Mechanical engineering applies principles of engineering, mathematics, physics, and materials science for the analysis, design, manufacture, operation, and maintenance of equipment and machinery. It also encompasses all forms of energy production, exchange, and conversion for a wide variety of applications.

What Do Mechanical Engineers Do?
Mechanical engineers are versatile and work in industries such as automotive, air and space, and petrochemical, to name a few. Careers include heating, ventilation, and air conditioning (HVAC) engineer; automotive designer; manufacturing engineer; reliability and maintenance engineer; production supervisor; and more. As an LSU Mechanical Engineer, you will learn to emphasize physical realization of prototypes, develop skills for communicating technical content effectively, and engage your professional community through industry-sponsored projects.

Communication Across the Curriculum
Our mechanical engineers are not only technical experts; they are also trained to be good communicators. The degree is designed so that students take a number of “communication-intensive” courses to help students improve their written, spoken, visual, and technological communication skills.

Capstone Design Class
The Bachelor of Science in Mechanical Engineering program culminates in a yearlong capstone design course sequence that requires student teams to conceive, design, manufacture, and test an engineered system, piece of equipment, or apparatus. Projects are proposed and sponsored by individuals, organizations, and most often, by industry. Partnered with the LSU Division of Electrical & Computer Engineering, this interdisciplinary course provides a holistic experience and hones other attributes such as leadership, project management, teamwork, responsibility, accountability, communication skills, and entrepreneurship. Capstone projects consist of national/international design competitions, disability-assistance devices, and consumer and industrial products. Recent examples include remote-controlled aircraft and a formula-style racing vehicle, a prosthetic device for a high school athlete with a congenital hand defect, and a novel hybrid (additive and subtractive) manufacturing system.

PROGRAM FACTS
2023–2024 Enrollment: 1,016 Students

Minors:
- Aerospace
- International Automotive Engineering
- Materials Science and Engineering
- Nuclear Power Engineering
- Robotics

Student Organizations:
- American Society of Mechanical Engineers (ASME)
- The Society of Automotive Engineers (SAE)
- The American Institute of Aeronautics and Astronautics (AIAA)

GRADUATE STARTING SALARIES
Median full-time in field salary info for graduates of the last three years

| Middle 50% | $65,000 |
| $80,000 | Median Salary |
| $100,000 |

Undergraduate Program Director:
Keith A. Gonthier, Professor
Email: kgonth1@lsu.edu
Phone: 225-578-5915

DESIGN COMPETITION TEAMS:
- FSAE–Design 1/3 scale Formula I (Indy) race car
- SAE Aero–Design remote-controlled airplane
- SAE Mini-Baja–Design prototype off-road vehicle
- Shell Eco Marathon–Design eco-friendly/efficient vehicle
- Bengal Reauxbots–Design competition robots

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**Legend:**
- **General Education:** Course work in humanities, social sciences, and other subjects.
- **Math:** Math courses for engineering.
- **Science:** Science courses for engineering.
- **Engineering:** Course work in mechanical engineering.
- **Other:** Other courses.
- **Major-Specific:** Course work specific to mechanical engineering.

**Curriculum Overview:**
- Major-specific courses in mechanical engineering.
- Engineering courses including thermodynamics, design, and other specialized topics.
- General education courses to provide a well-rounded education.
- Technical electives and other coursework tailored to enhance skills and knowledge.

**Details:**
- Course flow-charts available at [https://www.lsu.edu/eng/current/resources/flowcharts.php](https://www.lsu.edu/eng/current/resources/flowcharts.php)