MANUFACTURING DAY 2014

IN CADDO-BOSSIER
SEPT. 29-OCT. 3, 2014

MANUFACTURING PARTICIPANTS
Frymaster
Libbey Inc.
Metro Aviation
Omni Specialty Packaging
Ronpak
Ternium
Students and Teachers of Bossier and Caddo Schools,

The Manufacturing Managers Council (MMC) of Northwest Louisiana is pleased to participate in the 2014 National Manufacturing Day celebration, and we are happy about your interest as well! We want to make sure you know about the exciting and well-paying careers available in the manufacturing industry, the 5th largest employment sector in Northwest Louisiana.

Our membership is made up of key leaders of manufacturers operating in Northwest Louisiana, as well as representatives of regional organizations providing support to manufacturers. You can learn more about us on our website: www.mmcla.org

The plants participating in Manufacturing Week in Caddo-Bossier are all members of the MMC. Below is a full list of MMC member companies:
Caddo Bossier Port
Centerpoint Energy
Chemtrade Refinery Services Inc.
Frymaste
Gordon Inc
Greater Shreveport Chamber of Commerce
Hunt, Guillot & Associates, LLC
Inferno Manufacturing Corp.
Libbey Inc
Louisiana Tech University
Maktec Manufacturing
Metro Aviation
North Louisiana Economic Partnership
Omni Specialty Packaging
Praeses
Raytech Industries
Red Ball Oxygen
Red River Pharma
Ronpak
Shreveport Rubber and Gasket Co. Inc.
Sound Fighter Systems
Ternium
Wieland-Davco Corporation

We hope you will have an eye-opening experience on your tour today, and we encourage you to pursue further exploration of local manufacturing skills training available to you while in high school and beyond. To help with that, you will find information in this booklet about programs providing manufacturing skills training available at technical and community colleges, and universities in Northwest Louisiana. To learn more about manufacturing skills training available to you in high school, talk to your school counselor.

Eric Nelson

President, Manufacturing Managers Council
President, Maktec Manufacturing
Manufacturing is the 5th largest employment sector in Northwest Louisiana

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>2013 JOBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>56,083</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>35,201</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>29,143</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>22,225</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td><strong>16,955</strong></td>
</tr>
<tr>
<td>Other Services (except Public Administration)</td>
<td>14,439</td>
</tr>
<tr>
<td>Admin, Support, Waste Mgmt, Remediation Serv</td>
<td>13,409</td>
</tr>
<tr>
<td>Construction</td>
<td>13,748</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>8,816</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>7,573</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>7,291</td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
<td>6,765</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>6,847</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>6,024</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>3,940</td>
</tr>
<tr>
<td>Information</td>
<td>2,779</td>
</tr>
<tr>
<td>Educational Services (Private)</td>
<td>2,891</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>1,676</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>1,760</td>
</tr>
<tr>
<td>Utilities</td>
<td>1,470</td>
</tr>
</tbody>
</table>

