

# Chapter 7 - Special Programs and Facilities

## Athletics Opportunities

Louisiana Tech University is a member of the Western Athletic Conference. Louisiana Tech has been a member of the NCAA since 1951. Men's teams include football, basketball, indoor and outdoor track, baseball, cross-country, and golf. Women's teams are basketball, indoor and outdoor track, cross-country, tennis, softball, volleyball, bowling, and soccer. This well-balanced sports program provides year-round opportunities for faculty, staff, and students to enjoy athletics on the highest level of collegiate competition.

## Barksdale Air Force Base Program

Louisiana Tech has offered an on-base degree program at Barksdale Air Force Base since September 1965. The program is designed for Air Force personnel whose military assignments make it impractical for them to earn college credit and complete a degree program in the traditional manner. Civilians are permitted to participate on a space available basis. On-base offices are maintained in the Base Education Center.

<http://www.barksdale.latech.edu>

Sufficient courses are offered at Barksdale for a student to earn the Associate of General Studies, the Bachelor of General Studies, and the Bachelor of Science in Electrical Engineering Technology. Courses necessary for the Alternative Secondary Teacher Education Certification are also offered. The Master of Arts degree may be earned in Counseling and Guidance and in Industrial/Organizational Psychology. The Master of Business Administration is also offered.

## Center for Applied Physics Studies (CAPS)

The mission of the Center for Applied Physics Studies (CAPS) is to provide a world-class, integrated engineering and physics educational and research environment, thereby creating opportunities for interdisciplinary studies, the sharing of resources, and the transfer of technology from basic science to engineering applications. The CAPS program, through the use of multidisciplinary research and teaching efforts, generates a profile of both engineers and physicists who are well-trained to enter a broad spectrum of careers in both physics and engineering.

The CAPS multidisciplinary research and education program combines the strengths of researchers and students from particle physics, biomedical engineering, mechanical engineering, and the Institute for Micromanufacturing (IfM). As a participant in CAPS, each member and student spends a portion of his/her time in cross-collaborative efforts in areas outside of his/her traditional area of expertise. For each project, multidisciplinary research teams are assembled consisting of undergraduate and graduate students, postdoctorals, faculty, and collaborators from other institutions, national labs, and industry.

The major research efforts of CAPS currently span the areas of particle physics, micromanufacturing, microfluidics, and biomedical sensors. Each of the areas has received funding from agencies such as the NSF, NASA, Louisiana Board of Regents Support Fund, DoE, and Louisiana-NASA Space Consortium.

The Particle Physics Group within CAPS is involved in research in high energy, nuclear, and astro-particle physics with major experimental projects at Fermilab, the Thomas Jefferson National Accelerator Facility (TJNAF), Brookhaven National Lab, and the Los Alamos National Lab. A CAPS research team is

currently developing a Pizellated Cesium Iodide metal array coupled to a fast-timing bidirectional CCD in collaboration with LSU for use on a Gamma-Ray Balloon Borne Imaging Experiment and for use in Positron Emission Tomography (PET).

The Center is located on the Louisiana Tech Campus in the Engineering Annex. The CAPS facilities consist of a DEC Alpha-based computer system, a PSpice-based Electronics Design Station, an AutoCAD Mechanical Design Station, a Detector Development Test Lab, and a Cosmic Ray Test Stand with CAMAC, VME, and FastBUS based Data Acquisition Systems.

<http://www.phys.latech.edu/official/research/caps.htm>

## Center for Applied Teaching and Learning to Yield Scientific Thinking (CATALyST)

CATALyST, a regional science and mathematics education center housed in the School of Biological Sciences, focuses on improving the scientific and mathematical understanding of K-12 teachers, students, and parents in the public school systems with which it partners. It promotes science and mathematics education and maximizes regional educational resources by offering a menu of professional development activities and model programs to K-12 schools, teachers, administrators, university faculty, parents, students, and providers of preschool education and day care. A major focus of the center is the development of long-term professional development programs for K-12 teachers that are custom designed to meet the needs of the partnering school systems. In addition, CATALyST houses on-going nationally recognized professional development programs for K-12 teachers from throughout Louisiana and surrounding states.

CATALyST disseminates information on regional educational opportunities and programs via a CATALyST website, electronic networking, newsletters, and news releases. CATALyST sponsors a local newspaper column, *CATALyST Conundrums*, that invites students grades 4-8 to submit written solutions to science or math puzzlers; best answers and names and schools of all students submitting correct responses are published in the following column. CATALyST also sponsors the *Journal of K-12 Research in Science and Mathematics*. The journal publishes student-written articles describing science investigations and mathematics projects conducted by students in grades 4-12.

