Chapter 10 - College of Applied and Natural Sciences

Administration

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William J. Campbell, Interim Director
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Mark D. Gibson, Director
Department of Health Information Management
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School of Human Ecology
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Pamela V. Moore, Director

Address

More information about the College of Applied and Natural Sciences can be obtained by writing:
College of Applied and Natural Sciences
P. O. Box 10197
Louisiana Tech University
Ruston, LA 71272
(318) 257-4287
and/or visiting our web site at
http://www.latech.edu/ans

Mission

Through excellence in teaching, research, and service, the College of Applied and Natural Sciences prepares students for careers in agriculture, biological sciences, forestry, health care, and human ecology. Graduates are expected to be committed to life-long learning, to environmental awareness, and to improving their profession and community.

Accreditations

- The educational program in Forestry leading to the professional degree of BSF is accredited by the Society of American Foresters (SAF). SAF is recognized by the Council for Higher Education Accreditation as the specialized accrediting body for forestry in the United States.
- The Health Information Administration and the Health Information Technology programs are accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).
- The School of Human Ecology undergraduate programs are accredited by the Council for Accreditation of the American Association of Family and Consumer Sciences. The Nutrition and Dietetics undergraduate curriculum (DPD) is approved by the Commission on Accreditation for Dietetic Education of the American Dietetic Association and the Dietetic Internship is accredited. The FCS Education teacher preparation program is included in the University accreditation by the National Council for the Accreditation of Teacher Education and meets state certification standards. The Early Childhood Education Center is accredited by the National Academy of Early Childhood Programs Division of the National Association for the Education of Young Children (NAEYC).
- The Division of Nursing is accredited by the National League for Nursing (NLN) and has continued “full approval” by the Louisiana State Board of Nursing (LSBN).

Undergraduate Degrees Offered

Associate of Science in Health Information
- Health Information Technology

Associate of Science in Nursing
- Nursing (2-year RN program)

Bachelor of Science
- Agricultural Business
- Animal Science
- Biology
- Environmental Science
- Family and Child Studies
- Family and Consumer Sciences Education
- Geographic Information Science
- Merchandising and Consumer Studies
- Nutrition and Dietetics
- Wildlife Conservation

Bachelor of Science in Forestry
- Forestry

Bachelor of Science in Health Information
- Health Information Administration

Bachelor of Science in Medical Technology
- Medical Technology

These curricula provide well-balanced educational programs based on the professional needs of students. They include instruction in the natural sciences, the humanities, and the social sciences as well as a comprehensive education in one of the specialized fields of the college.

Minors Offered

Students pursuing an undergraduate major in any college may earn a minor in one of the following fields:
- Animal Science
- Biology
- Consumer Studies
- Environmental Science
- Family and Child Studies
- Forestry
- Geographic Information Science
- Geology
- Gerontology (interdisciplinary)
- Health Information Management
- Human Nutrition
- Medical Technology
- Merchandising
- Plant Science
- Wildlife Conservation

Specific requirements for each of these minors are identified in the departmental and school sections of the catalog. A student must earn a grade of C or better in each course applied toward meeting the requirements of a minor. This requirement is applicable to undergraduate students (freshmen and transfers) whose initial enrollment is Fall Quarter 2003 or quarters thereafter.
Requirements for Admission, Graduation, and Transfer Credit

Students who meet the University admission criteria will be admitted to the College of Applied and Natural Sciences. Specific admission criteria have been established for some programs. These criteria are identified for specific curricula in the descriptions of those programs. Graduation requirements are the same as those for the University unless noted otherwise.

Candidates for admission to the College of Applied and Natural Sciences who have completed course work at another institution must submit an official record of that credit to Louisiana Tech University. This record will be evaluated by the department offering the program in which the candidate wishes to major. The evaluation will determine which curricular requirements of the program of study at Louisiana Tech have been satisfied by the student’s prior course work. General education requirements are evaluated by the College of Applied and Natural Sciences. A grade of C or better is considered acceptable for transfer of credit for required or equivalent courses in the College of Applied and Natural Sciences degree programs.

Advising

Each student in the College of Applied and Natural Sciences is assigned an academic advisor. This advisor assists students in planning, implementing, and completing their programs of study as well as in career planning. Assignments are made to assure that students have advisors who have specialized knowledge in their fields of study. Students have the opportunity to change their advisor, and such changes can be initiated with the appropriate academic unit head.

Special Programs

Experiential/Cooperative Education

Students majoring in Agricultural Business, Animal Science, Biology, Environmental Science, Family and Child Studies, Forestry, Geographic Information Science, Merchandising and Consumer Studies, and Wildlife Conservation may elect to participate in a cooperative education/internship experience one or more terms during their college careers. These students receive relevant work experiences while earning college credit. Some students are paid for their services.

These experiences are designed to develop professional competencies, to impart general and specific skills, to provide opportunities for application of theoretical concepts, and to assist students in the transition from college to employment. The work experience also may provide students an entree for their first job following graduation.

Experiential learning experiences occur beyond the north Louisiana area. Cooperative education and practica work experiences occur in a variety of locations both within and outside Louisiana. Nursing, Health Information Management, and Nutrition and Diestetics students receive clinical instruction in varied health care facilities throughout north and central Louisiana. Medical Technology students complete clinical experiences in hospitals during their senior year. The Early Childhood Education Center serves as an early childhood demonstration laboratory for Family and Child Studies students. Students may travel to New York and Dallas as part of the Merchandising and Consumer Studies travel study. Agricultural Sciences students have the opportunity to complete cooperative education experiences in agricultural industries. All programs require application and acceptance.

Facilities

Academic programs in the College of Applied and Natural Sciences are located in Carson Taylor Hall and George T. Madison Hall on the main campus, as well as Reese Hall and Lomax Hall on the South Campus. In addition, numerous laboratory facilities in other buildings and at other sites enhance the instruction of students. Biological Sciences and Human Ecology are located in Carson Taylor Hall. Biological Sciences also has facilities in George T. Madison Hall. Nursing and Health Information Management are located in George T. Madison Hall. Agricultural Sciences and Forestry are located on the South Campus.

The Center for Children and Families, the only such center in Louisiana approved by the Board of Regents, is operated by the School of Human Ecology. The Center encourages collaborative research, instruction, and service that promote the well-being of children and families in north Louisiana. The Family and Child Studies Institute, one component of the Center, sponsors the endowed Bruce Everist Lecture Series. Another component, the Early Childhood Education Center, is a learning laboratory for 3- and 4-year-old children. Family and Child Studies students observe, teach, and conduct research at the Center.

Reese Hall, Lomax Hall and the Forestry Laboratory Building provide classrooms, laboratories and office space for Agricultural Sciences and Forestry. In addition, Lomax Hall houses research and student laboratories, greenhouses, and a display greenhouse for large plant specimens and exotic plantings. The 850 acre South Campus also has a Jersey-Holstein herd and dairy facility which provides milk for the campus; a dairy processing plant which pasteurizes and packages milk, makes cheeses and butter, and produces ice cream; a meats laboratory which trains students in meat processing and marketing; and an equine center. The Louisiana Tech University Farm Salesroom, also located on South Campus, offers products that are produced and/or processed by the Department of Agricultural Sciences. Fluid milk, cheese, ice cream, yogurt, butter, and sour cream are available on a continuing basis. Specialty products include peach ice cream, Christmas eggnog, and gift-boxed, wax-dipped cheddar cheese. The Tech Meats Laboratory sells retail cuts of beef, chicken, and pork through the Salesroom. Other products include seasonal fruits and vegetables, ornamental plants, Christmas poinsettias, and bedding plants. The Salesroom provides an integrated link in the marketing and sales of food and ornamental plant products.

The Louisiana Tech Equine Center provides facilities and animals for student instruction in all phases of horsemanship such as breeding, training, and nutrition. The Center also provides horsemanship classes and a therapeutic and handicapped horseback riding program.

Also located on the South Campus are numerous facilities which support the agriculture and forestry programs: a sawmill, a dry kiln, wood utilization laboratories, a wood working shop, a weather station, a farm machinery shop, barns for livestock, fields, forests, nurseries, research vegetable and flower gardens, a 50-acre arboretum, and ponds.

University-owned forestlands (800 acres) in north Louisiana and west Mississippi are used in the forestry education and research programs.

Scholarships

A number of scholarships are available in the College of Applied and Natural Sciences. Any student enrolled in the College is eligible to apply for general ANS scholarships. Other scholarships are available only to students in a certain department or major.

Applied and Natural Sciences Scholarships

- The M. Hayne Folk, Jr. Memorial Scholarship
- The Marvin T. Green Foundation Scholarship*

*
The Ruston Hospital Endowment*
The Lettie Pate Whitehead Scholarship
The Mary Jarrell Scholarship*
* Health-related careers

Agricultural Sciences Scholarships
- The Benjamin Forbes Leadership Scholarship
- The Block and Bridle Britain Simms Memorial Scholarship
- The Block and Bridle Richard Hill Memorial Scholarship
- The Block and Bridle Sullivan Memorial Scholarship
- The Hal B. Barker Scholarship
- The Tommie and Susie Murphey Memorial Scholarship
- The C. G. Hobgood Memorial Scholarship
- The T. W. Ray Johnson Memorial Scholarships
- The John A. Wright Horticulture Scholarship
- The Todd McAfee Memorial Scholarship
- The Agricultural Endowment Scholarships
- The Bessie Mae Talbert Purdy Scholarships
- The James Furman & Lavara B. Love Endowed Scholarship
- The John Green Scholarship

Biological Sciences Scholarships
- The Premedical/Predental Fund Scholarship
- The Scott M. Weathersby Endowment Award
- The Radford B. Allen, Jr. Medical Technology Scholarship

Forestry Scholarships
Application deadline is February 1. Write School of Forestry, Box 10138, Ruston, LA 71272 for applications, or complete application posted on the College web site.
- The E. R. Androlut Scholarship
- The Clyde and Ruby Anthony Endowed Scholarship
- The Lloyd P. Blackwell Scholarship
- The Wirt L. and Althea E. Bond Forestry Scholarship
- The Forestry Alumni Association Scholarship
- The Forestry Department Endowed Scholarship
- The Louisiana Forestry Foundation Scholarships
- The Martin Foundation Scholarship
- The McBride Endowed Scholarship
- The E. W. Merritt Scholarship
- The Dan and Dave Metz Memorial Endowed Scholarship
- The School of Forestry Freshman Awards
- The Richard M. Sisk Trust Fund Award
- The Louis and Frances Pirkle Forestry Scholarship Fund