Source: EMSI

While there is a wide range of wages in manufacturing, there are many training opportunities locally to help you move up the career ladder. Starting wages are often lower than the average, but experience and reliability on the job will improve your earnings potential quickly.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2013 Jobs</th>
<th>2012 Avg. Hourly Earnings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance and Repair Workers, General</td>
<td>3,669</td>
<td>$15.13</td>
</tr>
<tr>
<td>Assemblers and Fabricators</td>
<td>1,885</td>
<td>$15.73</td>
</tr>
<tr>
<td>Production Workers</td>
<td>1,715</td>
<td>$14.43</td>
</tr>
<tr>
<td>Industrial Machinery Installation, Repair, and Maintenance Workers</td>
<td>1,131</td>
<td>$22.00</td>
</tr>
<tr>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>1,033</td>
<td>$26.74</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair Workers</td>
<td>754</td>
<td>$15.14</td>
</tr>
<tr>
<td>Welding, Soldering, and Brazing Workers</td>
<td>767</td>
<td>$18.98</td>
</tr>
<tr>
<td>Inspectors, Testers, Sorters, Samplers, and Weighers</td>
<td>697</td>
<td>$17.25</td>
</tr>
<tr>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>680</td>
<td>$19.23</td>
</tr>
<tr>
<td>Machinists</td>
<td>663</td>
<td>$21.88</td>
</tr>
<tr>
<td>Butchers and Other Meat, Poultry, and Fish Processing Workers</td>
<td>632</td>
<td>$11.58</td>
</tr>
<tr>
<td>Plant and System Operators</td>
<td>571</td>
<td>$25.83</td>
</tr>
<tr>
<td>Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics</td>
<td>470</td>
<td>$20.49</td>
</tr>
<tr>
<td>Bus and Truck Mechanics and Diesel Engine Specialists</td>
<td>400</td>
<td>$17.64</td>
</tr>
<tr>
<td>Water and Wastewater Treatment Plant and System Operators</td>
<td>338</td>
<td>$14.24</td>
</tr>
<tr>
<td>Electrical and Electronic Equipment Mechanics, Installers, and Repairers</td>
<td>332</td>
<td>$22.58</td>
</tr>
<tr>
<td>Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders</td>
<td>317</td>
<td>$16.69</td>
</tr>
<tr>
<td>Packaging and Filling Machine Operators and Tenders</td>
<td>296</td>
<td>$11.99</td>
</tr>
<tr>
<td>Aircraft Mechanics and Service Technicians</td>
<td>307</td>
<td>$23.53</td>
</tr>
<tr>
<td>Line Installers and Repairers</td>
<td>301</td>
<td>$21.62</td>
</tr>
<tr>
<td>Computer Control Programmers and Operators</td>
<td>307</td>
<td>$17.85</td>
</tr>
<tr>
<td>Machine Tool Cutting Setters, Operators, and Tenders, Metal and Plastic</td>
<td>248</td>
<td>$14.64</td>
</tr>
<tr>
<td>Chemical Processing Machine Setters, Operators, and Tenders</td>
<td>130</td>
<td>$17.67</td>
</tr>
<tr>
<td>Structural Metal Fabricators and Fitters</td>
<td>134</td>
<td>$16.94</td>
</tr>
<tr>
<td>Control and Valve Installers and Repairers</td>
<td>116</td>
<td>$22.57</td>
</tr>
<tr>
<td>Precision Instrument and Equipment Repairers</td>
<td>112</td>
<td>$20.26</td>
</tr>
<tr>
<td>Stationary Engineers and Boiler Operators</td>
<td>103</td>
<td>$26.43</td>
</tr>
</tbody>
</table>

Source: EMSI

* Does not include benefits
What is Advanced Manufacturing?

- The certification program consists of four college courses that can be completed in one semester (16 weeks) and covers the essential skills needed in the modern manufacturing environment including:

  - Principles of Manufacturing: Safety, Quality, Lean Manufacturing, and Teamwork
  - Tools and Equipment
  - Automation
  - Focused Exposure to Fabrication, Process Technology, and Machining

- This program incorporates 180 contact hours of class and laboratory work taught with a hands-on approach.
- Extensive additional independent study time is done on tablets using PowerPoint.
- This program requires 16 weeks to complete and new classes will start every 8 weeks.

Bossier Parish Community College (BPCC) is excited to announce the implementation of a new program in Advanced Manufacturing. This new program will help interested students train for new manufacturing jobs with area industry partners. Benteler Steel has endorsed this program and has guaranteed interviews for every participant who successfully completes the program. Other industry partners have shown strong interest and we expect many of them to join in supporting the training of our area workforce. Students who complete this program may earn an industry recognized certification in addition to the TCA.

HOW DO I APPLY?

- Complete program application: www.bpcc.edu/tem/advancedmanufacturing
- After your application is received, we will contact you!

