University of Tennessee, Knoxville, before enrolling in the College of Pharmacy.
PRE-VETERINARY MEDICINE PROGRAM

The following program is designed for students who wish to pursue a Liberal Arts degree while preparing for the study of Veterinary Medicine. Students in this program must complete at least 93 credit hours while enrolled in the College of Liberal Arts, must satisfy the Basic Skills and Distribution requirements, and must complete the last 33 hours in residence at UTK before enrolling in the College of Veterinary Medicine. A departmental major is not required. Upon successful completion of the first year (two semesters) of the professional veterinary curriculum, the Bachelor of Arts degree will be conferred by the College of Liberal Arts.

Note: Admission to the College of Veterinary Medicine is at the discretion of the Admissions Committee and is based on satisfactory performance in the College of Liberal Arts. A minimum of 6 credits in two of the three areas is required. Recommended electives include courses in the humanities, social sciences, economics, business administration, particularly accounting, economics, and marketing.

LIBRARY SCIENCE

Certain courses in the Graduate School of Library and Information Science are open to students in the College of Liberal Arts interested in beginning positions in a library or in preparation for future graduate study in professional librarianship. For further information, consult the Director of the Graduate School of Library and Information Science.

PLANNING

Students who wish to consider a career in city and regional planning or a related field will find a brief description of the program of the Graduate School of Planning on page 128. Students are accepted into planning from a broad variety of undergraduate backgrounds. Detailed information on the planning profession, admission requirements, and the program of study may be obtained from the Graduate School of Planning.

TEACHING

Students in the College of Liberal Arts who wish to be certified for secondary school teaching must satisfy state certification requirements as well as all degree requirements of the College of Liberal Arts and must be recommended for certification by the College of Education. The College of Education is approved by the National Council for Accreditation of Teaching Education (NCATE); recommendation for certification by the college, therefore, in effect certifies the student in 30 states.

For additional information contact the Teacher Certification Office, Room 212 Claxon Education Building.

COURSE LOAD

The average course load in the college for any semester is 15-16 credit hours. The University defines full-time undergraduate students as those who register for a minimum of 12 hours. The maximum number of hours which may be taken by liberal arts students is 18, exclusive of elective work in

ensemble music and physical education. Exceptions to this rule will require approval by the Associate Dean for Student Academic Affairs (220 Ayres).

LOWER DIVISION - UPPER DIVISION

Courses numbered at the 100 and 200 levels are considered lower division and are normally taken by students in the freshman and sophomore years. Courses numbered 300 and above are upper division and are designed for students at the junior and senior levels.

SATISFACTORY/NO CREDIT

A few courses in the college are offered only on a Satisfactory/No Credit (S/NC) basis and students may elect to take others on this basis, except in areas where the option is specifically prohibited. Such courses, if successfully completed, will count as hours for graduation although neither S nor NC grades will be calculated in the student's grade point average. Satisfactory is defined as C or better work on the traditional grading scale and No Credit is defined as less than C. The following regulations apply:

1) S/NC courses, except those offered only on this basis, may not count for Basic Skills or Distribution requirements or major and minor requirements unless specifically permitted by petition. This restriction applies also to major or minor prerequisites or corequisites.

2) The maximum number of S/NC elective hours which may be counted toward graduation is 20, exclusive of courses offered only S/NC, physical education courses, and/or satisfactory hours earned by examination, military service, etc.

3) A student who desires to take a course S/NC should indicate that intention at the time of registration. A change from S/NC grading to regular grading or from regular grading to S/NC will not be permitted beyond the due date deadlines in each semester.

4) A transfer student who has more than 20 S/NC or equivalent hours earned prior to admission to The University of Tennessee, Knoxville, may count all of these hours toward graduation but may not elect additional S/NC hours.

5) A transfer student with S/NC or equivalent credit earned prior to admission to The University of Tennessee, Knoxville, in a course which satisfies a Basic Skills or distribution requirement may count it for that purpose. In the case of a course which satisfies a major or minor requirement, statement (1) applies.

The option of taking courses on a S/NC basis is provided to encourage the able student to venture beyond the limits of those courses in which the student does well and, motivated by intellectual curiosity, to explore subject matter in which performance may be somewhat less outstanding that work in preferred subject fields.

Note: Students planning to seek admission to graduate or professional
schools (especially in the health sciences) should discuss with their advisors possible limitations on exercise of the S/NC option before registering for courses on this basis.

**OFF-CAMPUS STUDY**

Recognizing that learning is not restricted to formal classroom situations, the college provides for students to earn credit toward graduation for approved off-campus study. Such study may be undertaken only with prior approval of the faculty member and the department concerned. It may include certain kinds of work experiences, community involvements, working in political campaigns, etc. Credit per semester will vary from 1-15 hours. Up to 21 hours of credit earned in this way may be applied toward a degree in the college, although individual departments may limit the number of hours which may be applied toward a specific major.