CATALyST is funded by the U.S. Department of Education and funds from partnering organizations. A variety of federal and state funds support specific programs. <http://catalyst.latech.edu>

## Center for Biomedical Engineering and Rehabilitation Science (CyBERS)

The Center for Biomedical Engineering and Rehabilitation Science (CyBERS) has been identified as a Center of Excellence at Louisiana Tech University, first by the Louisiana State Legislature in 1985 when it was established, and recently by the University of Louisiana System in a review of all its colleges and universities. CyBERS and the Biomedical Engineering faculty have long had international acclaim for its physiological research and its rehabilitation engineering and science research and service. Through partnership with the world-class facilities and research in Tech's Institute for Micromanufacturing, Biomedical Engineering faculty have developed expertise in the growing BioMEMS and Nanobiotechnology fields. The Center is also actively engaged in

Neural Engineering research. Total external funding for Biomedical Engineering research exceeds \$3M annually from a variety of sources including the Whitaker Foundation, State of Louisiana, NSF, NIH, AFOSR, VA, and US Department of Education. CyBERS is housed in the 23,000 square foot Biomedical Engineering Center. This building includes staff and administrative offices, educational facilities, and research and assessment laboratories. CyBERS' Comprehensive Center for Rehabilitation Technology (CCRT) provides rehabilitation technology services and assessments to the State of Louisiana's Rehabilitation Services agency and other clients. Certified specialists on staff include rehabilitation engineers, a counselor, occupational therapists and assistants, a speech/language pathologist, an adaptive driving evaluator, and a nurse (see <http://www.CyBERS.latech.edu>). Additional resources of the Center include craftwork shops, graphics and video studios, various vehicles used in the driver-training programs, and animal research facilities. Louisiana Tech University's Biomedical Engineering Program is unique in the country in that it is the only engineering school-based program that directly provides clinical rehabilitation services to individuals with disabilities. Active at the state, national, and international levels, CyBERS provides opportunities for faculty and students from throughout the entire university to participate in the activities and programs of the Center.

## **Center for Economic Education**

The Center for Economic Education is affiliated with the Louisiana Council and the National Council on Economic Education. The Center's primary purpose is to promote an increased level of economic understanding in the elementary and secondary schools of its service area.

## **Center for Entrepreneurship and Information Technology (CEnIT)**

CEnIT creates an innovative entrepreneurial culture by enhancing the education of students in information technology and entrepreneurship; promoting the development and commercialization of information technologies generated by university faculty and students; and providing leadership in entrepreneurship and information technology outreach activities that will support economic development in the state. CEnIT is a collaboration between the College of Engineering and Science and the College of Administration and Business but involves participation from every college at the institution. The CEnIT Innovation Lab is a technology-rich environment created to support interdisciplinary research, class projects and entrepreneurial activities. ([www.cenit.latech.edu](http://www.cenit.latech.edu))

## **Center for Real Estate Studies**

The Louisiana Real Estate Commission's grant to develop the real estate area at Louisiana Tech constituted the Center's initial funding. The Center coordinates real estate research, funds real estate scholarships, and promotes interaction with real estate professionals. (<http://www.cab.latech.edu/public/DEPTS/cres/index.htm>)

## **Center for Rural Development**

The Center for Rural Development provides a linkage between rural residents in Louisiana and experts at Louisiana Tech University in areas that are important to rural development. These include education, nutrition, technology,

small business development, community design and planning, agriculture and forestry, folklife and the arts. The Center helps rural community leaders access the data, research, and technical assistance that is available at the University.

(<http://www.latech.edu/tech.rural/index.html>)

The Center's staff also works with Louisiana Tech faculty who wish to do research that pertains to rural development by helping to identify possible community partners for their work.

In addition, the Center seeks to work on rural development projects and research in collaboration with programs at other agencies, non-profits and universities – both in the State of Louisiana and throughout the country.

The Center is also a source of information about funding opportunities in areas relating to rural development and can assist community leaders and Louisiana Tech faculty and staff in identifying potential sources of funding for specific projects. On this website we list current funding opportunities and grants.

The Center issues a quarterly publication – *Rural Louisiana*, sponsors an annual conference on rural development at Louisiana Tech, and conducts research on topics of interest to those working in rural development in Louisiana.

The Center is entirely supported by external funding sources. The main support for the Center is provided through a special grant from USDA's Cooperative State Research Education and Extension Service (CSREES). In addition, the Center has received a USDA-NRI research grant, a grant from the Southern Region SARE Program, and a contract from the State of Louisiana to support its research and technical assistance projects.