Health Information Management Scholarships
- The Eddie Cooksey Scholarship

Human Ecology Scholarships
- The Human Ecology Alumni Scholarships
- The Mary Wilks Chandler Scholarship
- The Clyde and Mildred Mobley and Kola Mobley Fouche Memorial Scholarship
- The F. C. and Gladys M. Haley Scholarship
- The Clothilde Tuten Clark Scholarship
- The Human Ecology Faculty Scholarships
- The Rhoda L. Chambliss Scholarship
- The Willie Lou Durrett Scholarship
- The Laurie S. and Helen Mobley Scholarship
- The Lois M. Jackson Dietetics Advisory Board Scholarship
- The Whetstone Scholarship
- The Eastman/Auto-Chlor Scholarship
- The Bette Heard Wallace Endowed Scholarship
- The Henry E. and Margaret A. Stamm Endowed Scholarship
- The Merle Burke Endowed Scholarship
- The Willie Fletcher Scholarship
- The Jeanne Mack Gilley Endowed Scholarship
- The E. Lee and Armade Willks Young Endowed Scholarship
- The Rev. and Mrs. W. R. Gage Endowed Scholarship
- The Dr. Harvye Lewis Endowed Scholarship

Nursing Scholarships
- The Mary Marguerite Merritt Scholarship
- The Henry R. Mays, Jr. Scholarship
- The Virginia Pennington Scholarship

Student Organizations
A number of organizations provide students opportunities for professional and leadership development, service, and networking with other students, faculty, and professionals. Students who desire more information about these organizations may consult either their advisor or their academic unit head. College organizations include the following.

Agricultural Sciences
- Alpha Zeta
- Block and Bridle
- Equestrian Club
- Future Farmers of America
- Greenscape
- Pre-Vet Club

Biological Sciences
- Alpha Epsilon Delta
- Chi Lambda Beta

Environmental Science
- National Association of Environmental Professionals

Forestry
- Alpha Zeta
- Forestry Club
- Xi Sigma Pi
- Student Chapter, Forest Products Society
- Student Chapter, Society of American Foresters
- Student Chapter, The Wildlife Society

Health Information Management
- Sigma Rho Alpha
- Zeta Tau

Human Ecology
- Child Life Student Association
- Kappa Omicron Nu (National Honorary)
- Louisiana Tech Association of Family and Consumer Sciences
- Louisiana Tech Student Council on Family Relations
- Louisiana Tech Student Dietetic Association
- Louisiana Tech Student Louisiana Early Childhood Association
- Louisiana Tech Student Chapter of the International Textile and Apparel Association

Nursing
- Louisiana Tech University Student Nurses Association
- Zeta Tau

Bachelor Degree Programs

Department of Agricultural Sciences

Mission
The mission of the Department of Agricultural Sciences is to:
- provide basic knowledge and experiential learning opportunities that will prepare students for challenging careers in the food and fiber system and the agribusiness industry;
- provide students with a comprehensive education in plant and animal production, processing, marketing, and management; and
- enhance the economic viability and sustainability of agriculture in the region, state, and nation through
research and outreach programs.

The Department of Agricultural Sciences offers Bachelor of Science (BS) degrees in Agricultural Business and Animal Science. A BS degree in Agriculture Education can be earned while fulfilling the requirements for teacher certification in the College of Education.

The Agricultural Business program offers the choice of three concentrations: Business; Landscape & Turf Management; or Crop Science & Management. The Business Concentration features a built-in minor in Business Administration. Both the Landscape & Turf Management and the Crop Science & Management Concentrations include built-in minors in Plant Science.

The Animal Science curriculum has five areas of concentration: Dairy, Equine, Livestock Production, General Animal Science, and Pre-Veterinary Medicine.

**Agricultural Business**

The Agricultural Business Curriculum provides a base of knowledge and training which supports career opportunities that require a fundamental knowledge of both business and agriculture. The following concentrations are offered to give the student maximum flexibility in pursuing educational and career goals: Business; Landscape & Turf Management; or Crop Science & Management.

The Business Concentration focuses on applied agricultural production, processing, financing, and marketing functions, as well as corporate business principles. The concentration features a built-in minor in Business Administration from the College of Business plus 21 hours of directed electives that allow the student to specialize in areas of agriculture or business that are consistent with career goals. For example, directed electives can be used to earn an additional minor in Geographic Information Science (GIS), which enhances in-demand job skills.

The Landscape & Turf Management Concentration includes a built-in minor in Plant Science and is designed for students who are interested in careers in such fields as Golf Course or Public Garden Maintenance, Landscape Contracting, Nursery and Greenhouse Operations, Ornamental Plant Production, Sports Turf Management or Irrigation Technology. Practical applications, combined with up-to-date course materials, provide students with excellent preparation for either professional or graduate school opportunities.

The Crop Science & Management Concentration includes a minor in Plant Science and prepares the student for career opportunities in such fields as Farm Operations, Pasture Management, Soil and Crop Science, Agricultural Extension, or Research Technology. Classroom instruction, laboratory demonstrations, and hands-on experiences provide a strong foundation for career opportunities, including graduate school and agribusiness professions.

**Agricultural Business Curriculum (BS)**

- **Freshman Year**
  - Animal Science 111 .................................................... 3
  - Agricultural Business 230 ............................................. 3
  - Natural Sciences (GER) ................................................. 4
    - Biological Sciences 130, 131 .................................. 3
    - English (GER) .................................................... 6
    - Humanities (GER) .................................................. 3
    - Mathematics (GER) ............................................... 6
    - Plant Science 101 .................................................. 3
  - Social Sciences (GER) ................................................ 3

- **Sophomore Year**
  - Accounting 201 ....................................................... 3
  - Agricultural Business 220 ......................................... 3

**Junior Year**

- Agricultural Business 310 .......................................... 3
- Agricultural Science 320 ............................................ 3
- Humanities (GER) .................................................... 3
- English 303 ............................................................. 3
- Speech 110 or 377 or English 363 ................................ 3
- Plant Science 310, 311 ............................................... 4
- Social Sciences (GER) ................................................ 3
- Concentration Courses * ............................................ 11

**Senior Year**

- Agricultural Business 402, 450, 460 ............................. 9
- Agricultural Science 411 ............................................. 1
- Environmental Science 450 ......................................... 3
- Concentration Courses * ............................................ 18

**Total Semester Hours** ............................................. 124

*General Education Requirements (pg. 14)*

**Business Concentration [includes Business Administration Minor]**

- Accounting 202, CIS 310, Finance 318, Management 310, Marketing 300, plus 21 hours Directed Electives.

*Crop Science & Management Concentration [includes Plant Science Minor]**

- Agricultural Science 477, 478 or 479; Geographic Information Science 224, 250; Plant Science 211, 312, 421, 422, 423 plus 9 hours Plant Science plus 4 hours Directed Electives.

*Landscape & Turf Management Concentration [includes Plant Science Minor]**

- Agricultural Science 477,478 or 479; Geographic Information Science 224, 250; Plant Science 284, 285, 301, 303, 312, 412, 421, 441 plus 4 hours Directed Electives.

**Notes:**

1. Directed Electives supporting Concentrations are to be chosen by student in consultation with advisor.
2. A maximum of 6 credit hours of AGSC 477, 478, or 479 (Cooperative Education Work Experience) can be applied toward this curriculum.
3. A combined maximum of 6 credit hours of ANSC 425 (Special Problems in Animal Science) and/or PLSC 225/400 (Special Problems in Plant Science) can be applied toward this curriculum.
4. All courses applied toward the built-in minor in Business Administration and/or Plant Science must be completed with the grade of “C” or higher.

**Requirements for a Minor in Plant Science**

Twenty-one hours with a minimum of 9 hours in 300-400 level courses. Courses may be selected from Plant Science 101 plus any combination of other Plant Science courses (exception-Plant Science 400).

**Agriculture Education**

Agriculture Education prepares the student for teaching vocational agriculture in secondary schools. The College of Education manages this program in conjunction with the Department of Agricultural Sciences, with student advising occurring within this department. Students in Agriculture Education must meet the general requirements for admission to teacher education in the College of Education's upper division.

Service courses in technical agriculture provide the student training in the areas of plant science, animal science, forestry, soils, farm management, and farm mechanics. An active collegiate
chapter of Future Farmers of America provides practical experiences and student leadership opportunities.

The program is listed under the College of Education, Department of Curriculum, Instruction, and Leadership. Inquiries about this curriculum may be made to either this department or to the College of Education.

**Animal Science**
Animal Science includes the fields of poultry, swine, dairy, beef, equine, and veterinary science.

Animal Science provides instruction and practical experience in judging, breeding, feeding, and managing livestock. Through course selection the student may prepare for livestock farming, management, business, or graduate study in animal science or veterinary medicine. Selection of directed electives permits special training for work with animal feed companies; milk, egg or poultry operations; food processing industries; managerial or marketing groups; supply and equipment cooperatives; agricultural extension services; public relations; and other organizations associated with animal production or management.

Opportunities are afforded students in Animal Science to obtain practical experiences in beef, dairy, sheep, swine, and equine operation and management through the University herds of registered livestock. An automated milking parlor, dairy barn, beef barn, crop lands, and pastures are utilized for instruction and student training. A meat science laboratory for the study of meat cutting, preservation, storage and utilization, and a dairy processing plant equipped for processing fluid milk and manufacturing dairy products provide students opportunities for acquiring scientific and practical experiences in different aspects of processing meat and dairy products. Breaking, training, and foaling are an integral part of Tech's popular equine program within the Agricultural Sciences Department. A nationally affiliated chapter of the Block and Bridle Club and the Pre-Vet Club provide social and educational activities for students pursuing animal science as a profession.