To be eligible for this program, participants must meet the requirements to become a BPCC student and must meet one of these three options:

- have obtained a high school diploma from a state-approved high school or a regionally accredited high school,
- have obtained a GED or equivalent, or
- have met pre-established criteria on the BPCC Ability to Benefit test and are above the age of compulsory school attendance.

contact us:
Bossier Parish Community College TEM Division • 6220 East Texas Street • E-215
Bossier City, LA 71111 • (318) 678-6200 • AMFG@bpcc.edu
Design your future with a degree in Engineering Graphics

BPCC offers three options:

- **Associate of Applied Science Industrial Technology**
  (concentration in Engineering Graphics)
  2+2 option at NSU*
  [http://www.bpcc.edu/catalog/current/technologyengineeringmathematics/aas-industrialtechnology-engineeringgraphics.html](http://www.bpcc.edu/catalog/current/technologyengineeringmathematics/aas-industrialtechnology-engineeringgraphics.html)

- **Associate of General Studies**
  (Computer Aided Drafting concentration)
  [http://www.bpcc.edu/catalog/20092010/mathematicstechnicaleducation/a-gstudies-comuterdraftingdesigncon.html](http://www.bpcc.edu/catalog/20092010/mathematicstechnicaleducation/a-gstudies-comuterdraftingdesigncon.html)

- **Technical Competency Area**
  (Computer Aided Drafting)

In these programs, students study both manual and computer-based drafting techniques. CAD technicians use computer-based engineering graphics systems to produce, or revise, technical drawings needed in the design and development of machines, manufacturing processes and products, buildings, electrical components, and other items used every day. The CAD operator puts the designer’s or engineer’s concepts into a form which can be interpreted by people who produce the finished product.

*After completing the requirements for the Associate of Applied Science at BPCC, students can then transfer to Northwestern State University for additional course work which will allow them to earn a Bachelor of Science in Industrial Engineering Technology.

**FOR MORE INFORMATION**

Contact:
Edward Chopin, Program Director
(318) 678-6092 · echopin@bpcc.edu

**MATH 102:** College Algebra
**MATH 129:** Applied Technical Mathematics
or **MATH 112:** Trigonometry
**ENGL 101:** Composition and Rhetoric I
**SPCH 110:** Principles of Speech
**TEED 101:** Basic Electricity
**TEED 102:** Semiconductor Electronics
**TEED 102L:** Semiconductor Electronics Laboratory
**TEED 140:** Engineering Graphics
**TEED 142:** Industrial Graphics
**TEED 143:** Introductory Computer Drafting
**TEED 144:** Intermediate Computer Drafting
**TEED 150:** Pneumatics
  or **TEED 152:** Hydraulics
**TEED 156:** Customizing AutoCAD
**TEED 158:** Computer Drafting Applications
**TEED 158L:** Computer Drafting Applications Laboratory
**TEED 160:** 3D Computer Drafting
**TEED 171:** Graphics Modeling I
**TEED 172:** Graphics Modeling II
**TEED 280:** Engineering Graphics Internship
**PHSC 105:** Elemental Physics
  or **PHYS 201:** General Physics

Humanities Elective
Social Science Elective

Total hours: 63

Bossier Parish Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree and certificate. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Bossier Parish Community College.

In compliance with ACT 574, 100% ($1,308.48) of this project shall be financed with state funds 2012-2013.

Scan this with your smartphone’s QR reader to view Industrial Tech-EG info
BPCC’s Industrial Tech-Automation & Controls concentration prepares students to—

- Work in process control industry
- Work as instrumentation technicians
- Design, install, & troubleshoot electric, hydraulic, & pneumatic manufacturing equipment
- Perform PLC programming (RS Logix 5000)

The associate degree requires 63 hours of course work.

100% of course work in the Associate of Applied Science in Industrial Technology is transferable to Northwestern State University.

BPCC also offers a Certificate of Technical Studies in Industrial Control Systems. This CTS is 32 hours of the same technical courses as in the Automation and Controls degree.