**INDEPENDENT STUDY**

Certain educational goals may best be met though independent study done by an individual under the direction of a faculty member. Students who wish to do such independent work should obtain the approval of the faculty members and the departments concerned prior to embarking upon their study. Credit per semester will vary from 1-15 hours. Up to 21 hours of credit earned in this way may be applied toward a degree in the college, although individual departments may limit the number of hours which may be applied toward a specific major.

**STUDY ABROAD AND FOREIGN STUDY COURSES**

Several opportunities for study abroad are available to students in the college. One avenue is through group programs arranged and supervised by departments of the college on a full-semester or summer term basis. A second is through group programs conducted abroad by other academic institutions in which UTK students with approval may enroll for credit. Assistance in identification of and registration in such programs may be obtained through the Overseas Study Information Service located in the University's Division of International Education. A third opportunity is through individualized programs under the foreign study number 491. The nature of this work as well as credit for it should be negotiated by students prior to departure with the appropriate liberal arts departments. Credit will be awarded only after completion of all agreed upon requirements, and may vary from 1-15 hours in any one department. Up to 21 hours of such credit, exclusive of that earned in group programs offered by departments, could apply toward a degree in the college. Departments may in any of the above forms, however, limit the hours of credit which can be applied toward a given major.

**AFRO-AMERICAN STUDIES**

See Cultural Studies.

**AMERICAN STUDIES**

See Cultural Studies.

**ANCIENT MEDITERRANEAN CIVILIZATIONS**

See Cultural Studies.

**ANTHROPOLOGY**

Professors:

W. M. Bass (Head and Alumni Distinguished Service Professor), Ph. D. Pennsylvania; C. H. Faulkner, Ph. D. Indiana; R. L. Jantz, Ph. D. Kansas; P. W. Parmalee, Ph. D. Texas A&M; F. H. Smith, Ph. D. Michigan; M. C. Wheeler, Ph. D. Yale.

Associate Professors:

I. Harrison, Ph. D. Syracuse; B. J. Howell, Ph. D. Kentucky; W. E. Klippel, Ph. D. Missouri; M. H. Logan, Ph. D. Pennsylvania State; G. F. Schroedl, Ph. D. Washington State.

Research Associate Professor:


Assistant Professors:

M. A. Bass, Ph. D. Kansas State (part-time); A. Galloway, Ph. D. Arizona; J. F. Simek, Ph. D. SUNY-Binghamton; P. S. Willey, Ph. D. Tennessee.

Research Assistant Professors:

M. Smith, Ph. D. Tennessee; S. Tardif, Ph. D. Michigan State.

Anthropology 110, 120, and 130 are prerequisites to a B. A. major in anthropology, which consists of Anthropology 450 and 27 additional hours of upper division course work in Anthropology. This course work shall be distributed as follows:

1. one course from categories (a), (b), (c), and (d); and two courses from category (e).
   - (a) archaeological method and theory - 361, 362, 440, 464
   - (b) archaeological area - 360, 461, 462, 463
   - (c) cultural area - 310, 311, 312, 313, 314, 315
   - (d) cultural method and theory - 410, 411, 412, 413
   - (e) biological anthropology - 470, 490, 494, 495, 496

2. Remaining hours may be selected from any upper division Anthropology courses.

Students with senior standing are encouraged to substitute appropriate 500 level courses (with permission of the instructor of the course and approval of the Department Head) for any portion of (1) or (2) above.

**ART**

Professors:


Associate Professors:


Assistant Professors:

P. Longobardi, M. F. A. Montana State; B. Lyons, M. F. A. Arizona State; D. Wilson, M. F. A. California (San Diego). B. F. A. in Studio Art

The B. F. A. is Studio Art is a professionally oriented degree especially intended for those students planning careers or graduate study in the visual arts. Majors must pass a portfolio review, usually at the end of the sophomore year in order to be admitted into upper division courses and concentrations. All studio courses require 3 hours per week attendance for each credit hour earned. Completing the B. F. A. program may take more than 8 semesters. Students are urged to seek departmental advisement each semester to ensure proper scheduling.

Transfer students are advised that a minimum of 21 hours in studio courses, and 6 upper division hours in art history, must be earned at UTK. No grade below "C" in art courses may be applied to the B. F. A. major. A minimum of 40 credit hours, 300 level or above, must be earned prior to graduation.

Students may be accepted into advanced media concentrations in Ceramics, Drawing, Painting, Printmaking, Sculpture, Watercolor, and approved Inter-Area combinations, after passing the appropriate portfolio course.