**Animal Science Curriculum (BS)**

**Freshman Year**
- Animal Science 111 ................................................................. 3
- Arts (GER) ........................................................................... 6
- English (GER) .................................................................. 3
- Mathematics (GER)
  - Mathematics 100 or 101, 112 .......................................... 6
- Natural Sciences (GER)
  - Biological Sciences 130, 131, 132, 133 .......................... 8
- Plant Science 101 ................................................................. 3
- Social Sciences (GER) ......................................................... 3
- Junior Yea
- Agricultural Business 220 .................................................. 3
- Animal Science 201, 202, 204 or 211 .............................. 3
- Biological Sciences 214 or 260 ......................................... 3
- Computer Literacy (GER) .................................................. 3
- Humanities (GER)
  - History ........................................................................... 3
  - English 201 or 202 ......................................................... 3
  - Speech 110 or 377 .......................................................... 3
- Natural Sciences (GER)
  - Chemistry 100, 101, 102, 103, 104 ............................... 8
  - Directed Electives* ......................................................... 2
- Senior Year
- Agricultural Science 411 .................................................. 1
- Agricultural Science 320 .................................................. 3
- Animal Science 315 or 407 or 410 or 411 ....................... 3
- Animal Science 318, 401, 409 ......................................... 7
- Social Sciences (GER) ....................................................... 6
- Directed Electives* ......................................................... 10
- Total Semester Hours ......................................................... 124

* Directed Elective chosen by student in consultation with advisor from one of the following concentrations:

**Dairy Concentration**
- Animal Science 202 and 407; Directed Electives: Animal Science 305 and 307; 6 hours of Agricultural Sciences 477 or 478 or 479 and 6 additional directed elective hours.

**Equine Science Concentration**
- Animal Science 411; Directed Electives: Animal Science 220, 222, 307, 340, and 440 and 3 additional directed elective hours.

**General Animal Science Concentration**
- Animal Science 307 and 15 additional directed elective hours.

**Livestock Production Concentration**
- Animal Science 204 and 315; Directed Electives: Animal Science 307, 410, and 418 and 9 additional directed elective hours.

**Pre-Veterinary Medicine Concentration**

**Notes:**
1. A maximum of 6 credit hours of AGSC 477, 478, or 479 (Cooperative Education Work Experience) can be applied toward this curriculum.
2. A maximum of 6 credit hours of Special Problems in Animal Science (any combination of ANSC 225 and ANSC 425) can be applied toward this curriculum.

**Requirements for a Minor in Animal Science**
Twenty-one hours with a minimum of 9 hours in 300-400 level courses. Courses may be selected from Animal Science 111 plus any combination of other animal science courses.

**Applications to Veterinary Medicine Programs**
Louisiana Tech University Animal Science students who have completed the admission requirements for entrance into a professional veterinary medical school may apply prior to completion of the undergraduate degree. Such a student may receive a B.S. degree in Animal Science from Louisiana Tech University, after successfully completing one year of veterinary school, if they meet the following criteria: (a) completion of at least 90 credit hours; (2) completion of all General Education Requirements (GER); and (3) completion of Animal Science 111, plus 12 additional hours of 300-400 level Animal Science courses. The student is responsible for arranging transfer of credit from the veterinary medical school to Louisiana Tech University, and the student must follow procedures for application for graduation at Louisiana Tech University.

The Pre-Veterinary Medicine concentration at Louisiana Tech University is based on the requirements for application to the Louisiana State University (LSU) Veterinary Medical School in Baton Rouge. Application for admission to the LSU Veterinary Medical School is made in October for admission in the fall of the following year. Requirements for admission to professional veterinary programs in other states may vary.
Only residents of Louisiana and Arkansas are normally eligible to apply for admission to the LSU Veterinary Medical School. Residence status is determined by LSU, and residence status at Louisiana Tech University has no bearing on such determination.

School of Biological Sciences

The curricula and courses offered by the School of Biological Sciences are designed to prepare students to meet a broad range of career goals. Two undergraduate degrees are offered: Bachelor of Science in Biology and Bachelor of Science in Medical Technology. Each degree program includes general education courses; a group of required courses in biology, chemistry, mathematics, and physics; and electives, selected with approval of the advisor, appropriate to a concentration. The interdisciplinary degree in Environmental Science is also administered through the School of Biological Sciences.

Mission

The mission of the School of Biological Sciences is to promote student and faculty professional growth and development through integration of teaching and research. The School contributes to the biological literacy of all students, advances biological knowledge, and is a resource for the state, region, and nation.

Objectives and Career Opportunities

Degree program in the School of Biological Sciences provide a solid foundation in both the biological sciences and chemistry and are designed to prepare students for a broad range of careers. The BS degree in Biology and the BS degree in Medical Technology allow students to design a medical/science-oriented curriculum that meets their career goals. The BS degree in Medical Technology prepares students for jobs in clinical laboratory sciences. The BS in Biology prepares students for postgraduate study or for jobs as research assistants, managers or staff scientists in a wide range of academic and industrial laboratories, state and federal agencies, and private industry.

Degree Programs and Concentrations

Two undergraduate degrees are offered: BS in Biology and BS in Medical Technology. The BS in Biology includes two concentrations, one in Biological Sciences and one in Applied Biology.

Biology

Program Information

Students completing a degree in Biology select a concentration based upon their career goals. Students are urged to consult with advisors in selecting the concentration that is best suited to their post-graduate career. The course work in the biological sciences concentration satisfies the course requirements for entrance to most graduate, medical, and dental schools, as well as other medical fields if certain electives are taken.

Occasionally, students are accepted to and enroll in medical, dental, or other professional school before completion of the bachelor’s degree. Such a student may make application to receive a BS degree in Biology from Louisiana Tech University after successfully completing one year of professional school provided the following criteria are met: (1) completion of the General Education Requirements, and (2) completion of 90 semester credit hours to include Biological Sciences 130-133, 310, 313; 320 or 335 or 405; Chemistry 100-104 or 107, 108; 250-254; 351, 352; Statistics elective.

To graduate with a BS degree in Biology, the student must earn a grade of C or better in all Biological Sciences courses counted toward graduation requirements.

Biology Curriculum (BS)

Freshman Year

Natural Sciences (GER) Biological Sciences 130, 131, 132, 133, 260................................. 12
Chemistry 100, 101, 102, 103, 104 ......................................................... 8
English (GER) ....................................................................................... 6
Mathematics (GER) Mathematics 101 or 101, and 112.............................. 6

Sophomore Year

Humanities (GER) English 201 or 202 ......................................................... 3
History .................................................................................................... 3
Physics 209, 210, 261, 262 ................................................................. 8
Directed Electives* .............................................................................. 16

Junior Year

Biological Sciences 310,315, 320 or 335 .......................................... 9
Humanities (GER) English 303 ............................................................... 3
Speech 110, 377, or English 363 ..................................................... 3
Social Science (GER) ........................................................................... 3
Statistics 200 or Agricultural Science 320 .................................... 3
Directed Electives* .............................................................................. 9
Electives ........................................................................................... 3

Senior Year

Arts (GER) .......................................................................................... 3
Biological Sciences 331, 480 ............................................................ 4
Social Science (GER) ........................................................................... 6
Directed Electives* ............................................................................ 13
Electives ........................................................................................... 3

Total Semester Hours ................................................................. 124

(GER): General Education Requirements (pg. 14)
(IER): International Education Requirement (pg. 15).

*Directed Electives chosen by student in consultation with advisor from
one of the following concentrations:

Biological Sciences Concentration

Sophomore Year: Biological Sciences Electives** (8); Chemistry 250,
251, 252, 253, 254 (8). Junior Year: Biological Sciences Elective** (1);
Chemistry 351, 352, 353, 354 (8) Senior Year: Biological Sciences
Electives** (13).

** At least 12 hours of BISC electives must be at the 300/400 level.

Applied Biology Concentration

NOTE: Does not meet the minimum requirements for admission to
dental or medical school.

Sophomore Year: Biological Sciences Electives** (8); Chemistry 225, 227 (6), Biological Sciences
Electives** (3). Science Electives (7). Junior Year: Biological Sciences
Electives** (3); Science Electives (6). Senior Year: Biological Sciences
Electives** (7); Science Electives (6).

** At least 12 hours of BISC electives must be at the 300/400 level.

Requirements for a Minor in Biology

Twenty-one hours of Biological Sciences (BISC) courses with a
minimum of 9 hours in 300-400 level courses. Course selection must
include Biological Sciences 130, 131, 132, 133, 310, 313, plus a
physiology course (Biological Sciences 320 and 321, or 335, or 405).

Medical Technology (Clinical Laboratory Science)

Program Information

Medical technologists (clinical laboratory scientists) are clinical
specialists who design, perform, evaluate, and supervise
biological, chemical, and other clinically related tests. Job
opportunities for these specialists exist in hospitals, clinics,
research facilities, government agencies, educational institutions,
and industries.
Graduates of the program in Medical Technology are required to complete 125 semester hours of specified course work, which includes 1 calendar year (40 semester hours) of professional course work in an accredited medical center program affiliated with Louisiana Tech University. These programs are located in metropolitan areas throughout the region and provide “hands on” training. Affiliated medical center programs are located at Lake Charles Memorial Medical Center, Lake Charles, LA; Rapides General Hospital, Alexandria, LA; St. Elizabeth Hospital, Beaumont, TX; St. Francis Medical Center, Monroe, LA; Veterans Administration Medical Center, Shreveport, LA; Baptist Health System, Little Rock, AR; and Scott and White Hospital, Temple, TX.

During the third quarter of the sophomore year, students are counseled as to their progress toward meeting the minimum academic requirements for admission to the professional education component. This evaluation is based on the student’s progress in completing all required pre-professional courses, a minimum cumulative grade point average of 2.7, no grade less than C in a subject area, and the recommendation of the program faculty.

Students who meet the criteria listed above are allowed to complete the formal application process to professional training sites. Applications should be completed by the end of the second quarter of the junior year. Applicants are admitted to the professional programs on a competitive basis by using both academic and non-academic criteria. Admission decisions are made by the Admissions Committee at each site. Applicants are informed of the decision of the Admissions Committee by the third quarter of the junior year. Students who are not selected for admission are counseled as to their deficiencies and of appropriate remedial action or alternative career opportunities.

Students who are accepted into the professional program enroll in courses chosen by the student and the Program Coordinator. On-campus registration for these students is coordinated with campus faculty with appropriate fees paid by the student at the time of registration. The student must comply with all University policies and the policies of the clinical affiliate. These policies are stated in the bulletin or the program brochure of each clinical site. Students must maintain a grade of C or better in all clinical courses. Students who fail to follow these policies are dropped from the program. On-site living expenses are the responsibility of the student. University financial aid (loans, grants, scholarships) is available to students during clinical training.

After completion of professional education, the student is awarded the BS degree and is eligible for professional certification, which is achieved by passing a nationally recognized registry examination.

