

Auxiliary Programs and Facilities

Athletics Opportunities

Louisiana Tech University currently plays football and softball as a Division I-A Independent. Other sports participate in the Sun Belt Conference. Louisiana Tech joins the Western Athletic Conference July 1, 2001. 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, and volleyball. 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.

Sufficient courses are offered at Barksdale for a student to earn the Associate of General Studies, and 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 Biomedical Engineering and Rehabilitation Science

In 1985, the Louisiana Board of Regents established the Center for Biomedical Engineering and Rehabilitation Science at Louisiana Tech as a University-wide Center of Excellence. Committed to education, research, and service, the Center's activities range from the study of disabilities to the application of technology to assist disabled persons. The Center is housed in the 63,000 square feet Biomedical Engineering Center complex. The building includes staff and administrative offices, educational facilities, research and assessment laboratories, and a dormitory for severely disabled individuals. Additional resources of the Center include wood, metal, and electronics shops, graphics and video studios, and various vehicles used in the Center's driver-training programs. Active at the state, national, and international level, the Center provides opportunities for faculty and students from throughout the entire university to participate in the activities and programs of the Center.

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 practica, 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.

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. The Division of Continuing Education, Louisiana Tech University, has affirmed its commitment to the role of public service. Annually, hundreds of people attend events such as non-credit seminars, workshops, and conferences offered through the University's Division of Continuing Education.

Hardwood Log, Lumber, and Tree Grading Workshop

The School of Forestry's Hardwood Workshop has been actively training participants from the forest industry for 45 years. The course is designed to assist those involved in the hardwood lumber industry (mill owners, sawyers, edger operators, inspectors, sales and office personnel), those involved in timber management (forestry technicians, foresters, refuge managers, and private landowners), and other interested persons (attorneys, etc.). Since 1977, a total of 724 people have attended. Based on our average of 30 participants per year, we have served approximately 1,350 people during the 45 year history of the workshop. On average, 6 states and 16 companies are represented at the workshop each year. The workshop is designed to present a working knowledge of the U.S. Forest Service log grading system and its relationship to lumber grades and product utilization. Attendees learn to recognize external defect indicators and their importance in hardwood logs. The application of log grading to standing timber is also covered.

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.

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.

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. An 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 apparent motion of the heavenly bodies is properly synchronized mechanically while speed and intensity are controlled by modern solid-state electrical circuitry.

Louisiana Forest Products Laboratory (LFPL)

The Louisiana Forest Products Laboratory of the Louisiana Agricultural Experiment Station, Louisiana State University Agricultural Center, was created in 1992 by the state legislature. The major part of the Laboratory is housed in the LSU School of Forestry, Wildlife, and Fisheries in Baton Rouge, with the balance housed in the School of Forestry at Louisiana Tech University in Ruston. The Louisiana Tech division of the LFPL is located on the South campus in the Forestry Laboratory Building. It provides information on the quality of Louisiana's woody resource that will foster a better understanding of wood as a raw material for a wide range of manufacturing processes, encourage efficient and competitive use of wood within the state, and maximize the sustainability and productivity of our forests. Through close cooperation with the main LFPL at LSU in Baton Rouge, the Tech LFPL staff has provided technical assistance and technology transfer to local, state, and regional primary and secondary forest products industry. The development of new processes and the expansion of existing processes for manufacturing products from wood have been encouraged. Improvements in some processes have increased jobs and profit for existing Louisiana industries.

Louisiana Tech Computing Center

The Louisiana Tech Computing Center provides computing and consulting support for the instructional, research, and administrative activities of the University. The Center reports administratively to the Vice President for Academic Affairs.

The equipment and software supporting computing activities for the campus include an IBM Multiprise 2003 Model 207 mainframe running VM/ESA and MVS operating systems, 124 gigabytes of disk memory, four high-speed tape drives, a network of approximately 1500 nodes, and 128 33.6 KB dial-in ports. Language processors for FORTRAN, COBOL, PL1, and Assembler languages are supported on this equipment. Popular software systems supported include SAS, SPSS, and ACSL.

The Computing Center also operates three central laboratories with 144 workstations and laser printers for students (one lab is open 24 hours, 7 days a week) providing full Internet access and e-mail service. Several satellite labs of terminals are located in buildings around the campus and provide an additional 250 workstations for students.

The Computing Center is responsible for the campus Internet connection and routing. Additionally, the Center participates in campus WAN/LAN activities. The LAN equipment includes 25 Unix, 30 Netware, and 5 Microsoft NT servers, as well as campus routers, hubs and switches. All students and employees are provided computing accounts, e-

mail service, and internet access. The Student Consultant Group serves as a technical support resource for the campus community, and the Center also provides computing professionals to consult with student and faculty computer users during office hours.