## **Continuing Education**

Today's rate of increase in knowledge has made constant renewal of education a necessity. It is the responsibility of the University to play its part in meeting this need. Louisiana Tech University is committed to learning as a lifelong process. As a means of supporting this commitment, the Division of Continuing Education offers courses that provide learning experiences for both personal enrichment and continuing professional training. Annually, hundreds of people attend events such as non-credit seminars, workshops, and conferences offered through Continuing Education. Course offerings range from non-credit classes to certificate (CEU) courses. Additionally, thousands of employees receive customized training annually through grants or contract training partnerships with area businesses.

## **Early Childhood Education Center**

The Louisiana Tech University Early Childhood Education Center, operated by the School of Human Ecology, is a model education program for three- and four-year-old children. The center offers two half-day sessions during Fall, Winter, and Spring Quarters. The center serves as a learning lab for students enrolled in Family and Child Studies programs and as a student teaching site for students enrolled in the Early/Elementary Education (PK-3) program. In addition, students from a number of disciplines observe and participate in educational programming at the center. The center is a Louisiana Class A licensed center and is accredited by the National Academy of Early Childhood Programs.

## **Experiential Education Programs**

Experiential Education Programs at Louisiana Tech University are designed to provide quality-structured, supervised experiences for qualified students in their chosen professional fields. Experiences include practice, internships, cooperative

education, clinicals, and student teaching. In many majors, the experiences are degree requirements; in other majors, the experiences are optional for students who choose to participate. Such experiences will enhance employment opportunities for students and carry academic credit. These programs also serve as an opportunity to integrate the theoretical principles studied in the classroom with the practical knowledge gained from on-the-job performance. Experiential Education Programs are provided in each academic college for a variety of academic majors. The availability of department or college opportunities should be discussed with the respective program director or department head.

## **Institute for Innovation and Development in Engineering and Science (I.D.E.A.S.)**

The College of Engineering and Science renamed its Institute for Effective Engineering Teaching to the Institute for Innovation and Development in Engineering and Science (Institute for I.D.E.A.S.) and broadened its mission to provide for the professional development and growth of the faculty and staff. Through seminars, conferences, and workshops, the faculty and staff learn new and better ways to teach and administer to students, to improve their skills in scholarly activities, and to provide opportunities for professional and technical service-related ventures. Innovative teaching and learning techniques, use of technology both in a regular classroom setting and by distance learning, improved communication and teamwork techniques, program accreditation procedures, integrated curricula development, quality training, and outcomes assessment are just a few of the types of programs that are conducted through the Institute for I.D.E.A.S. The vision of the Institute is to help faculty and staff make a positive impact in their own personal development and to enhance their abilities to serve the students, the university, and the state.

## **Institute for Micromanufacturing (IfM)**

The focus of this Institute is applied rather than basic research, emphasizing the design and development, the metrology, the inspection and testing, and the assembly and production of micron and submicron structures and devices. Related to these microstructures and devices, the following areas are emphasized: sensors, manufacturing techniques, systems, and structures. High priority is given to the transfer of these new technologies to government, academia, and industry and to the education of students, particularly graduate students. The mission of the Institute is

- to foster partnerships with industry;
- to provide diversity in process research and development activities yielding the best miniaturization technologies for the economic manufacturing of small products;
- to maintain an interdisciplinary and flexible organization capable of adapting to meet the needs of industry;
- to provide service, education, and curricula development in microfabrication technologies.

The Institute for Micromanufacturing is composed of three components. The focal point is the component for research and development located on the Louisiana Tech University campus in Ruston. A second component is associated with the Center for Advanced Microstructures and Devices (CAMD) in Baton Rouge. This component performs research associated with the x-ray

lithography micromachining capability at CAMD. The third component of the Institute is Technology Transfer and Engineering Research. The component is located in Shreveport/Bossier in order to take advantage of the unique opportunities and resources offered in this region. There is strong interaction among the three components of the Institute, and each of the components interacts to varying degrees with universities, industries, and research centers world-wide.

The main research facility is located on the Louisiana Tech University campus in north-central Louisiana. The 41,000 square foot (3,810 square meter) facility includes 20,000 square feet of environmentally controlled laboratory space with the capability for up to 5,000 square feet of cleanrooms. Laboratory and office facilities have been planned for industrial, governmental, or individual academic collaborators. The IfM is the only facility of its kind in the U.S., and industry representatives are encouraged to be resident at the IfM and to use the facilities to develop micromanufacturing processes for their products. ([www.coes.latech.edu/ifm/index.html](http://www.coes.latech.edu/ifm/index.html))

## **Inter-Institutional Cooperative Program (ICP)**

Louisiana Tech University and Grambling State University entered into a cooperative program, the Inter-institutional Cooperative Program (ICP), effective the Fall of 1969. This program facilitates free student exchange between the two institutions, making it possible for students to enroll for courses at both schools. Faculty exchange between the two institutions is also a part of the program.