### Medical Technology Curriculum (BS)

#### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences 250</td>
<td>2</td>
</tr>
<tr>
<td>Natural Sciences (GER)</td>
<td></td>
</tr>
<tr>
<td>Biological Sciences 130, 131, 224, 226</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 100, 101, 102, 103, 104</td>
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<td>English (GER)</td>
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<td>Mathematics (GER)</td>
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<td>Mathematics 100 or 101</td>
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<tr>
<td>Social Sciences (GER)</td>
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<tr>
<td>Psychology 102 or Sociology 201</td>
<td>3</td>
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<tr>
<td></td>
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#### Sophomore Year

<table>
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<th>Course</th>
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<td>Arts (GER)</td>
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<tr>
<td>Biological Sciences 246, 260</td>
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<tr>
<td>Chemistry 121*</td>
<td>3</td>
</tr>
<tr>
<td>Health Information Management 240</td>
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<tr>
<td>Humanities (GER)</td>
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<td>English 201 or 202</td>
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<td>History</td>
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<tr>
<td>Mathematics (GER)</td>
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<td>Statistics 200</td>
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#### Junior Year

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<th>Course</th>
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<tbody>
<tr>
<td>Biological Sciences 341, 343, 344, 445</td>
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<tr>
<td>Clinical Laboratory Science 457</td>
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<tr>
<td>Health Information Management 440</td>
<td>3</td>
</tr>
<tr>
<td>Humanities (GER)</td>
<td></td>
</tr>
<tr>
<td>Speech 110 or 377</td>
<td>3</td>
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<tr>
<td>Social Sciences (GER)</td>
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#### Senior Year

<table>
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</thead>
<tbody>
<tr>
<td>Directed Electives**</td>
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<td></td>
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#### Total Semester Hours

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>125</td>
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</table>

**The student and Program Coordinator will choose courses from Clinical Laboratory Science 460-489.**

### Requirements for a Minor in Medical Technology

- Twenty-one hours of course work chosen from Biological Sciences 246, 250, 260, 341, 343, 344, 445, 447, and Clinical Laboratory Sciences 450, 457.

### Pre-Professional Course Work

In addition to the two degrees offered by the School of Biological Sciences, Louisiana Tech University can prepare students for entry to professional programs offered at other institutions.

**NOTE:** Please be aware that the pre-professional course work necessary for admission to these programs is specified by the admitting institution. NOT Louisiana Tech. Therefore, it is the responsibility of each student to obtain a catalog, or printout of required course work from the web site of the school he/she plans to attend and determine which courses are required prior to entering that institution. The student can then “customize” course work in consultation with an advisor in the School of Biological Sciences to fulfill the requirements of a particular institution.

**Examples of such programs are as follows:**

- Pre-Cardiopulmonary Science
- Pre-Occupational Therapy
- Pre-Optometry
- Pre-Pharmacy
- Pre-Physician Assistant
- Pre-Physical Therapy
- Pre-Radiologic Technology

Admission to professional phases of these programs is on a competitive basis. Furthermore, it should be noted that although some programs will consider students after 2 years of course work at Louisiana Tech, in reality many students are admitted only after completion of a baccalaureate degree. If there is any question about this, it is the student’s responsibility to contact the admitting professional program for clarification.

**REMEMBER:** It is the student’s responsibility to determine what is required for admission to the particular institution in which he/she is interested.

### The Graduate Program

Master of Science Degrees offered by the School of Biological Sciences are described in Chapters 15 and 18 of this Catalog.
Interdisciplinary Degree in Environmental Science

Program Information
The Environmental Science program consists of a multi-disciplinary curriculum emphasizing pure and applied sciences, and the application of critical thinking to environmental problems. Participating academic units include Agricultural Sciences, Biological Sciences, Chemical Engineering, and Forestry. The curriculum incorporates 22 hours of directed electives to allow students to obtain a minor in an area of particular career interest. Numerous minors are available at Louisiana Tech University; specific requirements for minors are identified in the departmental sections of this Catalog.

A junior or senior internship or cooperative education experience is a requirement of the curriculum because it contributes to the preparation of students for a career in environmental science; thus graduates are ready for a wide range of employment opportunities. Potential employers are regulatory agencies, industrial firms, commercial laboratories, consulting firms, and environmental organizations. Also, graduates may pursue enrollment in professional or graduate schools.

Environmental Science Curriculum (BS)
Freshman Year
Environmental Science 211 ......................................................... 3
Natural Sciences (GER)
   Biological Sciences 130, 131, 132, 133 .................................. 8
   Chemistry 100, 101, 102, 103, 104 .................................... 8
   English (GER) .......................................................... 6
Mathematics (GER)
   Mathematics 100 or 101, and 112 ....................................... 6

Sophomore Year
   Biological Sciences 216, 217 ..................................................... 4
   Chemistry 121, 205 .......................................................... 7
   Humanities (GER)
   English (Literature) ....................................................... 3
   Arts (GER) .............................................................. 3
   Geology 111, 121 .......................................................... 4
   Social Sciences (GER)
   Geography ................................................................. 3
   Mathematics 220 ............................................................ 3
   Directed Electives* .......................................................... 3

Junior Year
   Environmental Sciences 310, 311, 313 ....................................... 7
   Environmental Sciences 477/478/479 (recommended) or
   Special Problems .......................................................... 3
   Biological Sciences 260 ...................................................... 4
   Geographical Information Science 250 .................................. 3
   Geology 422 ............................................................. 3
   Humanities (GER)
   English 303 ............................................................... 3
   English 363 or Speech 110, 377 ...................................... 3
   Statistics ................................................................. 3
   Directed Electives* .......................................................... 3

Senior Year
   Environmental Science 444, 458 .......................................... 6
   Geology 460 ............................................................... 3
   Humanities (GER)
   History ................................................................. 3
   Social Sciences (GER)
   Political Science .......................................................... 3
   One other Social Sciences discipline .................................. 3
   Directed Electives* .......................................................... 12

Total Semester Hours .................................................................. 123

GER: General Education Requirements (pg. 14)
IER: International Education Requirement (pg. 15).

*Students are expected to obtain a minor in an area of their choice; if students choose not to seek a minor, directed electives are selected from
the following: Animal Science, Biology, Chemical Engineering, Chemistry, Environmental Science, Forestry, Geographic Information
Science, Geography, Geology, Physics, and Plant Science.

Students are required to complete individual professional courses (Biology, Chemistry, Environmental Science, Geographic Information
Science, Geology, Statistics, and Directed Electives) with a minimum grade of C.

Requirements for a Minor in Environmental Science
Twenty-one hours of course work to include Geology 111, Environmental Science 211, 310, 313, 444, 458, and 3 hours of Biological
Sciences, Chemistry, Environmental Science, Forestry, Geology, or Plant Science at the 300 level or above.

Requirements for a Minor in Geology
A minor in geology consists of twenty hours of course work to include
Geology 111, 112, 121, 122, and 12 additional hours, at least 9 of which
must be at the 300- or 400-level.

School of Forestry

Mission:
The mission of the School of Forestry is "To enhance the social,
ecological, and economic value of forest resources for the citizens
of Louisiana and the nation through professional education, basic
and applied research, and service to the public and natural
resource managers."

The specific goals are to:
1. maintain an accredited undergraduate forestry education
   program,
2. maintain an undergraduate wildlife conservation education
   program, that meets certification requirements of The
   Wildlife Society,
3. conduct research relevant to enhancing Louisiana’s
   forestlands and associated natural resources, and
4. conduct continuing education and service activities to meet
   the needs of Louisiana’s forest landowners.

Degree Programs
The School of Forestry offers three degree programs: Bachelor
of Science in Forestry (BSF), a Bachelor of Science in Geographic
Information Science (BS) with a concentration in Natural
Resources, and a Bachelor of Science in Wildlife Conservation
(BS). The Forestry curriculum is designed for students who desire
scientific knowledge of conservation and management of forestry
resources, such as timber inventory, site productivity, resource
protection, and many other activities carried out in the production
of wood and wood fiber. The Geographic Information Science
(GISc) curriculum is designed for students interested in
understanding, analyzing, and applying the spatial relationship
among human and physical features (e.g., social and economic
impact of natural disasters). Students of GISc learn how to use
computer software programs that identify the interactions that
transpire between humans and the physical environment based
on location. They also learn how to analyze those interactions, and
to use that information to suggest changes in policies and procedures.
Jobs for graduates of this curriculum are found in all sectors of the
economy including business, communication, defense, education,
engineering, Federal, state, and local government, health and
human services, natural resources, transportation, and many
others. The Wildlife Conservation curriculum is designed for
students who desire scientific knowledge of the conservation and
management of wildlife. This curriculum emphasizes the life
history, habitat relationships, and habitat management of wildlife species and communities. Students are trained as managers, naturalists, and researchers through course work and practical experience with wildlife professionals.

Students are encouraged to complete at least one internship (on-the-job experience) during their course of study. Students are required to maintain a minimum grade of C on all individual professional courses and a minimum grade point average of 2.0 on all courses taken. Professional courses for each of the degree programs are as follows: Forestry – Forestry and Geographic Information Science prefixes and any course listed under Other Program Requirements; Wildlife Conservation – Forestry, Geographic Information Science, and Biological Sciences prefixes and any course listed under Other Program Requirements; Geographic Information Science – Geographic Information Science prefixes and any course listed as a Concentration Elective or Other Program Requirement.

The educational program in Forestry leading to the professional degree of BSF is accredited by the Society of American Foresters (SAF). SAF is recognized by the Council for Higher Education Accreditation as the specialized accrediting body for forestry in the United States. The Wildlife Conservation degree program meets the certification requirements of The Wildlife Society, and graduates may apply for certification as an Associate Wildlife Biologist.

**Field Session**

Successful completion of the Forestry Summer Field Session during the junior year is a prerequisite for senior standing for Forestry and Wildlife Conservation majors, but not for Geographic Information Science majors. Students who have completed all prerequisites, including all 100 level courses, FOR 205, 206, 300, 301 (or BISC 313), 302, 306, MATH 212, and have at least an overall C average are eligible to enroll. Field Session students are also required to meet the conditions as outlined in the Forestry Summer Field Session Academic and Operating Policies document which is available from the School of Forestry upon request.

**Field Trips**

During the junior and senior years, field trips are made to forest production areas, wood-using plants, and wildlife management areas. These enable students to observe forestry, wildlife management, research, and wood-using activities of private companies and government agencies. Many of the important forest types and management activities, as well as a wide variety of wood-using industries, are located near campus.

**Expenses**

Field trips cannot always be arranged within the scheduled laboratory hours. In some cases, students must leave the campus earlier and return later than the published class schedule. The payment for meals and lodging when overnight trips are necessary is the responsibility of the individual student. This includes the field session. In addition to regular expenses, a special fee is charged each student who attends the field sessions.