The Computing Center staff operates the administrative computing systems for the University. In addition, the staff provides systems analysis and programming support for the maintenance and development of administrative applications for University departments. The staff also assists with appropriate special projects and reports that are required of administrative and academic departments. A central Word Processing Center is operated for the support of administrative functions and research and publication materials.

Long-range planning for the computing and word processing needs of the University is an important part of the activity of the Computing Center. Projections of needs and goals for the integration of computing into institutional activities have been formulated and serve as the basis for fiscal year computing services plans.

Louisiana Tech Concert Association

The Louisiana Tech Concert Association serves as an integral service of the School of the Performing Arts. It offers the Tech and Ruston communities the world's best music, dance, and theatre performed by internationally acclaimed artists.

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 60 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 Nuclear Center

The Nuclear Center is a centralized facility to control the use of radiation and radioactive material on the Louisiana Tech campus. The Nuclear Center staff are available for consultation on the design of experiments involving radioactive material or radiation produced by machines. Operation of the Center is in accordance with a license issued to Louisiana Tech by the Louisiana Board of Nuclear Energy, Division of Radiation Control. The Nuclear Center encompasses a radioisotopes laboratory with student and research counting stations, a radioisotope equipment and storage room, office space, a radiochemical laboratory equipped to handle radioisotopes in many forms, a nuclear spectroscopy laboratory, a low-level laboratory, and a gamma irradiation facility. The gamma irradiation facility contains over 15,000 curies of Cobalt 60 and is capable of supporting numerous projects requiring high doses of radiation.

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, and 1990 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 & 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 evaluation; 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.

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 the 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 various 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.

Louisiana Tech 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.

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.

Mobile Automated Learning Laboratory (MALL)

The Mobile Automated Learning Laboratory was established in Louisiana as a cooperative effort between business/industry and education. The MALL, donated by Entergy Corporation and Louisiana Power and Light, is staffed and jointly managed by Louisiana Tech University and Grambling State University.

The project goal of the MALL is to provide a better educated workforce by serving the needs of the undereducated adult. The mission of the MALL is to deliver instruction within both community and business/industry sectors based on the theory that a better educated workforce will enhance economic development.

The MALL is a 28-foot motorcoach equipped with computer and interactive video disk stations. The automated instructional delivery system uses software packages containing basic skills programs in reading, language arts, mathematics, and life skills. The programs are designed for adults and provide skill development from adult basic education through the skills needed for the General Educational Development (GED).

The MALL travels to worksites in north Louisiana averaging 14 hours a day, five days a week and four hours on Saturday. The staff includes one full-time coordinator and one graduate assistant from each of the two universities.

The MALL is one of the nation's most innovative workplace literacy projects and was featured in PBS's Innovations series during an episode entitled The Future is Now: Technology in Education. The MALL received the Point of Excellence award from Kappa Delta Pi for outstanding contributions to education and the Thomas P. Harwood, Jr. Excellence in Education award presented by the National Association of Regulatory Utility Commissioners.

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. The ERC is housed in the College of Education and is the latest component of SciTEC.

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 Nutrition. 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: Both an Associate Degree program in Health Information Technology and a baccalaureate program in Health Information Administration have advisors in 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 is a modern, ten-floor, open-stack library which offers a full array of informational resources and services. Its comfortable reading areas, computer laboratories, books, periodicals, microforms, media materials, and competent faculty and staff combine to make the library an essential facility for student and faculty endeavors.

Prescott Memorial Library houses an extensive and well-balanced collection of informational sources including over 1.5 million volumes, over 2,500 current periodical subscriptions, and extensive electronic research opportunities. TechNet is an automated library system that allows a user to access the Tech library catalog as well as the library catalogs of other Louisiana universities. Computer resources provide electronic indexes, full text databases, document delivery, and Internet access. 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 include the Student Technology Laboratory with fifty computer workstations providing Internet access and productivity software; the Electronic Reference Center with twenty computer workstations; the Media Center which includes audio and video services as

well as satellite teleconferencing, and the Electronic Instruction Classroom.

An information service, located on the main floor, assists students and faculty members with directional and reference inquiries. The online catalog, electronic resources, directories, the circulation desk, the reference collection, and the reserve book collection are also located on the main floor, easily accessible upon entering the building.

Special collections available for specialized research, located on the fourth floor, include the American Foreign Policy Center, a continuing collection of microfilmed primary source material for the study of U.S. foreign policy, and the Department of Special Collections, Manuscripts, and Archives, comprising the University Archives, the Forestry Archives, the William King Stubbs Architectural Archives, and other manuscript collections documenting the history of the University and the region, as well as rare books, maps, and Tech theses and dissertations.