**Basic Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History 171, 172, 173</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Additional hours</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Studio 101, 102, 103</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Studio 192</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Studio 211 Drawing I; 213 Painting I (or 215 Watercolor I); Sculpture (241 or 243 or 244 or 245 or 246); Printmaking (161 or 262 or 263 or 264)</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>
9 hours from the following: Fiber-Fabric (201 or 202 or 203 or 204); 242 Life Modeling; 106 Metal Design; 231 Photography; 292 Film Design; 221 Ceramics

Total: 48 hours

Concentration - Ceramics; Drawing; Painting; Printmaking; Sculpture; Watercolor; or Inter-Area (approved combinations of studio media).

200 level............................................................................. 3
Portfolio Review (Pre-requisite to 300 and 400 courses) ............................................................................. 0
300 and 400 level................................................................... 20

Approved Studio Electives for Concentration ..... 9

Total: 32 hours

Studio Electives

Additional hours in studio course electives to be completed in the Art Department or at our affiliated facility, Arrowmont School of Arts and Crafts. Students may also apply a maximum of 6 hours of approved studio courses from Architecture, Art Education, Broadcast Journalism, Computer Science, Vocational Technical Education, Interior Design or Theatre. Students electing a joint Art/Art Education degree (B. F. A./B. S.) may take 12 hours in Art Education courses.

Total: 12 hours

General Curriculum

English Composition ........................................................................ 6
Non-U.S. History/Social Science.............................................................. 6-8
Natural Science/Mathematics............................................................... 6-8
Liberal Arts Non-Art Electives ............................................................ 14-16

Total: 34 hours


Students who wish to obtain certification to teach art in the schools may pursue the joint B. F. A. in Studio Art/B. S. in Art Education degree. For details see the Art Education listings in the College of Education section of this catalog.

B. F. A. in Graphic Design/Illustration

The Graphic Design/Illustration major is specifically designed to provide the basic visual education for those persons who wish to pursue careers in the commercial application of art in fields such as advertising, art direction, package design, publications, and television. A minimum of 126 credit hours are required for graduation. Two options are available: Graphic Design or Illustration. Students are advised that courses in Graphic Design/Illustration must be taken in sequence, and that successful completion of Art 350 (Portfolio Review, S/NC) is prerequisite to all upper division courses.

GRAPHIC DESIGN CONCENTRATION

Art Core
Art 171, 172, 173 ...
Art History electives:
Art 101, 102, 103 ...
Art 192, 211, 213 (or 215)

Total: 30 hours

Graphic Design

Art 350
Art 212, 3 hours drawing electives
Art 231
Art 151, 251, 252, 351, 352, 451, 452, 455 in sequence
Art 356
Art 456

Total: 45 hours

Design Electives

Art 259, 331, 355, 396, 404, 405, 459, 491, 492, 498

Total: 6 hours

Professional Electives

Advertising 250, 350; Broadcasting 330; Marketing 361

Total: 6 hours

ILLUSTRATION CONCENTRATION

Art Core
Art 171, 172, 173...
Art History electives:
Art 101, 102, 103...
Art 192, 211, 213 (or 215)

Total: 30 hours

Illustration

Art 350
Art 212, 9 hours drawing electives
Art 231
Art 151, 251, 252, 351, 352, 451, 452, 455 in sequence
Art 356
Art 353, 364, 453, 454 in sequence...

Total: 44 hours

Studio Electives

B. A. Majors in Art History

Prerequisite: Art 172, 173, 183...
Major: Art History courses numbered 200 and above (May include Greek and Roman Art and Archeology, Department of Classics)

Total: 39 hours

Undergraduate work in Art History is enhanced by knowledge of at least one foreign language and by additional studio art experience. Graduate work normally requires reading knowledge of German, French, and any other language appropriate to an area specialization.

Students anticipating possible careers in the museum or gallery field are advised that elective hours in Art 482, Museology II, should be considered.

B. A. Major in Studio

Prerequisite: Art 101, 102, 103...
Art 171 and 6 additional hours of Art History...

Major: Studio courses numbered 200 and above, including a minimum of 15 hours in 200-400 level courses...

Total: 39 hours

In addition to the general B. A. requirements, the following are required for minors:

B. A. Minor in Art History

Prerequisite: Art 172, 173...
Minor: Art History courses 200 and above...

Total: 21 hours

B. A. Minor in Studio

Prerequisite: Art 101, 102, 103 Studio...
Fundamentals...

Minor: Studio courses which include a minimum of 8 additional upper-division hours. Concentration may be Ceramics, Drawing, Fiber-Fabric, Painting, Watercolor, Printmaking, Sculpture or a combination from these areas...

Total: 27 hours

Pi Beta Phi Arrowmont School of Arts and Crafts

Director:
S. J. Blain, M. F. A. Wisconsin.

Arrowmont, located 40 miles from the UTK campus, is a visual arts complex which functions as a regional and national cultural center. In 1954, Pi Beta Phi Fraternity established an affiliation with The University of Tennessee, and with the Department of Art in 1978. The program currently includes...