Application for courses to be taken on the cooperating campuses must be made at the institution where admissions requirements have been met and degree programs are being pursued. Credits gained as a visiting student may apply toward a degree at the home or matriculation school. The student's divisional dean or authorized representative must approve the course or courses selected and the course load. A copy of the student's report card bearing the official seal will be furnished to the home institution at reporting time by the visited institution. Credit from the ICP classes is reported on the home school's transcript as transfer work. To be eligible to participate in the ICP program, a student must pay full-time tuition at the home institution. Louisiana Tech Barksdale, extension classes, and credit examinations are not included in the ICP program.

## **Larson Test Preparation Center**

The Larson Test Preparation Center is a resource library made possible through the College of Education and by the generous gift of the Estate of Elizabeth Nobles Larson. The main purpose of the center is to assist teacher candidates with preparation for PRAXIS and GRE examinations required for teacher certification. The test center offers PRAXIS and GRE study guides, K-12 textbooks, and other education books for checkout and/or reference. There is also a software program (PLATO) which contains simulated PPST exams with an individualized assessment for each of the three sections and tutorials as needed. For additional information, you may contact one of the following: Ms. Melanie Gleason, Certification Counselor (318) 257-2849; Dr. Dawn Basinger, Assessment Coordinator (318) 257-3950; or Dr. Jo Ann Dautat, Dean, College of Education (318) 257-3950.

## **Lomax Hall Horticultural Conservatory**

The public is welcome to visit the Lomax Hall Conservatory and greenhouses. The Conservatory contains a permanent collection of tropical flowering and fruiting ornamental plants enhanced by seasonal displays of poinsettias, chrysanthemums, bulbs, and bedding plants. The greenhouses are used for educational and teaching activities including propagation, production, and demonstration. The Agricultural Sciences Department provides assistance with individual or group tours.

## **Louisiana Forest Products Development Center**

The Louisiana Forest Products Development Center (LFPDC) is part of the School of Forestry, Louisiana Tech University, and the School of Renewable Natural Resources, LSU AgCenter. The Center attempts to not only develop new technology and products that will add value to forest products, but assure that it is adopted and put into the marketplace and ultimately made available to the consumer, thus improving quality of life for the consumer and improving the economy of the state. The LFPDC was originally established by the Louisiana Legislature as the Louisiana Forest Products Laboratory at both the LSU Agricultural Center and Louisiana Tech University, to provide technical assistance and help in development of value-added processing. To address the needs of Louisiana, the scope of the Lab was broadened in 1994 to include the whole value chain from the forest to the consumer. Overall, the goal of the LFPDC is to aid the state's economy and well being of its people through forest sector development. Visit our website: <http://www.mr.lsu.edu/lfpdc> or <http://www.ans.latech.edu/forestry-index.html>

## **Louisiana Tech Astronomy Facilities**

The astronomy facilities of Louisiana Tech can be used for classroom and laboratory instruction and also for instructional demonstrations to visiting school groups and interested public groups. The facilities at the present time include a Planetarium on the main campus and an Observatory at the Research Park located about 11 miles west of the main campus. The observatory has an eleven-inch reflecting telescope maintained by the Physics Department. A 10-inch Smidt-Cassagrainian mount telescope is also in use.

The Planetarium seats 120 people under its 40-foot diameter dome. A Spitz A4-type instrument projects the sun, moon, and planets as well as about 3,000 visible stars, giving a correct and realistic simulation of the celestial view. The star projector combines with twelve automated slide projectors and a video projector to give visitors an impressive multimedia experience synchronized by a state of the art Theater Control System designed to present accurate, up to date astronomical information. Over 15,000 K-12 students visit the facility each year. Tech students utilize the facility for both academic and leisure activities. The annual Christmas shows attract large numbers of students as well as people from the surrounding communities. (<http://www.latech.edu/planetarium>)

## **Louisiana Tech Concert Association**

The Louisiana Tech Concert Association (LTCA) seeks to enrich the lives of Tech students and members of the various communities with North Central Louisiana by bringing to Howard Auditorium the world's best music, dance, and theatre as performed by professional artists. LTCA is managed through the

School of the Performing Arts. For more information regarding current programming, access the following website:

<http://performingarts.latech.edu>.

## **Louisiana Tech Enterprise Center**

The Louisiana Tech Enterprise Center, dedicated October 2005, was brought to fruition with the purpose of providing administrative assistance and facilities to stimulate small business formation, growth, and development. It provides a venue for start-up companies to concentrate on research, marketing, and production. The facility's additional purpose is to serve as an outreach for the College of Education's many initiatives. It serves as a contributing factor to the regional community as well as the State of Louisiana's economic engine. (<http://research.latech.edu/>)

## **Louisiana Tech Equine Center**

Student instruction, reproductive research, therapeutic riding, and continuing education courses are offered as an integral part of Tech's popular equine program within the Department of Agricultural Sciences. The Equine Center, located on approximately 50 acres on Tech's South Campus, includes pastures for grazing and/or hay production, 12 paddocks, a 16-stall training barn, and an 8-stall stallion barn. The Equine Center typically maintains horses of various breeds year round.