MATH 102: College Algebra
MATH 129: Applied Technical Mathematics or MATH 112: Trigonometry
ENGL 101: Composition and Rhetoric I
TEED 101: Basic Electricity
TEED 101L: Basic Electricity Laboratory
TEED 102: Semiconductor Electronics
TEED 102L: Semiconductor Electronics Laboratory
TEED 142: Industrial Graphics
TEED 143: Introductory Computer Drafting
TEED 153: Hydraulics/Fluid Dynamics with Lab
TEED 201: Basic Digital Electronics
TEED 202: Introduction to Microprocessors
TEED 202L: Introduction to Microprocessor Laboratory
TEED 204: Industrial Instrumentation
TEED 206: Electronics Equipment and Repair
TEED 208: Programmable Logic Controllers (PLCs)
TEED 208L: Programmable Logic Controllers Laboratory
TEED 252: Electric Motor Controls
TEED 252L: Electric Motor Control Laboratory
OGPT 101: Introduction to the Exploration and Production of Oil and Gas
OGPT 203: Oil and Gas Instrumentation and Lab
PHSC 105: Elemental Physics or PHYS 201: General Physics
Humanities Elective
Social Science Elective

Total hours: 63

Contact:
Allan Pratt, Program Director
318-678-6383  apratt@bpcc.edu

Scan this with your smartphone’s QR reader to view Industrial Tech-Automation & Controls info

Bossier Parish Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree and certificate. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033–4097 or call 404-679-4500 for questions about the accreditation of Bossier Parish Community College.

In compliance with ACT 574, 100% ($1,200.00) of this project shall be financed with state funds 2011-2012.
AEROSPACE TECHNOLOGY PROGRAM
Southern University at Shreveport offers a Technology Diploma Programs for students who desire to enter the field of aviation as Aviation Maintenance Technicians. The maintenance technician keeps the aircraft in peak operating condition by performing scheduled maintenance, making repairs and conducting inspections as required by the Federal Aviation Administration (FAA).

Students in the Aerospace Technology Program are expected to pursue aerospace technology courses on a continuous basis. The order of course progression may vary depending on when the student enters the program. Special course scheduling may be necessary to ensure continuity of student training between the academic and technical components. These schedules must be approved by the program director.

TECHNICAL DIPLOMA IN AIRFRAME AND POWERPLANT MAINTENANCE TECHNOLOGY
The Airframe and Powerplant Maintenance Technology Diploma Program, which is certified by the FAA under Air Agency Certificate No. XSUT020K, offers the non-experienced student a carefully selected blend of theory and practical applications. The training will give the student an opportunity to enter the Aviation Maintenance profession. Once the training requirements are completed, the student will become eligible to take the FAA airframe and/or power plant examinations for the Aviation Maintenance Technicians License. Licensing is not a function of the University, but of the FAA. Students in this program perform actual repairs on the aircraft as well as overhaul the engines and accessories. Facilities for the technology training are located in the Aerospace Technology Center at the Downtown Airport in Shreveport.

Contact:
David Fogleman, Program Director
Telephone: (318) 676-5591 • Email: dfogleman@susla.edu

The Community College of Shreveport, LA

TECHNICAL DIPLOMA IN AIRFRAME AND POWERPLANT MAINTENANCE TECHNOLOGY

FIRST SEMESTER
AMTG 101 – Basic Electricity  3
AMTG 102 – Aviation Regulations  1
AMTG 104 – Fluid, Lines, and Fittings  1
AMTG 105 – Materials and Processes  3
AMTG 106 – Ground Operations and Servicing  3
AMTG 108 – Aircraft Drawings  1

SECOND SEMESTER
AMTA 201 – Wood, Coverings and Finishes  2
AMTA 202 – Sheet, Metal and Non-Metallic  4
AMTA 203 – Aircraft Welding  1
AMTA 205 – Airframe Inspection  1
AMTA 206 – Assembly and Rigging  3
AMTA 208 – Aircraft Fuel Systems  1

FIRST SUMMER SESSION
AMTA 208 – Aircraft Hydraulic and Pneumatic Systems  3

THIRD SEMESTER
AMTA 209 – Aircraft Landing Gear System  2
AMTA 210 – Cabin Atmosphere Control  1
AMTA 211 – Aircraft Electrical Systems  3
AMTA 212 – Position and Warning/Fire Control  2
AMTA 213 – Comm/Navigation and Instruments  2
AMTA 222 – Turbine Engines  3
AMTA 223 – Engine Inspection  1

FOURTH SEMESTER
AMTP 224 – Engine Instruction and Fire Protection  1
AMTP 225 – Engine Lubrication Systems  1
AMTP 226 – Ignition and Starting System  3
AMTP 227 – Engine Fuel and Metering System  3
AMTP 228 – Induction, Cool, and Exhaust  2
AMTP 229 – Propellers and Components  3
AMTP 231 – Engine Electrical Systems  2

SECOND SUMMER
AMTP 250 – Reciprocating Engine Overhaul  4

TOTAL CREDIT HOURS - 60
With a strong background in providing workforce training in engineering fields, Northwestern State University’s department of engineering technology offers students two tracks to becoming an engineering technologist. Students with an interest in solving technical problems, working with other technology professionals and managing complex industrial equipment are well suited for the field.

