STUDENT ORGANIZATIONS & PROJECT TEAMS
The College of Engineering sponsors over 70 student organizations and project teams. Students have helped set world land-speed records for an electric vehicle with the Venturi Buckeye Bullet, traveled to Honduras with Engineers for Community Service (ECOS) to set up a computer lab for the Montana de Luz orphanage, and write for the award-winning Ohio State Engineer Magazine. With such a large variety of organizations, there is something to interest everyone.

For more info, visit: mae.osu.edu/undergraduate/student-organizations

THINKING OF GRADUATE SCHOOL TOO?
Qualified students can participate in the mechanical engineering BS/MS program. Students in this program can use some of their senior courses to fulfill requirements for both their bachelor's and master's degrees in mechanical engineering, thus reducing the amount of time needed to earn a master's degree by nearly a year!

DEPARTMENT HIGHLIGHTS
• Consistently ranked in the top 25 ME programs in the nation by US News and World Report.
• Students learn and study in the Peter L. and Clara M. Scott Laboratory, one of the premier engineering facilities in the country.
• Curriculum is easily coordinated with co-op and internship opportunities.
• Both a ME Honors Program and BS/MS or BS/PhD Programs for qualified students.
• A host of student organizations and project teams.

MECHANICAL ENGINEERING UNDERGRADUATE PROGRAM
Mechanical Engineering is one of the broadest branches of engineering. Mechanical Engineers are involved with the design, analysis, testing, manufacturing, control, operation, and maintenance of any system with moving parts. Mechanical Engineering deals with all aspects of the conversion of thermal energy into useful work and the machines that make this possible.

SCHEDULE A VISIT!
The best way to see if mechanical engineering at Ohio State is right for you is to come visit! Visits can be scheduled online at: campusvisit.osu.edu or by contacting Nina Parshall, College of Engineering Recruitment Coordinator, at Parshall.8@osu.edu or (614) 292-6320.
To contact an advisor: Phone: (614) 292-0515 Email: maeadvisor@osu.edu Find us on Facebook: facebook.com/OhioStateMAE
MECHANICAL ENGINEERING CURRICULUM
All engineering students at Ohio State begin their studies with math, chemistry, physics, and the Fundamentals of Engineering sequence. Once these background courses are completed, students who are admitted to the mechanical engineering major will acquire an understanding of:

- Engineering Mechanics: Statics, Dynamics, & Strength of Materials | the study of the effects of external forces on stationary and moving objects, and on materials
- Thermodynamics | the study of the development of motion (work) from heat
- Fluid Mechanics | the study of external forces on stationary and moving fluids
- Heat Transfer | the study of the flow of heat from warm objects to cool objects, and how to control this transfer of energy
- Machine Element Design | the study of the pieces and parts that make up machines, and how to design them to meet required specifications
- Kinematics | the study of how linkages and mechanisms move
- Manufacturing Engineering | the study of manufacturing processes
- Electrical Circuits and Controls | the study of electromechanical actuators, and the principles of feedback control, and analysis of control systems
- Measurement and Controls | how to take measurements, and how to control motion based on these measurements
- Design | how to incorporate all of the above into the design of a product or a measurement system

APPLICATION AREAS, TECHNICAL INTERESTS & TECHNICAL ELECTIVES
The majority of mechanical engineering students follow a track of instruction that aligns with one of six popular application areas:
- Advanced Automotive Systems
- Bioengineering/Biomechanical Systems
- Energy and Environmental Quality
- Materials and Manufacturing
- Micro and Nanotechnology
- Nuclear Science and Engineering

In each of the areas noted above, technical knowledge is gained through study of: Applied Mechanics; Design and Manufacturing; Dynamic Systems; and Energy, Fluid and Thermal Systems. Technical elective courses are intended to introduce students to additional tools for analysis of engineering systems in important application areas. Many of the technical elective courses have a strong component in design of mechanical, thermal, fluid or electrical systems for specific applications and in computational modeling or simulation of mechanical, thermal, fluid or electrical systems. More information about the curriculum, including sample schedules, can be found in the "undergraduate" tab of the mae.osu.edu web site.

THEORY IN ACTION
To better satisfy the most fundamental methods of learning, the mechanical engineering curriculum at Ohio State incorporates both required laboratory and project courses. These include:

- The Introduction to Design in Mechanical Engineering utilizes a structured design, build, and test sequence. Students fabricate an apparatus which requires a basic understanding of the full scope of mechanical engineering.

The Introduction to Measurements and Data Analysis in Mechanical Engineering lays a foundation in experimental measurement and data analysis in mechanical engineering; team planning and execution of experiments; and technical report writing.

The Mechanical Engineering Capstone Laboratory builds upon prior laboratory experiences and integrates thermal and mechanical system concepts; it also focuses on problem solving using experimental and analytical/computational methods.

All students in the major also participate in a Senior Design Capstone Course in which they design and analyze a part, product or system followed by building and testing a prototype.

UNDERGRADUATE RESEARCH
Research is an encouraged part of an undergraduate student's education. Many students participate in the ME Honors Program where they perform research under the guidance of a faculty member and write and defend an undergraduate thesis, all while earning credit hours towards their degree. Students may also conduct research at a more informal level without the requirement to write an undergraduate thesis.

CO-OPS & INTERNSHIPS
Ohio State's Engineering Co-Op & Internship Program is a great resource for our students. Two out of every three Ohio State engineering students participate in a co-op or internship experience. Knowledge gained in an authentic engineering work environment builds career confidence and demonstrates real commitment to future employers. In addition to getting a boost in job readiness, many students are able to further reduce their education expenses through income received while working as interns or on co-op assignments. More information is available at: mae.osu.edu/undergraduate/internships-and-co-ops.