## **Louisiana Tech Museum**

The Louisiana Tech Museum was established July 1, 1982, with the objectives of fostering scholarship at the University, encouraging research by faculty and students, helping educate area school children, and being a cultural center for the region. Numerous exhibits represent the fields of anthropology, archaeology, architecture, art, biological sciences, geology, history, and technology. More than 10,000 artifacts are included in the Indian collections. The museum is not just for viewing but is also a place where study and research can be conducted.

## **Louisiana Tech Public Service Information Center**

The Center, which is housed in the Research Division of the College of Administration and Business, maintains and processes data from the 1970, 1980, 1990, and 2000 Censuses of Population and Housing as well as personal income data furnished by the U.S. Bureau of Economic Analysis. Computer programs and projects have been developed to generate demographic and economic analyses for the State, regions in the State, and selected areas of the Nation. Short reports, articles, and research projects are prepared, both on an in-house and on a contractual basis, for local, state, and regional organizations.

## **Louisiana Tech Speech and Hearing Center**

The Louisiana Tech Speech and Hearing Center provides diagnostic evaluations and treatment for Louisiana Tech students, as well as individuals of all ages with speech, language, and/or hearing disorders. Located in Robinson Hall, the Center accepts referrals from all sources for its services, which include speech, language, and hearing evaluations; hearing-aid evaluation/dispensing; speech-language therapy; and aural rehabilitation. These services are provided by graduate student clinicians under the direct supervision of faculty who are licensed and hold the Certificate of Clinical Competence in Speech-

Language Pathology and/or Audiology awarded by the American Speech-Language-Hearing Association.

<http://www.latech.edu/tech/liberal-arts/speech/Spch&HearingCenter/S&HCenter.htm>

## Louisiana Tech Teachers' Institute

The Teachers' Institute reflects Louisiana Tech University's long-standing commitment to promoting and enhancing the quality of elementary and secondary education. The primary purposes of the Institute are to provide a formal linkage between faculty in Applied and Natural Sciences, Liberal Arts, Engineering and Science, Business, and Education with public school teachers; to provide a university structure for the development of faculty joint projects; and to provide an administrative structure for the development of grant proposals. Faculty expertise in the various discipline areas are made available to teachers through workshops, courses, and other activities. Specifically designed courses are taught by the faculty to expand the teachers' knowledge base and to up-date them on the latest developments in the field.

## Museum of Fashion and Textiles

The Museum of Fashion and Textiles at Louisiana Tech University was established to preserve and exhibit the fashion heritage of the North Louisiana area. The collection, initiated in 1976 as a result of a donation of fifty garments from a private collection of Virginia Laskey of Ruston, was organized formally as a museum in 1983. Conservation techniques were implemented and professional standards were emphasized. Items were cataloged as (1) Fashion, or costumes, and accessories, (2) Textiles, and (3) Paper (patterns, magazines, catalogs, and photographs). Since 1993, the Museum has been housed in the School of Human Ecology, located in Carson Taylor Hall. In 2000, the Museum inherited a vast collection of treasures from the estate of Winifred Spencer Williams, which increased the collection size to over 3000 pieces. The Museum is the only one of its type in Louisiana as well as in surrounding states. The collections represent a comprehensive array of women's fashions from the late 19<sup>th</sup> Century and the 20<sup>th</sup> Century. The collections are an educational tool for university classes in historic costume, apparel evaluation, fashion design, and dramatic arts. Students have the opportunity to view dress from 1880 until the present. Historical and documentary research is possible in the areas of conservation, preservation, environmental conditions, or a particular facet of fashion and fabric design. Periodic exhibits are open to the public and private showings/seminars are also available. Contact the School of Human Ecology (318-257-3727) for more information.

## NASA Educator Resource Center (NASA ERC)

The NASA Educator Resource Center is a repository of exemplary science and math materials made available to educators by NASA. Louisiana Tech was selected by NASA in 1999 to serve as the host institution for the ERC serving the entire state of Louisiana. The ERC is housed in the College of Education as a component of SciTEC. (<http://www.latech.edu/ideaplace/nerc/>)

## Pre-Professional Programs

Louisiana Tech University provides excellent preparation for the student planning a career requiring advanced study in specialized programs.