Each student registering for any Forestry, Geographic Information Science, or Biological Sciences course involving field laboratory work should have, for self-protection, an accident insurance policy. Policies are available during registration to all students for a reasonable cost.

A number of student assistants are employed by the School each year. This enables the students to work part-time while attending school.

**Transfer Credit**

Students may complete 62 semester hours of the forestry, geographic information science or wildlife conservation major at regionally accredited institutions. However, transfer credit will only be accepted for courses completed with a C or better grade and must be approved during the student's first quarter at Tech.

The professional core courses in forestry and wildlife conservation must be completed at Louisiana Tech University. Students who are considering transfer to the School of Forestry should contact the Director's Office, School of Forestry, prior to enrollment at other institutions.

**Forestry Curriculum (BSF)**

**Freshman Year**

| Natural Sciences (GER) | Biological Sciences 134 | .......................... | 3 |
| Social Sciences (GER) | Economics 201 or 202 or 215 | .......................... | 3 |
| Social Sciences course | .......................... | .......................... | 3 |
| English (GER) | .......................... | .......................... | 6 |
| Arts (GER) | .......................... | .......................... | 3 |
| Forestry 101 | .......................... | .......................... | 1 |
| Forestry 201, Agricultural Science 201 or Merchandising and Consumer Studies 246 | .................. | 3 |
| Mathematics (GER) | Mathematics 100 or 101, and 212 | .......................... | 6 |
| .......................... | .......................... | .......................... | 28 |

**Sophomore Year**

| Humanities (GER) | English 201 or 202 | .......................... | 3 |
| History | .......................... | .......................... | 3 |
| Forestry 205, 206, 312, 313 | .......................... | .......................... | 8 |
| Geographic Information Science 250 | .......................... | .......................... | 3 |
| Social Science (GER) | .......................... | .......................... | 3 |
| Statistics Elective | .......................... | .......................... | 3 |

**Junior Year**

| Humanities (GER) | English 303 | .......................... | 3 |
| Geographic Information Science 217, 224 | .......................... | .......................... | 4 |
| Electives | .......................... | .......................... | 5 |
| .......................... | .......................... | .......................... | 30 |

**Senior Year**

| Humanities (GER) | Forestry 322, 401, 402, 404, 406, 410, 413, 425 | .......................... | 22 |
| Speech 110 or 377, or English 363 | .......................... | .......................... | 3 |
| Geographic Information Science 260 | .......................... | .......................... | 2 |
| .......................... | .......................... | .......................... | 27 |

**Total Semester Hours** ................................................................. 125

(GER): General Education Requirements (pg. 14).
(IER): International Education Requirement (pg. 15).
*Statistics Elective: AGSC 320, QA 233, PSYC 300, or STAT 200
**Students are strongly encouraged to take Forestry 301; however, students may elect Biological Sciences 313 if their career goals dictate.
***10 credit hours are taken during a required Summer Field Session between the Junior and Senior years.

**Requirements for a Minor in Forestry**

Twenty or 21 hours to include Forestry 202, 205; Forestry 301 or Biological Sciences 313; Forestry 302, 306, 312 or 313, 404 or Geographic Information Science 250, and Forestry 406.

**Wildlife Conservation Curriculum (BS)***

**Freshman Year**

| Natural Sciences (GER) | Biological Sciences 130, 131, 132, 133 | .......................... | 8 |
| Chemistry 120, 121, 122 or Chemistry 100, 101, 102, 103 | .......................... | .......................... | 7 |
Cal Sciences 428 or Forestry. Social and economic opportunity to earn a minor in forestry, wildlife conservation, sciences.

Spatial data technologies that prepared for rewarding and high opportunity.

Forestry 428; A between the Junior and Senior years.

**35

Senior Year

Biological Sciences 413 or 428, and 432, 433 9
Animal Science 309 3
Forestry 401, 410, 445 9
Geographic Information Science 260 2
Humanities (GER)

English 303 3
Elective** 3

**39 credit hours are taken during a required Summer Field Session between the Junior and Senior years.

Requirements for a Minor in Wildlife Conservation

Twenty-one hours to include Biological Sciences 317, 432, 433; Forestry 314; Biological Sciences 313 or Forestry 301; Biological Sciences 221 or Forestry 205; 206; 3 semester hours to be selected from the following: Biological Sciences 401; Biological Sciences 428 or Forestry 428; Animal Science 309; Forestry 445, Geographic Information Science 250.

**Interdisciplinary Degree in Geographic Information Science**

**Program Information**

The Geographic Information Science (GISc) program is both an interdisciplinary and interdepartmental degree program shared between the School of Forestry in the College of Applied and Natural Sciences and the Department of Social Sciences in the College of Liberal Arts. The 125 semester credit hour concentration in Natural Resources directed by the School of Forestry incorporates 33 hours of concentration electives that allow students to specialize in natural resources. Students are prepared for rewarding and high-paying careers in the field of spatial data technologies that more specifically engage environmental issues and issues that pertain to the natural sciences. Careful selection of concentration electives provides the opportunity to earn a minor in forestry, wildlife conservation, environmental science, or other fields. Specific requirements for minors are identified in the departmental sections of this Catalog.

The GISc curriculum is designed for students interested in understanding, analyzing, and applying the spatial relationship among human and physical features (e.g., social and economic impact of natural disasters). Students of GISc learn how to use computer software programs that identify the interactions that transpire between humans and the physical environment based on location. They also learn how to analyze those interactions, and to use that information to assist with public and private sector management, administration and planning.

Career opportunities for graduates with GISc training specifically mention a degree in GISc as a favored condition of employment. There is an enormous and growing need for graduates with GISc training. Ample job opportunities exist both in Louisiana and across the country and such opportunities are growing and diversifying as GISc technologies prove their value in even more areas. Excellent opportunities exist for GIS analysts, cartographers, database and system administrators, photogrammetrists, image analysts, GIS coordinators, and programmers. Employment can be found in U.S. Government agencies such as the U.S. Geological Survey (USGS), U.S. Forest Service (USFS), Environmental Protection Agency (EPA), and National Aeronautics and Space Administration (NASA), in city and state government for planning, environment, resources, and transportation, and in the private sector for a diverse set of disciplines including agriculture, archaeology, architecture, business, communications, computer science, defense, ecology, economics, education, engineering, forestry, health and human services, natural resources, and many others.

**Geographic Information Science Curriculum (BS)**

**Freshman Year**

Natural Sciences (GER)

Biological Sciences 331*................................. 3
Social Sciences (GER)

Economics.................................................. 3
Social Sciences............................................. 3
English (GER)................................................ 3
Arts (GER).................................................... 3
Mathematics (GER)....................................... 6
Concentration Courses*................................. 6

**29

**Sophomore Year**

Natural Sciences (GER)................................. 6

Humanities (GER)

English...................................................... 3
History...................................................... 3
Geographic Information Science 250, 260, 300, 360..... 7
Concentration Courses*................................. 9
Social Sciences (GER)................................. 3

**31

**Junior Year**

Humanities (GER)

Speech 110 or 377........................................ 3

Geographic Information Science 217, 224, 341, 350, 371 13
Concentration Courses*................................. 14

**33

**Senior Year**

Geographic Information Science 460, 461, 462, 463, 464 16
Concentration Courses*................................. 16

**32

Total Semester Hours .................................... 125

*Concentration Courses chosen by student, in consultation with advisor, from one of the following concentrations:
Natural Resources Concentration Requirements
GER and other non-GISC requirements for this concentration include the following: Natural Sciences (9 hours); Mathematics 100 or 101, and 112 or 212. Statistics (3 hours)-Agricultural Science 210, 220, 250, 260, 270; Geography 210 or 240; Geography 310; Environmental Science 320, 325, 330; and 18 hours of Social Sciences (9 hours)-Economics 201 or 202, 215, and 6 hours of Social Science electives; History 102 or 201 or 202; Speech (3 hours)-Speech 110 or 377 or English 363; Arts elective (3 hours); Forestry 201; Directed electives (33 hours) chosen in consultation with advisor including one International Education Requirement to be selected from Humanities GER (History 102) or Social Sciences GER (Geography 205 or 210).

Social Sciences Concentration Requirements
Requirements for the Social Sciences concentration are described in the College of Liberal Arts section of this Catalog.

Requirements for a Minor in Geographic Information Science:
Twenty or 21 hours to include Geographic Information Science 217, 224, 250, 260, 350; Geography 341 or Geographic Information Science 341, Geography 371 or Geographic Information Science 371; one quantitative methods course chosen from Agricultural Sciences 202, 320, Geographic Information Science 360, Quantitative Analysis 233, or Statistics 200, 402, or 405.

Department of Health Information Management
Health Information Management professionals collect, integrate, and analyze primary and secondary health care data, disseminate information, and manage information resources related to the research, planning, provision, and evaluation of health care services.

High school students planning to enter a Health Information Management program should take the general college preparatory courses and be computer literate.

Applicants for readmission and transfer students must meet program criteria at the time of admission to the program. If application for readmission occurs more than three quarters since the student was enrolled in a Health Information Management (HIM) course, a committee of Health Information Management faculty will determine placement in the curriculum and any remedial course work necessary. Transfer credit from another accredited health information management program in a regionally accredited college will be evaluated to determine similarity of course content. Courses with the same content in which the student earned at least a C can be transferred. Credit from a non-accredited program will be granted provided the course is the same in content, the student earned at least a C in the course, and mastery of course material is validated by examination.

Students are required to adhere to stated prerequisite courses. A request for a waiver of a stated prerequisite course must be submitted to the student's advisor who will make a recommendation to a committee of HIM faculty. The committee will consider overall GPA, HIM GPA, and prior work experience in their decision.

The Health Information Management programs include a professional practice component in which the student performs health information management procedures in hospitals and other health care facilities. To be eligible to register for the professional practice, the student must earn a minimum grade of C in prerequisite courses, achieve a minimum GPA of 2.25 in the curriculum, and have the approval of the committee of HIM faculty. In addition to regular University fees, students beginning directed practice must provide name pins, uniform clothing, lab coats, and their own transportation. The quarter preceding graduation is spent at off-campus affiliated sites where the student will gain experience in a variety of health care organizations. The course number in which the student enrolls will be determined by the geographic location of the clinical sites from Louisiana Tech University: 100, 101-200 miles, and over 200 miles. These experiences may be clustered in the North Louisiana area. There are additional sites in other cities in Louisiana, Texas, Mississippi, Arkansas, and other states for students who are able to spend a period of time in another area. Each student’s professional practice experience is individually planned with the student to fulfill the educational requirements within the student's financial and travel limitations. These professional practice experiences will be scheduled for students who have
1. completed all course work on-campus
2. have no grades in required courses in the curriculum less than a C,
3. have a curriculum GPA of no less than 2.25,
4. and have an overall GPA of no less than 2.0.