**Where does the Engineering Technologist fit in the workplace?**

- Work between the design engineer and the technician that maintains and operates
- Must understand and bridge the gap between design and operations.
- Implement changes, upgrade operations, set-up equipment, analyze problems and modify if necessary.

**Engineering Technology provides two degree paths**

A degree in engineering technology prepares students for a wide range of career fields from oil and gas production to traditional manufacturing; from wood product harvest and processing to medical technology support in hospital and research environments. The salaries for either path average $45,000 and range from $30,000 to $100,000, including benefits.

The difference in Northwestern State’s two bachelor of science degrees in engineering tech center around the primary physical processes managed.

- **Electronic Engineering Technology**  
  (including concentration in Biomedical Engineering Technology)
  - Students learn to analyze, test, build, operate and maintain electronic systems.
  - Manage, maintain and install low voltage/power systems, automation and controls.
  - Opportunities for work experience through internships with most of these companies: GE Medical Equipment, Halliburton, Shaw Industries, Crest Operations, RoyOMartin, Boise Wood Products, Gilchrist Construction, AT&T, Dresser and Lufkin Industries to name a few.

- **Industrial Engineering Technology**
  - Students learn to analyze, test, build, operate and maintain industrial systems (equipment, warehouse operations, safety management, plant operations and etc.)
  - Manage manufacturing facilities, systems and operations to include installation, motion and time, safety and efficiency.
  - Opportunities for work experience through internships with most of these companies: Halliburton, Shaw Industries, Crest Operations, RoyOMartin, Boise Wood Products, Gilchrist Construction, AT&T, Dresser and Lufkin Industries to name a few.

**Scholarships for Engineering Majors**

ET offers scholarships to qualified students based on need and academic qualifications.

**Accreditation**

Engineering Technology students designed and built electric guitars in the Product Life Cycle course.

Industrial Engineering Technology (IET) is unique in Louisiana

The NSU Industrial Engineering Technology program is the only one of its kind in Louisiana. IET students learn to develop, implement, and improve integrated manufacturing systems that include materials, facilities, operations, personnel costs, and information. They learn to use appropriate analytical and computational procedures to create efficient integrated systems. Currently, only nine four-year IET programs are accredited nationwide. NSU’s IET program is the only Louisiana state accredited program.

Engineering Technology (ET) graduates are in great demand by employers

ET graduates get jobs! Even when times are tough and the economy is down, graduates of the ET programs at NSU are sought after by employers. New employers contact the department in hopes of getting resumes from graduating seniors. The Department of Engineering Technology is a University of Louisiana Area of Excellence.

Contact:  Ali Ahmad, PhD
Department Head, Engineering Technology
Northwestern State University
101 Williamson hall
Natchitoches, LA 71497
318.357.6751
ahmada@nsula.edu

See our website for more information: engrtech.nsula.edu

Admissions:
Office of Admissions
Student Services Center
175 Sam Sibley Drive
Natchitoches, LA 71497
318.357.4078
800.767.8115
admissions.nsula.edu

Recruiting:
Office of University Recruiting
Student Services Center
175 Sam Sibley Drive
Natchitoches, LA 71497
318.357.4503
800.327.1903
recruiting.nsula.edu

Northwestern State University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) (1866 Southern Lane, Decatur, Georgia 30033-4097; telephone number 404-679-4501) to award associate, baccalaureate, master’s, and specialist’s degrees.