### Pre-Law

Because of the diversity and complexity of this discipline, there is no single curriculum or course of study which is prerequisite to or guarantees success in law school. Students who intend to study law are referred to the Pre-Law concentration in the Department of Social Sciences, College of Liberal Arts. A choice can then be made based upon personal preference and future goals.

### Pre-Medicine and Pre-Dentistry

In pre-medical and pre-dental preparation, a student's major need not be one in a field of science; however, experience shows that the majority of applicants to medical or dental school will have a science major. Students are urged to follow their personal inclinations in selecting a major, recognizing that a physician or dentist should have a broad educational background.

The Pre-medical and Pre-dental Advisory Committee is composed of faculty members representing the disciplines of Biomedical Engineering, Biological Sciences, Chemistry, and English-Honors. Students should select a major and plan a course of study in consultation with a pre-medical or pre-dental advisor.

The minimum requirements for most medical and dental schools include one year each of Biology with lab, General Chemistry with lab, Organic Chemistry with lab, General Physics with lab, Mathematics, and English. Also, applicants are required to submit scores on the Medical College Admission Test (MCAT) or the Dental Admission Test (DAT). The test should be taken in the Spring of the junior year prior to application. It is strongly suggested that these examinations not be attempted until courses in genetics, comparative anatomy, animal physiology, organic chemistry, biochemistry, and physics have been successfully completed.

In the Spring of each calendar year, personal interviews are conducted by the Pre-medical and Pre-dental Advisory Committee for the purpose of evaluating those students preparing to make formal application to either dental or medical school. This interview is a very important part of the student's application process. After the interview, the Committee prepares recommendations that will be forwarded to the Admissions Committee of the professional schools to which the student has applied.

Alpha Epsilon Delta (AED) is a national pre-medical and pre-dental honor society which is open to students possessing a minimum grade point average of 3.20 and at least 40 semester hours of course work.

### Pre-Veterinary Medicine

Students wishing to pursue a career in veterinary medicine are referred to the Pre-Veterinary Medicine Concentration in the Animal Science curriculum. Those who have earned an exceptional grade point average and an acceptable score on the Graduate Record Examination (GRE) may wish to apply for admission to veterinary school during their junior year. These students may become candidates for the B.S. degree in Animal Science after completing the first year of work at a veterinary school.

For assistance in planning a course of study, students should consult with the Pre-Veterinary Medicine advisor in the Department of Agricultural Sciences, College of Applied and Natural Sciences.

### Other Health Science Programs

Louisiana Tech offers degree programs in the health science areas, including Nursing, Dietetics, Health Information Management, and Medical Technology.

**Nursing:** Advisors for the Associate Degree program in Nursing are located in the Division of Nursing, College of Applied and Natural Sciences.

**Dietetics:** Programs in Dietetics include an undergraduate didactic program, a post-baccalaureate internship, and a graduate program. These are found in the School of Human Ecology, College of Applied and Natural Sciences.

**Health Information Management:** An Associate Degree program in Health Information Technology and a baccalaureate program in Health Information Administration are offered both on campus and electronically. The Master of Health Information Management is offered only electronically through the Department of Health Information Management, College of Applied and Natural Sciences.

**Medical Technology** is a baccalaureate degree program located in the School of Biological Sciences, College of Applied and Natural Sciences.

In addition, there are many other health careers for which Louisiana Tech can offer prerequisite courses to prepare students to enter a professional program at another institution. These pre-professional areas are listed below with the department and college in which they are offered:

**Cytotechnology, nuclear medicine technology, respiratory therapy, histological technology, physician's assistant, occupational therapy, physical therapy, surgical assistant, and radiologic technology** are in the School of Biological Sciences, College of Applied and Natural Sciences.

**Pre-Optometry** and **Pre-Pharmacy** are in the School of Biological Sciences, College of Applied and Natural Sciences.

**Pre-Professional Speech-Language Pathology** is in the Department of Speech, College of Liberal Arts.

Students interested in any of the health science programs named above should contact the department head in whose department the curricula are shown.

## Prescott Memorial Library

Centrally located in the heart of campus activities, Prescott Memorial Library offers a full array of information resources and services.

The Library houses an extensive and well-balanced collection of informational sources including over 1.5 million volumes, over 2,700 current periodical subscriptions, over 35,000 maps, and extensive electronic resources. Tech's library is one of only fifty-three U.S. Government Regional Documents Depositories, and it is a depository for Louisiana State Documents, USGS Maps, and Department of Energy Contractor reports. Other facilities within the library include the Electronic Reference Center with 35 computer workstations for research, the Electronic Classroom with workstations for library instruction, and the Student Technology Laboratory with over 50 computer workstations providing Internet access and productivity software. Secure wireless network access is available on all floors.