A student’s professional practice experience will be terminated for inappropriate professional behavior and lack of adherence to ethical standards. The student who terminates a professional practice experience without permission from the HIM professional practice coordinator and the professional practice site will not be scheduled for further professional practice experiences.

If a student wishes to enroll in a professional practice course after a lapse of more than three quarters since completion of the prerequisite courses, a committee of HIM faculty will determine whether remedial course work is necessary before placing the student in professional practice. This is the only course that is not offered online. It must be completed at a professional practice site.

Louisiana Tech offers Health Information Technology graduates the opportunity to progress towards the four year degree. This is done by participating in internet and/or on-campus classes. Students are required to have an associate degree in HIT and possess RHIT credentials obtained within the last three years. Progression students must complete all junior and senior classes. A minimum of 2.0 grade point average and 122 semester hours are required to receive the BS in Health Information Administration.

Students must earn a C in all required courses before being eligible for graduation from the program. HIM academic probation results when a student earns one or more grades lower than a C in an HIM course. The student is required to have a conference with the professor of the course and the department head. Students are required to develop a written plan for remediation. The plan must be approved before the student will be allowed to register for any HIM courses. In the event the student receives a second grade lower than a C in an HIM course, he/she will be required to meet with the HIM Remediation Committee to request continued participation in the program. Further expansion of the remediation plan will be required. The third grade lower than a C in an HIM course will result in suspension from the program. Suspended students will not be allowed to enroll in HIM courses for a 12-month period. After the 12-month suspension from the program, a student can request readmission to the program. The student must submit a formal request to the HIM Remediation Committee. If approval is granted, a plan of study must be developed, which will include any course content changes since the student was previously enrolled.

Students seeking information concerning admission to the Health Information Management programs may contact the Health Information Management Department, P.O. Box 3171, Louisiana Tech University, Ruston, LA 71272.

Health Information Technology
The associate degree curriculum emphasizes the technical component of providing a variety of health information services.

The Health Information Technology (HIT) program requires 6 quarters of study on campus plus 1 quarter off campus at professional practice sites. Students must complete certain courses in a specified sequence in order to complete their studies within the 2 year time frame.
Therefore it is very important that first-year students develop a plan of study with their assigned advisor. This plan of study will be placed on file in the Department of Health Information Management office before or during registration for the Winter Quarter. Failure to develop a curriculum plan with the advisor and to follow the plan could prolong the course of study.

The program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education. Graduates of the program are eligible to apply to write the accreditation examination of the American Health Information Management Association. Graduates who pass this examination may use the credential, RHIA, Registered Health Information Technician. The two-year program leads to the Associate of Science degree. This program is available online.

**Health Information Technology Curriculum (AS)**

**Freshman Year**
- Biological Sciences 225, 227 .................................................. 6
- English (GER).......................................................... 3
- English 101 .................................................................................. 3
- Health Information Management 103, 107, 108, 115, 122, 226, 240 .................................. 18
- Humanities (GER)............................................. 3
- Speech 110 or 377 .................................................. 3
- Mathematics (GER) .................................................. 3
- Mathematics 100 or 101 ........................................... 3
- Statistics 200 or Math 125 ........................................... 3

**Sophomore Year**
- Arts (GER) .................................................................. 3
- English (GER).......................................................... 3
- English 102 .................................................................................. 3
- Health Information Management 120, 207, 208, 217, 224, 229, 234, 236, 237, 238, 241, 277/278/279, 280 ........................................ 30
- Social Science (GER) .................................................. 3

**Total Semester Hours** ...................................................... 75

**Health Information Administration**

The baccalaureate degree curriculum emphasizes the development of skills for the management of health-related information and the systems used to collect, store, retrieve, disseminate, and communicate information for the support of enterprise operations and clinical and business decision making in health care or related organizations.

The Health Information Administration (HIA) program requires 12 quarters of study on-campus plus 1 quarter off-campus at professional practice sites.

The Health Information Administration program received the Louisiana State Board of Regents' Commendation of Excellence, the highest recognition awarded to an academic program by this group.

The program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education. Graduates of the program are eligible to apply to write the registration examination of the American Health Information Management Association. Graduates who pass this examination may use the credential, RHIA, Registered Health Information Technician. This program leads to the Bachelor of Science Degree. This program is available online.

**Health Information Administration Curriculum (BS)**

**Freshman Year**
- Natural Sciences (GER) .................................................. 6
- Biological Sciences 225, 227 .................................................. 6
- English (GER) .......................................................... 6
- English 101, 102 .................................................................. 6
- Health Information Management 103, 107, 108, 115, 120, 128 ......................... 14
- Health Information Management 107, 108, 115, 120, 128, 226, 240 .................................. 18
- Humanities (GER) ............................................. 3
- Speech 110 or 377 .................................................. 3
- Mathematics (GER) .................................................. 3
- Mathematics 100 or 101 ........................................... 3
- Statistics 200 or Math 125 ........................................... 3

**Sophomore Year**
- Arts (GER) .................................................................. 3
- English (GER).......................................................... 3
- English 102 .................................................................................. 3
- Health Information Management 120, 207, 208, 217, 224, 229, 234, 236, 237, 238, 241, 277/278/279, 280 ........................................ 30
- Social Science (GER) .................................................. 3

**Junior Year**
- Human Sciences (GER) ............................................. 3
- Speech 110 or 377 .................................................. 3
- Health Information Management 312, 318, 319, 330 ........................................ 10
- Management 310 .................................................. 3
- Social Sciences (GER) .................................................. 3
- Sociology 201 .......................................................... 3
- An additional Social Sciences course .................................. 3

**Senior Year**
- Arts (GER) .................................................................. 3
- Clinical Laboratory Science 450 .................................................. 3
- Health Information Management 417, 418, 425, 430, 431, 477/478/479 ........................................ 18
- Humanities (GER) ............................................. 3
- History .............................................................................. 3
- Management 470 .......................................................... 3

**Total Semester Hours** ...................................................... 121

**Requirements for a Minor in Health Information Management**

Eighteen hours to include Health Information Management 103, 107, 240, 312, 318, and 440.

**The Graduate Program**

The Master of Health Information Management (MHIM) degree is described in Chapters 15 and 17 of this Catalog.

**School of Human Ecology**

**Mission**

Through excellence in teaching, research, and service, the School of Human Ecology prepares students to meet the changing needs of individuals, families, consumers, and communities. Consistent with the University and College, this mission is implemented through instruction, research, and service which involve:

- Implementing undergraduate and graduate curricula that reflect current trends from the rapidly changing and complex professional environments, that expand students’ knowledge of the field, stimulate intellectual curiosity, cultivate original thought and expression, and enhance problem-solving skills.
- Contributing to current knowledge through research in the areas of family and child studies, merchandising and consumer studies, and nutrition and dietetics.
- Providing professional expertise to other professionals, the university community and the community-at-large.

**Programs**

The School of Human Ecology offers four undergraduate degree programs (Family and Child Studies, BS; Family and Consumer Sciences Education, BS; Merchandising and Consumer Studies,
BS; Nutrition and Dietetics, BS), a post-baccalaureate dietetic internship, and two graduate programs (Family and Consumer Sciences, MS; Nutrition and Dietetics, MS). In addition, the School of Human Ecology collaborates with the College of Education to offer the Early/Elementary Education - Grades PK-3 undergraduate degree program, and with the Department of Psychology and Behavioral Sciences to offer a graduate (post-baccalaureate) certificate program in Dynamics of Domestic Violence.

Undergraduate programs in the School of Human Ecology are accredited by the Council for Accreditation of the American Association of Family and Consumer Sciences. The Nutrition and Dietetics undergraduate program is approved by the Commission on Accreditation for Dietetic Education of the American Dietetic Association, and the post-baccalaureate dietetic internship is accredited. The Family and Consumer Sciences Education program, which satisfies state teacher certification standards, is included in the University accreditation by the National Council for the Accreditation of Teacher Education. The Early Childhood Education Center is accredited by the National Academy of Early Childhood Programs. In addition, the Family Science concentration in the Family and Child Studies program is approved by the National Council on Family Relations.

**Family and Child Studies**

**Career Opportunities**

Students completing the BS degree in Family and Child Studies will choose one or more of three concentrations: Applied Child Development, Child Life, or Family Science. All concentrations provide students with a broad background in child development and guidance, family dynamics, coping strategies, and interpersonal skills. Each concentration includes theory-based courses, application-based courses, and experiential education courses.

The Applied Child Development concentration prepares students to work with children of all ages in a variety of settings. Graduates may find employment in social agencies, child care settings, and related programs. The Applied Child Development concentration is not a teacher certification program.

The Child Life concentration prepares students to become child life specialists. After completing the BS degree in Family and Child Studies, graduates complete an internship and pass a national certification examination to become certified child life specialists. Child life specialists work primarily in the hospital setting, although some graduates have obtained jobs working with children in social and community agencies, bereavement programs, and early intervention programs.

The Family Science concentration prepares students for a variety of human services positions, including community support services; counseling and youth agencies; law or public policy; and employee assistance programs. Many of the students completing this concentration enter graduate programs such as family and consumer sciences, social work, marriage and family therapy, and seminary.

**Program Information**

Students in the Family and Child Studies program are eligible to apply for upper division after they have completed at least 30 semester hours, including 6 hours of English composition, 6 hours of mathematics, and 6 hours of Family and Child Studies courses; have at least a 2.2 GPA; and have earned a grade of C or better in English 101 and 102, Mathematics 101, and all Family and Child Studies courses taken at Louisiana Tech University. Students are required to be admitted to upper division before enrolling in 300 and 400 level Family and Child Studies courses. A grade of C or better in all Family and Child Studies courses also is required in order to meet graduation requirements.