Bibliographic instruction is offered by the Reference Department to beginning students. At any time a professor may request additional bibliographic instruction tailored to fit a specific informational need.

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

Research Divisions

The participation of both faculty and students in academic and contract research is strongly encouraged at Louisiana Tech University. Toward this end, formally organized divisions of research associated with each college have been charged with the responsibility of coordinating and expediting research activities in their respective colleges. The Directors of the College Research Divisions are charged with the responsibility of coordinating research activities. Numerous graduate students perform research under the direction of members of the graduate faculty. Contract research for local, state, and national governments, industries, and foundations is effected regularly.

Science and Technology Education Center

(SciTEC) 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; the NASA Education Resource Center, and community outreach activities. SciTEC 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; and private foundations such as the Toyota Foundation and the Rapides General Hospital Foundation.

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.

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 offers exhibits on such topics as mechanics, electricity, optics, perception, geometry, and geology and allows visitors to initiate contact with specially constructed bits of the scientist's universe. Approximately 100 children each week visit the IDEA Place. They come to campus from schools across north and central Louisiana and south Arkansas.

Louisiana Tech University Center for Applied Physics Studies (CAPS)

The mission of the Louisiana Tech University 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, postdocs, 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.

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 student teaching site for students enrolled in the Early Childhood Education concentration. In addition, a variety of students from a number of disciplines observe and participate in educational programming at the center. The center is accredited by the National Academy of Early Childhood Programs.

Rural Development Center

The Rural Development Center of Louisiana Tech University serves as a clearinghouse for information and outreach activities in response to development needs in rural areas. The purpose of the Rural Development Center is to be an advocate for rural development, to be a focal point to which needs may be identified and assistance requested, and to be a clearinghouse through which relevant information may be disseminated.

For additional information, contact: Dr. Monty Sullivan, Rural Development Center, Louisiana Tech University, P.O. Box 3188, Ruston, LA, 71272

Study Abroad Programs

Louisiana Tech University encourages its students to participate in varied educational experiences including academic programs that combine the culturally enriching benefits of travel outside the United States. Currently, formal program agreements include (1) the London Seminar in International Finance and Business, offered through a consortium including the University of Colorado, Arkansas, Kansas, Nebraska, Wyoming, and Colorado State, and (2) CODOFIL/MICEFA accords providing opportunities for study at Universities of Paris, France.

London Seminar in International Finance

Louisiana Tech University, in cooperation with the University of Colorado, is pleased to offer interested students an opportunity to study in London, England, in mid-Summer each year. The program, held during the month of July, consists of approximately forty lectures and discussion sessions plus weekly visits to major financial and political institutions in London.

The seminar covers three major areas: the political and economic conditions for doing business in London and Europe, the major international financial markets and financial institutions of London, and the European Union. The seminar concentrates on the integration of the European community and the financial, business, and political consequences of this integration on Europe, the United States, and the rest of the world.

The program's focus makes it appropriate for any advanced undergraduate or graduate student in finance, international business, economics, political science, or international relations.

The program is limited to twenty-four students to make it a genuinely interactive seminar. Six semester hours credit are offered to participants. Besides lectures and field trips, a major research paper will be required, and it will be due October 15th. Applicants must meet certain prerequisites, and applications will be accepted beginning November 1 until the program is full, or through March 15.

A personal interview (by telephone, for those applying from schools other than the University of Colorado at Boulder) is required of all applicants. Interested students may consult the web site www.colorado.edu/OIE/Study_Abroad, inquire at Louisiana Tech University's Office of Academic Affairs; by writing "London Seminar," Academic Affairs, P. O. Box 3188, Louisiana Tech University, 71272; or by calling (318) 257-4262.

CODOFIL/MICEFA

This exchange program was established by the Consortium of Louisiana Universities and Colleges (CODOFIL) to provide Louisiana university students a unique opportunity to study in a francophone country. The Interuniversity Mission for the Coordination of Franco-American Exchanges Paris-Ile de France (MICEFA) is a Consortium of universities in Paris. The agreement allows a student to spend up to one academic year in a French university at a price comparable to what the student would pay for studying here in Louisiana.

A selected student will pay all of tuition and administrative fees required by the home university. In exchange, the student will be able to attend one of the participating French universities without paying further fees. However, the student is responsible for travel expenses, room, board, and other expenses. Participating students must have completed two years of university level French courses.

For information on this exchange program, contact Dr. Tom Lewis, Foreign Language Coordinator, School of Literature & Language on campus (318/257-4748).