Many library services and resources are located on the main floor, easily accessible upon entering the building. Included on the main floor are reference, government documents and reserve book collections, as well as the Electronic Resource Center, the Circulation Desk, and to assist with reference inquiries, the Information Desk.

The third floor contains the complete periodical collection including microforms and the Forestry Library. Upper floors (five-nine) house the main book collection and provide quiet study space for group and individual use.

Located on the fourth floor are collections for more specialized research. The American Foreign Policy Center is a

continuing collection of microfilmed primary source material for the study of U.S. foreign policy. The Department of Special Collections, Manuscripts, and Archives is comprised of the University Archives, the Forestry Archives, the William King Stubbs Architectural Archives, the Camp Ruston collection, and other manuscript collections documenting the history of the University and the region, as well as rare books, maps, and other materials.

The library's faculty and staff welcome the opportunity to serve the students and faculty of the Louisiana Tech University academic community. The library home page is <http://latech.edu/tech/library>.

## Professional Development and Research Institute on Blindness

This Institute builds on a long standing relationship with the Louisiana Center for the Blind and Louisiana Tech. Its primary focus is initiatives on professional development opportunities for teachers of the blind, development of appropriate curricula and materials for these individuals, development of curricula for preparing teachers of the blind, research on issues of education for blind persons, and dissemination of research and development results. The overall goal of the Institute is to advance the blindness field by providing the blind and professionals serving the blind with innovative programs and conducting meaningful research that will empower blind people to live independent and productive lives. The Institute is designed to address the needs of the over 16,000 Louisiana blind citizens who have significant education/training needs.

## Psychological Services Clinic

The Psychological Services Clinic is part of the Psychology and Behavioral Science Department. The Clinic offers affordable psychological counseling and assessment services to members of the community. The Clinic is staffed by masters and doctoral students who are supervised by licensed psychologists. The Clinic works with the District Attorney's office to provide services for the Pre-Trial Diversion Program and the Truancy Program.

## School of Art Galleries

To promote the understanding of contemporary art, the School of Art administers two galleries within the Visual Arts Center. Artists from across the United States annually display a wide variety of creative work chosen by the Gallery Committee. The galleries offer receptions for the artists where visitors may converse with and/or listen to lectures from the exhibiting artists. Admission is free and open to the public.

## Science and Technology Education Center (SciTEC)

This is an active outreach program of the College of Education organized to serve the surrounding school systems and communities. Activities of the Center include six broad initiatives: professional development programs for inservice teachers, collections of exemplary math and science materials, exemplary undergraduate math and science education, the IDEA Place and Planetarium, the NASA Education Resource Center, and community outreach activities. SciTECH activities are supported exclusively by external funds awarded by such agencies as the National Science Foundation, the Math Science Education Act (MESA), the Louisiana LEARN Commission, the Louisiana Systemic Initiative (LaSIP), the Louisiana Collaborative for

Excellence in the Preparation of Teachers, the Louisiana Board of Regents, and private foundations such as the Toyota Foundation and the Rapides General Hospital Foundation. (<http://www.latech.edu/scitec>)

## Small Business Development Center

Louisiana Tech's Small Business Development Center (SBDC) is part of a statewide network of offices providing specialized management assistance, counseling, and training to small business firms and prospective small business owners. The SBDC utilizes the resources and abilities located on campus and throughout the community to target development of technological and student enterprises, opportunities maximizing use of regional resources, and endeavors with the potential to attract new dollars to north central Louisiana. The Small Business Development Center operates in partnership with the U.S. Small Business Administration and the Louisiana Department of Economic Development.

(<http://www.cab.latech.edu/public/DEPTS/sbdc/index.htm>)

## Spatial Data Lab

The Spatial Data Lab (SDL), created in 1999, is a state-of-the-art high tech facility used for teaching and research purposes. The SDL has 25 PCs running Windows XP Professional on a Windows 2000 network and runs all ArcGIS programs, and ERDAS as well as software for GPS and general computing needs. For hardcopy data input, the SDL houses a large format scanner and digitizer. For hardcopy data output, the SDL has a large format color printer and several smaller printers. Some data from the research projects conducted in the lab as well as other types of data for Louisiana are stored on the server and are available over the internet for download. The SDL hosts a full range of GIScience training options ranging from academic to continuing education courses offered in traditional and distance learning formats. For more information on the SDL or training opportunities in the SDL, visit us at <http://sdlab.latech.edu/>.