**Family and Child Studies Curriculum (BS)**

**Freshman Year**

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<td>Mathematics 125 or Statistics 200</td>
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<td>Biological Science</td>
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**Sophomore Year**

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<td>English 201 or 202</td>
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<td>Merchandising and Consumer Studies 256</td>
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<td>Psychology</td>
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**Junior Year**

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**Senior Year**

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<td>Human Ecology Elective</td>
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<td>Human Ecology Practica</td>
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<tr>
<td>Directed Electives*</td>
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<tr>
<td><strong>Total Semester Hours</strong></td>
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</tbody>
</table>

Total Semester Hours: 123

*Directed Electives: General Education Requirements (pg. 14)
(IER): International Education Requirement (pg. 15).
**Restricted Electives are those chosen by student in consultation with advisor, from one of the following concentrations.

**Applied Child Development Concentration**

Sophomore Year: (9 hours) Family and Child Studies 200, 221, 276.
Junior Year: (15 hours) Family and Child Studies 277, 301, 331, 341, 361.
Senior Year: (9 hours) Family and Child Studies 401, 432, 451.

**Child Life Concentration**

Sophomore Year: (9 hours) Family and Child Studies 280, 301; Health Information Management 103.
Junior Year: (15 hours) Family and Child Studies 225, 325, 331, 341, 361 and 335 or Counseling 400.
Senior Year: (9 hours) Family and Child Studies 380, 432, 451.

**Family Science Concentration**

Sophomore Year: (9 hours) Family and Child Studies 100, 200, Human Ecology Elective (3).
Junior Year: (15 hours) Family and Child Studies 301 or 331 or 341; Family and Child Studies 355 or Counseling 400;
Family and Consumer Sciences Education

Career Opportunities
Family and Consumer Sciences Education is a teacher certification program. Graduates are prepared to teach vocational family and consumer sciences in Louisiana secondary schools.

Program Information
Upper division requirements for the Family and Consumer Sciences Education program are established by the Louisiana Tech University Teacher Education Council. Students applying for upper division must have earned 46 semester hours by the end of the quarter the application is made. They must have completed University Seminar 100, Speech 110 or 377, Education Curriculum and Instruction 210, English 101 and 102 or 201 or 202, Social Studies (9 hours), and Mathematics (6 hours). A grade of C or better is required in English 101 and 102, Speech 110 or 377, Education Curriculum and Instruction 125 and 210. At the point of application, students must have a minimum C average in science, math, and social studies. Applicants must have passed the first section of the PRAXIS Exam. They must have had their speech and hearing rated “satisfactory” by the Louisiana Tech University Department of Speech. Applicants must possess those physical, emotional, and mental traits needed for successful performance in a regular classroom and must not be on University academic or disciplinary probation or suspension. Any student seeking admission to upper division who has been convicted of a felony may be denied admission. Applications should be turned in to the advisor at least one week prior to the beginning of the quarter.

Students in the Family and Consumer Sciences Education baccalaureate program are required to earn a grade of C or better on all human ecology and professional education courses. Students are required to apply for clinical experience. A grade point average of 2.5 is required for enrollment in clinical experience. Students are required to successfully complete the PRAXIS-PLT and the PRAXIS specialty exam prior to clinical experience.

Family and Consumer Sciences Education - Grades 6-12 Curriculum (BS)

**Freshman Year**
- Education Curriculum and Instruction 125..................................................1
- English (GER)........................................................................................................6
- Family and Child Studies 201..............................................................................3
- Human Ecology 267............................................................................................1
- Humanities (GER)
  - History 102.........................................................................................................3
  - Speech 110 or 377...............................................................................................3
- Mathematics (GER)
  - Mathematics 100 or 101, and 125.................................................................6
- Merchandising and Consumer Studies 118......................................................3
- Natural Sciences (GER)
  - Biological Sciences 101 or 130.................................................................3

**Sophomore Year**
- Education Curriculum and Instruction 210......................................................3
- Humanities (GER)
  - English 201 or 202, and 303........................................................................6
- Food and Nutrition 232......................................................................................3
- Merchandising and Consumer Studies 256......................................................3

**Junior Year**
- Education Curriculum and Instruction 434, 435, 471......................................9
- Family and Child Studies 200..........................................................................3
- Food and Nutrition 220.....................................................................................3
- Human Ecology 398..........................................................................................1
- Merchandising and Consumer Studies 219, 426, 456.......................................9
- Restricted Electives *......................................................................................6

**Senior Year**
- Education Curriculum and Instruction 403,416, 472........................................15
- Education Curriculum and Instruction 480 or Secondary Focus Electives....3
- Family and Child Studies 341..........................................................................3
- Human Ecology 405, 415, 457..........................................................................5
- Restricted Electives *......................................................................................6

Total Semester Hours......................................................................................125

*Restricted Electives to be selected by student in consultation with advisor to satisfy requirements for secondary teaching area.

Merchandising and Consumer Studies

Career Opportunities
Students completing the BS in Merchandising and Consumer Studies complete a freshman core of courses and then choose one of two concentrations: Merchandising or Consumer Studies.

The Consumer Studies concentration prepares students for careers that focus on how businesses, government agencies, and community organizations interact with and promote the well-being of consumers and families. Graduates may seek employment with government and private consumer service agencies and/or businesses related to management and consumer education, customer service, consumer public relations, event planning, and cooperative extension.

The Merchandising concentration prepares students for managerial and merchandising careers in a dynamic, technologically advanced, and globally focused industry in the areas of merchandising, design, and promotion. Professional preparation includes studies in product creation, production, distribution, and promotion. In both concentrations, University study is supplemented by experiential learning in local and metropolitan job settings. Travel-study programs provide students opportunities to study the global aspects of their fields.

Program Information
Students in the Merchandising and Consumer Studies program are eligible to apply for upper division when they have a 2.2 GPA on at least 30 semester hours credit, including 6 hours of English, 3 hours of Mathematics, University seminar 100, and 6 hours of Merchandising and Consumer Studies courses. They must have earned grades of C or better in English 101 and 102, 3 hours of mathematics and all Merchandising and Consumer Studies courses completed. Students must be admitted to upper division prior to enrolling in human ecology content courses numbered 300 or above. A grade of C or better in all Merchandising and Consumer Studies courses is required in order to meet graduation requirements.

Natural Science (GER)
- Biological Science 102 or 132 .................................................................3
- Geology 111 or Physics 205........................................................................3

Social Science (GER)
- Political Science 201..................................................................................3
- Psychology 207............................................................................................3
- Sociology 201...............................................................................................3

Family and Child Studies

**Freshman Year**
- Family and Child Studies 444, 471..........................................................476
- Merchandising and Consumer Studies 456.

**Sophomore Year**
- Family and Child Studies 100, 200, 210, 221, 255, 276, 277, 301, 320, 331, 400, 401, 420, 432, 435, 444, 447, 451, 471, or 490. At least 12 hours should be 300 level or above.

**Junior Year**
- Arts (GER)........................................................................................................3
- Education Curriculum and Instruction 434, 435, 471......................................9
- Family and Child Studies 200..........................................................................3
- Food and Nutrition 220.....................................................................................3
- Human Ecology 398..........................................................................................1
- Merchandising and Consumer Studies 219, 426, 456.......................................9
- Restricted Electives *......................................................................................6

**Senior Year**
- Education Curriculum and Instruction 403,416, 472........................................15
- Education Curriculum and Instruction 480 or Secondary Focus Electives....3
- Family and Child Studies 341..........................................................................3
- Human Ecology 405, 415, 457..........................................................................5
- Restricted Electives *......................................................................................6

Total Semester Hours......................................................................................125

*Restricted Electives to be selected by student in consultation with advisor to satisfy requirements for secondary teaching area.
Merchandising and Consumer Studies Curriculum (BS)

Freshman Year
- English (GER) ................................................................. 6
- Mathematics (GER)
  - Mathematics 100 or 101 ............................................. 3
  - Mathematics 112, 114, 125, or Statistics 200 ............. 3
- Merchandising and Consumer Studies 108, 246, 256 ........ 8
- Natural Sciences (GER) ................................................... 9
- Humanities (GER)
- Speech 110 ..................................................................... 3

Sophomore Year
- Accounting 201 or 206 .................................................. 3
- Social Sciences (GER)
  - Economics 202 or 215 ............................................... 3
- Psychology ....................................................................... 3
- Additional Social Sciences Course ................................. 3
- Humanities (GER)
  - English 201 or 202 ..................................................... 3
- Additional Humanities course ........................................ 3
- Family and Child Studies 201 ....................................... 3
- Merchandising and Consumer Studies 258 ..................... 3
- Directed Electives* .......................................................... 6

Junior Year
- Arts (GER) ........................................................................ 3
- Business Law 255 ........................................................... 3
- Humanities (GER)
- History 102 ..................................................................... 3
- Human Ecology 327, 398 .................................................. 4
- Marketing 300, 420 ........................................................... 6
- Directed Electives* .......................................................... 14

Senior Year
- Directed Electives* .......................................................... 6
- Human Ecology 457 ........................................................... 1
- Human Ecology Practica or Merchandising & Consumer Studies 498 ........................................ 3
- Journalism 450 ................................................................ 3
- Management 305 ............................................................. 3
- Merchandising and Consumer Studies 466, 429 .......... 6
- Restricted Electives** ....................................................... 6

Total Semester Hours ....................................................... 123
(GER); General Education Requirements (pg. 14)
IER: International Education Requirement (pg. 15).
* Directed Electives: chosen by student in consultation with advisor from one of the following concentrations below:
**Restricted Electives: 300 and 400 level courses selected in consultation with the advisor

Consumer Studies Concentration
- Sophomore Year: (6 hours) Family & Child Studies 210; Management 310; Junior Year: (14 hours) Family and Child Studies 410 or 447; Merchandising and Consumer Studies 388, 426; Restricted Electives (5 hours); Senior Year: (6 hours) Merchandising and Consumer Studies 456; Human Ecology (HEC) or Merchandising & Consumer Studies (MCS) or Family and Child Studies (FCS) elective (3 hours).

Merchandising Concentration
- Sophomore Year: (6 hours) Merchandising and Consumer Studies 219, 238; Junior Year: (14 hours) Merchandising and Consumer Studies 118 or Merchandising & Consumer Studies elective; Merchandising & Consumer Studies 268, 308, 348; Marketing 435; Senior Year: (6 hours) Merchandising and Consumer Studies 488 and 439 or 440.

Requirements for a Minor in Consumer Studies
- A minimum of 21 hours with at least 9 hours at the 300 level or above to be selected from the following: Merchandising and Consumer Studies 108, 256, 258, 366, 388, 426, 456, 466, 498; Human Ecology 327.