Northwestern State University does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following individuals have been designated to handle inquiries regarding non-discrimination policies (i.e., Title IX): Employees/Potential Employees – Veronica M. Biscoe, EEO Officer (318-357-6359); Students – Frances Conine, Dean of Students (318-357-5286). For Americans with Disabilities Act (ADA) concerns, contact the Disability Support and Tutoring Director, Catherine Fauchaux, at 318-357-4460. Full disclosure statement: http://universityplanning.nsula.edu/notice-of-non-discrimination/.

*A inquiries regarding employment applications should call Business Affairs (318-357-5446).
After 115 years of technical and engineering education, and 10 years of interdisciplinary integration, the College of Engineering and Science, Louisiana Tech University is well on its way to becoming “best college in the world at integrating engineering and science in education and research.”

We are a US News & World Report Tier 1 National University and a Carnegie RU/H (Research University/High Activity) institution. The College's NSF-funded integrated Living With The Lab first-year program is a national model for undergraduate engineering education. Our vibrant student organizations have won national awards for their programs (National Society of Black Engineers - national chapter of the year, two years in a row), outreach activities (Society of Women Engineers - five national awards in five years), and designs (Shell Eco-Marathon team - Design Award, North American mpg record). We have one of only seventeen National Academy of Engineering Grand Challenge Scholars Programs in the nation.

Our College is ranked by US News & World Report as one of the best engineering graduate schools in the nation. Our K-12 Cyber Discovery Camp is being rolled out to a national audience with support from the Cyber Innovation Center and the Department of Homeland Security. Our interdisciplinary research centers and faculty continue to make national news in research for innovative products (such as green geopolymer concrete), contributions to major scientific discoveries (such as the Higgs boson particle), innovations in bio nanotechnology (such as cutting-edge drug delivery systems), efforts to advance women in engineering and science (with an invitation to the White House), and more.

We continue to offer pioneering degree programs, including the first B.S. in Cyber Engineering in the nation and a new interdisciplinary Ph.D. in Molecular Sciences and Nanotechnology. These join other outstanding programs, such as the country's first B.S. in Nanosystems Engineering and one of the nation's oldest B.S., M.S. and Ph.D. programs in Biomedical Engineering. With plans for a 110,000 square-foot, new Integrated Engineering and Science Building underway and the recent opening of the Tech Pointe facility, housing high-tech start-up companies, we are poised to grow our national leadership in integrated engineering and science education and research.

**DEGREES OFFERED**

- **M.S.** Computer Science, Engineering, Engineering & Technology Management, Microsystems Engineering, Mathematics, Molecular Sciences & Nanotechnology, and Applied Physics.
- **Ph.D.** Biomedical Engineering
  - Computational Analysis & Modeling (Bioinformatics, Computational Science, Cyberspace)
  - Engineering (Micro/Nano Systems, Trenchless Technology, Engineering Physics, Engineering Education)
  - Molecular Science and Nanotechnology

**RESEARCH CENTERS**

- Center for Biomedical Engineering and Rehabilitation Science (1985)
- Institute for Micromanufacturing (1991)
- Trenchless Technology Center (1992)
- Center for Applied Physics Studies (1997)
- Center for Entrepreneurship and Information Technology (2002)
- Center for Secure Cyberspace (2007)
- Integrated STEM Education Research Center (2009)

**STATISTICS**

- Degrees Granted (2013-14): 300 (Bachelor of Science), 107 (Master of Science), 20 (Ph.D.) and 12 (Graduate Certificate)
- Number of Tenured and Tenure Track Faculty: 68, Non-Tenure Track: 33
- Enrollment (Fall 2014): 2220 (Bachelor of Science), 250 (Master of Science), 131 (Ph.D.) and 39 (Graduate Certificate).
- Research Funding (2012-13): $11.8M federal, $16.4M total
- Total space available: 350,000 square feet in 10 buildings

www.coes.latex.edu
MANUFACTURING IN NORTHWEST LOUISIANA

- Louisiana Tech Engineering students work on Boe-Bots in class
- Hands on learning in Industrial Technology programs at Bossier Parish Community College
- Rolled steel is galvanized and painted at Ternium
- Engineering Technology students at Northwestern State University
- AEP SWEPCO needs many line workers to replace aging workforce