## Study Abroad Programs

Louisiana Tech University encourages its students to participate in varied educational experiences including academic programs that foster opportunities for culturally enriching experiences outside the United States. The University currently offers several avenues for study abroad:

- The University offers specialized study abroad courses or programs through individual academic units at Louisiana Tech University. Some current offerings include study abroad opportunities to Costa Rica (Foreign Languages), London (Theater), Australia (Biological Sciences), and Paris (Art). Proposals for these courses or programs are reviewed by the College Review Tour Committees and the University Tour Committee.
- In order to further the international education of its student body, the University has available Summer Study Abroad Scholarships. These scholarships are offered competitively on an annual basis to students of junior or senior standing seeking to enrich their educational experience by participating in an international travel program while taking courses in their major field of study. Finalists are interviewed by the Committee on International Education. Information and application requirements can be found at: ([www.latech.edu/administration/academic-affairs/ug-study-abroad-scholarship](http://www.latech.edu/administration/academic-affairs/ug-study-abroad-scholarship))
- CODOFIL, the Council for the Development of French in

Louisiana ([www.codofil.org](http://www.codofil.org)) and MICFA, the Interuniversity Mission for the Coordination of Franco-American Exchanges provide opportunities for study at sixteen universities in and around Paris, France. ([www.micefa.org](http://www.micefa.org))

- Louisiana Tech University is a member institution of two organizations which offer students a wide variety of already-developed study abroad opportunities at locations throughout the world: Council on International Educational Exchange ([www.ciee.org](http://www.ciee.org)) and The Institute of International Education ([www.iie.org](http://www.iie.org))

For additional information about study abroad opportunities, contact William T Willoughby, Director of Study Abroad Programs at Louisiana Tech University, Study Abroad Office, P. O. Box 10018, Ruston, LA 71272; or by calling (318) 257-2660.

## Technology Transfer Center Shreveport

The Technology Transfer Center – Shreveport is located in a new modern educational facility with distance learning capabilities. Louisiana Tech University offers selected undergraduate and graduate coursework, workshops, and conferences addressing the educational needs of northwest Louisiana. The Technology Transfer Center serves as a partner with business, industry, and the medical community in economic development activities related to engineering and technology.

([www.coes.latech.edu/ttcs/index.html](http://www.coes.latech.edu/ttcs/index.html))

## The IDEA Place

The IDEA Place (Investigate, Discover, Explore, Ask) is a hands-on children's museum designed to provide children and adults an opportunity to experience the excitement of learning about mathematics and science through interactive activities. School groups visit on field trips while pre-service education majors serve as guides. Education majors are encouraged to interact with students and gain valuable pre-student teaching experiences as children explore a variety of phenomena ranging from geologic digs to reflecting in a kaleidoscope.

The essence of the IDEA Place is its interactive exploration of scientific phenomena. The Center now houses the Experiment Gallery, a collection of over 35 interactive hands-on exhibits designed by the Science Museum of Minnesota with funding from the National Science Foundation. The Experiment Gallery features exhibits in each of the following theme areas: Electricity, Weather, Sound and Waves, Light and Optics, and Mechanics. At the Activity Station, preservice teachers provide opportunities for visiting groups to see scientific demonstrations and for participation in a variety of experiments. The Resource Room is available for visitors to further explore topics of interest. Over 15,000 K-12 students visit the IDEA Place each year.

([www.latech.edu/ideaplace/](http://www.latech.edu/ideaplace/))

## Trenchless Technology Center (TTC)

The Trenchless Technology Center (TTC) is a university/industry cooperative research center under the College of Engineering and Science. The TTC was established September 1989 to assist in the development of trenchless technologies through basic research, applied research, and technology development activities coupled with educational, outreach, and technology transfer programs. The Center has a small core staff consisting of the Director, an administrative assistant, and a technician. The research activities are conducted by an

interdisciplinary group of approximately 25 faculty affiliated with the Center together with graduate students, university technical support staff, and the other industry and/or government partners in the research programs.

The Center has had very active research and technology transfer programs in the areas of pipeline rehabilitation, microtunneling and pipe jacking, and horizontal directional drilling. Market studies for various areas of trenchless technology and for specific companies have also been conducted. The Center is currently involved in two new research and demonstration programs in the area of trenchless pipe replacement (pipe bursting), several projects studying the long-term performance of pipe lining systems, and a research project related to the management of sewerage systems. Two state-funded exploratory research programs in the soil mechanics area are also underway.

The Center is housed in the main engineering building of the Louisiana Tech campus. The Center has a strong collection of research and informational materials related to trenchless technology and the former library holdings of the Underground Space Center at the University of Minnesota covering a broad range of issues relating to the design, construction, and use of underground facilities. The Center's research utilizes several research facilities on and off campus including a Pipeline Rehabilitation Test Facility located approximately 2 km. from campus designed to provide the ability to test the short- or long-term pressure response of a variety of pipes and pipe lining systems; and a Field Test Facility located on the Louisiana Tech Farm used for a variety of field tests on trenchless technologies.

[www.coes.latech.edu/ttc/](http://www.coes.latech.edu/ttc/)