Requirements for a Minor in Merchandising
- A minimum of 21 hours with at least 9 hours at the 300 level or above to be selected from: Merchandising and Consumer Studies 108, 118, 219, 238, 258, 268, 308, 348, 388, 429, 439, 440, 466, 488, 498.

Nutrition and Dietetics (BS)

Career Opportunities
- The undergraduate program in Nutrition and Dietetics is designed for students wishing to pursue careers as registered dietitians. The program is designed to allow students to master the American Dietetic Association knowledge requirements for entry-level practice. Students completing the program must also complete a dietetic internship before they are eligible to take the Registration Examination for Dietitians. The dietetic internship at Louisiana Tech University is described in detail in the graduate program section of the University catalog.
- The undergraduate program at Louisiana Tech University is a generalist program. Students complete course work that prepares them for clinical dietetics, community dietetics, and food service management. After successfully completing the undergraduate program, a dietetic internship and the Registration Examination for Dietitians, graduates are prepared to assume clinical positions in health care facilities such as hospitals; community positions in health centers like public health departments and wellness centers; and management positions in food service.

Program Information
- Students in Nutrition and Dietetics apply for upper division status prior to enrolling in the specialized phase of the program (junior and senior years). Students are eligible for upper division when they have completed at least 54 semester hours, including 35 hours of knowledge requirement courses, with a knowledge requirement (KR) grade point average of 2.85 and no grade less than a C in knowledge requirement courses. The knowledge requirement or KR courses are those in which students achieve the core knowledge requirements for entry level dietitians as specified by the American Dietetic Association. Additional information about the ADA knowledge requirements and KR courses can be obtained from academic advisors.
- A 2.85 KR-GPA, with no grade lower than C in all knowledge requirement courses is required for graduation in this curriculum.

Nutrition and Dietetics Curriculum (BS)

Freshman Year
- English (GER) ................................................................. 6
- Family and Child Studies 201 ....................................... 3
- Food and Nutrition 103, Elective ................................... 4
- Humanities (GER)
  - English 201 or 202 ..................................................... 3
  - Mathematics (GER)
  - Mathematics 100 or 101 ............................................. 3
  - Merchandising and Consumer Studies 246 .................. 3
  - Natural Sciences (GER)
  - Chemistry 120, 121, 122 ............................................ 7
  - Social Sciences (GER)
  - Sociology 201 ............................................................. 3

Sophomore Year
- Accounting 201 or 206 .................................................. 3
- Food and Nutrition 203, 220, 232, 274 ............................ 12
- Merchandising and Consumer Studies 256 ..................... 3
- Natural Sciences (GER)
  - Biological Sciences 225, 226, 227, 228 ....................... 8
- Social Sciences (GER)
  - Psychology 102 .......................................................... 3

Junior Year
- Biological Sciences 214 ................................................... 4
Food and Nutrition 305, 402, 403, 404, 414................................. 14
Humanities
English 303 .............................................................................. 3
Speech 110 or 377 ................................................................. 3
Management 310 ..................................................................... 3
Mathematics (GER) ............................................................... 3
Statistics 200 ......................................................................... 3
  ................................................................................................ 30
Senior Year
Arts (GER).............................................................................. 3
Food and Nutrition 302, 412, 423, 443, 463, 472..................... 18
Human Ecology 398, 457.......................................................... 2
Humanities (GER) ................................................................... 2
History Elective ....................................................................... 3
Management 340 or 400.......................................................... 3
Social Sciences (GER) ............................................................ 3
Psychology 320 or 400 ............................................................. 3

Total Semester Hours................................................................ 123
(GER): General Education Requirements (pg. 14)
(IER): International Education Requirement (pg. 15).

Requirements for a Minor in Human Nutrition
A minimum of 21 hours with at least 9 hours at the 300 level or above to be selected from Food & Nutrition 103, 203, 220, 232, 253, 305, 402, 403, 404.

Requirements for an Interdisciplinary Minor in Gerontology
The minor in Gerontology is an interdisciplinary program requiring 24 hours, with at least 10 hours from courses at the 300 level or above.
Core courses (15 hours): Family and Child Studies 201 or Psychology 308; Health and Physical Education 406; Sociology 435; Family and Child Studies 447; 3-hour practicum in Education, Health and Physical Education, Human Ecology, or Sociology.
Electives (9 hours): Electives are to be selected from those listed below and approved by the advisor. It is strongly suggested that ALL students elect either Psychology 475 or Sociology 436 for 3 of the 9 hours. Other elective courses include: Counseling 400; Family and Child Studies 210, 320, 400, 420; Food and Nutrition 203; Health and Physical Education 292, 401, 416; Psychology 474, 475, 480, 499; Sociology 308, 425, 436.

The Graduate Program
Master of Science degrees offered by the School of Human Ecology are described in Chapters 15 and 17 of this Catalog.

Division of Nursing

Vision
The Louisiana Tech University Division of Nursing is committed to serving as a benchmark nursing program in the community, state, and southern region of the country, through the provision of innovative teaching and interactive opportunities to prepare the entry level registered nurse to function in the evolving health care delivery system.

Mission
The Division of Nursing is committed to excellence in the education of students of diverse educational and cultural backgrounds, preparing them to enter an ever-changing health care environment as competent practitioners of nursing. This education environment:
- Fosters critical thinking
- Is achieved through interaction of faculty with students
- Is responsive to community needs
- Is cognizant of regional and national trends in health care delivery
- Recognizes its responsibility for research and scholarly activity and service.

Accreditation
The Associate of Science degree in nursing has full approval from the Louisiana State Board of Nursing, 5207 Essen Lane, Suite 6, Baton Rouge, Louisiana 70809; telephone number 225-763-3570; www.lsbm.state.la.us. The program is also accredited by the National League for Nursing Accrediting Commission (NLNAC), 61 Broadway – 33rd Floor, New York, New York 10006; telephone 800-669-1656; www.nlnac.org.

Program
The purpose of the Division of Nursing is to prepare graduates, with an Associate of Science Degree in Nursing, to function as beginning practitioners of nursing, thus affording unique benefits in meeting the health care needs of the community. The graduate will, also, upon completion of the prescribed program, be eligible to sit for the examination required for state licensure as registered nurses.

The Louisiana State Board of Nursing reserves the right to deny a graduate admission to sit for the R.N. Licensing Exam if he/she has ever been arrested, charged with, convicted of, pled guilty or no contest to, or been sentenced for any criminal offense.

Admission to the Division of Nursing is based upon the following criteria established by the Admissions Committee, Division of Nursing:
- ACT scores
- High School or College Transcripts
- Three (3) Letters of Reference
- Evidence of LPN Licensure (if applicable)
- Pre-Nursing and Guidance examination given on the LA Tech campus in the Testing Center, Keeny Hall.

After a student has been accepted into the nursing program, an annual physical examination is required. A chest x-ray, Hepatitis B vaccine, varicella titer, and drug screen are required upon admission to the first nursing course, along with current CPR certification and proof of malpractice insurance. Application for permission to enroll in clinical nursing courses must include a criminal background check as authorized under the Nurse Practice Act, Louisiana Revised Statutes 37:920.1. Students who hold or have held licensure in any health care discipline and who have or have had disciplinary action against such license; students who have ever been arrested, charged with, convicted of, pled guilty or no contest to, or been sentenced for any criminal offense; students who have habitually used or been diagnosed as addicted to drugs or alcohol; and students who have any physical or mental impairment which may affect their ability to practice safely as a registered nurse, shall petition the Louisiana Board of Nursing for review and action regarding their right to practice as student of nursing in Louisiana prior to entry into the first clinical course. Failure to disclose this information may result in denial of licensure. Nursing students must be able to meet the Division of Nursing published Core Performance Standards (copy available in Nursing Office and on the web site).

Applicants for readmission must meet the admission and progression criteria at the time of application. If more than 3 quarters have elapsed since the student was enrolled in a nursing course, an application to be readmitted to the first quarter in clinical nursing courses must be approved by the Admissions Committee.

In addition to the regular University fees, expenses for uniforms, supplies, equipment, books, standardized exams, fees related to application for licensure, NCLEX-RN examination, criminal background check, or other expenses required for admission to clinical nursing courses and graduation are required in the nursing program.

Students must achieve a minimum grade of C in each nursing and nursing-related course to progress from one sequentially designed nursing course to the next. A nursing course may be repeated only one time.
**Transfer**

Students may transfer credit earned for the general academic courses from other accredited universities. Students must meet admission and progression criteria at the time of application, as well as transfer admission requirements to Louisiana Tech University. A minimum grade of C is required for acceptance of transfer courses.

Transfer students must provide a syllabus and course description for all nursing courses for which transfer credit is possible, and must pass the credit exams for each exam taken. Students must also submit a letter of good standing from the school of nursing previously attended. Credit will not be granted for courses in nursing taken more than 3 quarters prior to admission. This policy also applies to credit granted by examination.

Upon successful completion of all course requirements, the student is eligible for graduation with an Associate of Science Degree in Nursing.

**Nursing Curriculum (ASN)**

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<th>Sophomore Year</th>
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</table>

**Accelerated (Extension) Program**

The Division of Nursing provides an opportunity for licensed practical nurses who wish to pursue the Associate of Science Degree in Nursing through the Extension Program (LPN to RN articulation) at Glenwood Regional Medical Center in West Monroe, LA. Nursing graduates from state-approved practical nurse educational programs that are currently licensed to practice, have had one year of clinical experience, and meet the admission criteria are eligible for admission.

After satisfactory completion of two transition courses, Nursing 100 (Winter Quarter only) and Nursing 113, (Spring Quarter only), the student is eligible for advanced placement in the Nursing curriculum. Any student who fails to achieve in Nursing 113 may request admission to Nursing 109, 110, and 112 on the Ruston campus. Subsequent failure to achieve in any one of these courses prohibits progression and eligibility to re-enroll in nursing courses. Students must complete the following courses before enrolling in the fall quarter nursing course (Nursing 114): Biological Sciences 214, 225, 226 and 227; Math 101; Nursing 100 and 113. Students are also urged to complete the remaining 18 hours of General Education Requirements (GER) courses prior to fall enrollment.

The total course work for Extension students follows.

**Courses**

<table>
<thead>
<tr>
<th></th>
<th>11</th>
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<tbody>
<tr>
<td>Arts (GER)</td>
<td>3</td>
</tr>
<tr>
<td>Biological Sciences 214, 225, 226, 227</td>
<td>11</td>
</tr>
</tbody>
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