

WHY CLEMSON?



A large part of the educational experience occurs outside of the classroom.

Student chapters of professional groups include:

- American Society of Mechanical Engineers (ASME)
- Society of Automotive Engineers (SAE), Formula SAE and Baja SAE
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
- Pi Tau Sigma, the ME Honor Society.

Real-world research

All ME students are encouraged to adopt a Creative Inquiry project, which provides hands-on, real-world research experience working with faculty. Experience in a lab setting and the potential to produce and be a part of peer-reviewed publications are vitally important for those pursuing graduate school and graduates entering the workforce.

One ME research project involves moon travel and improving wheel traction in sand and lunar terrain. The project started as a NASA-funded project to create a wheel that rolls smoothly through sand, manages rock piles and scales daunting inclines. Although the project is intended for space exploration, they anticipate that their work will also be practically applied on Earth — from military to recreational vehicles.

Design Program

The ME undergraduate program ends with an industry-sponsored senior design project. In this course, students are tasked by industry sponsors to solve a problem and integrate their prototype into a feasible design solution. Throughout the course, students work closely with sponsor engineers, keep regular communication, tour the sponsor's facilities and finally present their finished prototypes.

WHERE TO FIND US:



Mechanical Engineering

clemsun.edu/majors/mechanical-engineering

Department of Mechanical Engineering

clemsun.edu/ces/me

More information on anything Clemson

clemsun.edu

On campus

106D Fluor Daniel

864-656-3110

Follow us:

On Facebook [facebook.com/](https://facebook.com/ClemsonUniversityMechanicalEngineering)

ClemsonUniversityMechanicalEngineering



clemsun.edu/ces/me

ME: DEFINED



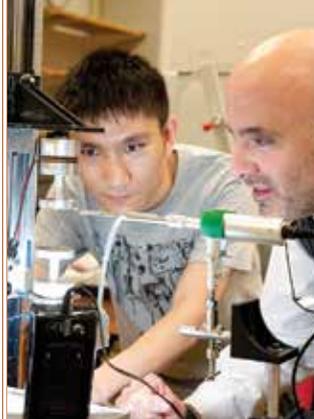
Clemson's ME curriculum prepares its graduates for the challenges they can expect to encounter over the life of their careers. It covers the fundamental engineering sciences and all of the technical areas within mechanical engineering. It includes a balance of individual work and group activities, and exposure to the arts and humanities allows students to develop deeper cultural understandings and the insights needed to work in our complex modern society. Throughout the curriculum, professional communication is emphasized.

Breadth, individuality and flexibility are inherent characteristics of the mechanical engineering profession. Mechanical engineers, in a broad sense, make major contributions to the creation of products and systems that benefit mankind. Here your curiosity and inventiveness will soar as you learn to look deeper into the behavior, design and production of things we use every day.

Engineers are problem-solvers who apply science, mathematics and technology in their work. Mechanical engineering disciplines are distinguished by the particular areas of science, mathematics and technology that they employ and the problems they address. Mechanical engineers usually focus on matters related, but not limited, to manufacturing, energy, machines, materials, transportation and design — perhaps a wider range of areas than any other engineering discipline.

Mechanical engineers are involved at every level in production of almost everything you use including automobiles, clothing, building products, aircraft and computers.

ME: JOBS



Fast Facts

- More than 70 percent of our students reported they had participated in some form of engineering co-op or intern experience.
- Problem solving, creativity, flexibility, communication and teamwork are inherent characteristics of careers associated with mechanical engineering.
- Our faculty members are internationally recognized in education and research.

Mechanical engineers are versatile enough to find a place in almost every industry. Accordingly, Clemson ME graduates have a bright job outlook. In fact, more than 85 percent of our BS graduates have at least one job offer prior to graduation. Companies that have made recent job offers include:

- BASF
- BMW
- Boeing
- DuPont
- Exxon
- Fluor Corp.
- Ford
- General Electric
- GM
- Hoechst-Celanese
- IBM
- Ingersoll-Rand
- Lockheed Martin
- NASCAR companies
- Duke Energy
- Michelin

What will I do with an ME Degree?

With a Bachelor of Science in mechanical engineering, you will be able to apply engineering analysis and design to matters that affect our everyday lives such as manufacturing; energy conversion and conservation; machines; materials; health; and vehicles for air, sea and land transportation. You will develop a foundation for lifelong learning as you practice mechanical engineering, earn advanced degrees or go on to specific areas such as automotive, nuclear, law, business or medicine.

MAKE IT COUNT: A CLEMSON DEGREE



Engineering is an international profession with more and more companies expanding worldwide. The Department of Mechanical Engineering recognizes this fact and offers a variety of international opportunities that ME students take advantage of, including a pre-determined program. They range from summers abroad to full-term exchange programs. Details can be found at the study abroad website. clemson.edu/studyabroad

Studying mechanical engineering prepares you in the basic sciences and math, thermal and fluid science, and mechanical systems. As classes progress, you will develop your analytical, design and experimental abilities, which will prepare you for the challenges and questions you will face in your career. Seniors choose from our technical electives classes, providing chances to focus on your interests or obtain a broader view of many mechanical engineering topics. Because science and technology are ever-changing, our program focuses on fundamental principles as well as modern tools.

Research in our department encompasses experimental, analytical and computational work in the following areas:

- Bioengineering and biomaterials
- Design
- Dynamics and controls
- Fluid mechanics
- Manufacturing
- Materials and materials processing
- Micro and nanotechnology
- Solid mechanics
- Thermodynamics, heat transfer and combustion
- Transportation vehicles and systems