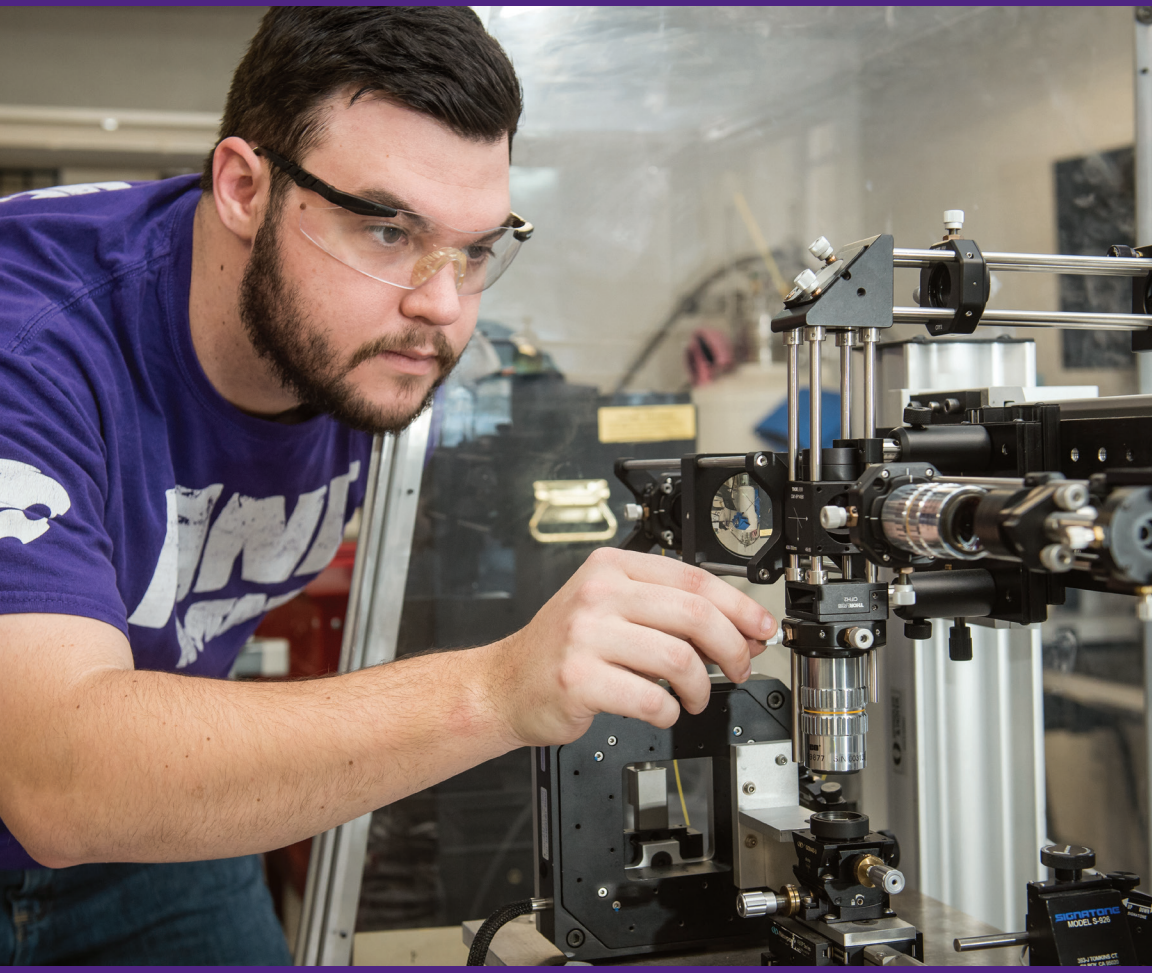
MECHANICAL ENGINEERING



KANSAS STATE UNIVERSITY | Carl R. Ice College of Engineering

"At K-State, I've always felt I had an amazing support system, from my professors to my classmates. I chose this university because I knew the people here truly cared about my success."

— Nicole Doughramaji,
mechanical engineering student

PROGRAM OVERVIEW

Mechanical engineering is a broad-based profession that works with devices, systems and processes through analysis and design. Mechanical engineers' knowledge of design helps advance the world through innovative solutions to complex challenges.

AREAS OF EMPHASIS

AEROSPACE
Technical electives such as aircraft propulsion, aircraft stability and aerodynamics are offered in the aerospace area.

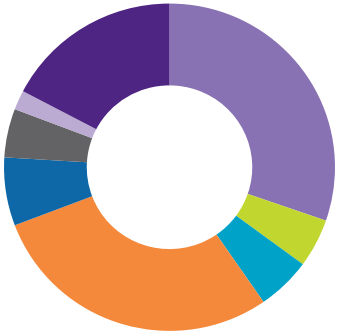
AUTOMOTIVE
Coursework covers combustion engines, composites and machine vibrations.

AUTOMATIC CONTROLS
Microcontrollers, digital systems, control systems analysis and design courses are offered to those interested in automatic controls.

ENERGY/SUSTAINABILITY
Thermal and fluid sciences concerning the use and production of energy and design of modern power systems are topics covered.

MACHINE DESIGN
Experimental stress analysis, manufacturing processes and finite elements are courses offered in machine design.

Additional areas of emphasis are available.



KEY ACADEMIC AREAS*

MATH AND SCIENCE COURSES
- Math/Physics
- Biology/Chemistry

ENGINEERING DESIGN/ TECHNICAL COURSES
- Chemical Processes
- Mechanics/Design
- Electronics/Electricity
- Computer Programming
- Business Processes
- Technical Electives

*General education electives not included

NUCLEAR OPTION

Mechanical engineering students can choose to pursue a formal option in nuclear engineering, which encompasses nuclear power plant design and construction, nuclear medicine and research of global issues at national laboratories.

MAKE AN IMPACT

INNOVATE TO ADVANCE THE WORLD

As designers and innovators, mechanical engineers combine science and mathematics to benefit humankind. Mechanical engineers impact the world through —

- developing new uses for technological discoveries.
- creating components, systems or processes to meet needs.
- devising new or improved production processes.
- using expertise as specialists to help others with technical problems.
- designing the next generation of transportation.
- finding energy-efficient solutions for current challenges.

GET INVOLVED

UNDERGRADUATE RESEARCH

Students have the opportunity to do research with faculty in areas such as nanoscience and nanomaterials, nuclear engineering, multiphase microfluidics, semiconductor materials and air quality.

STUDENT ORGANIZATIONS

Mechanical engineering students can join organizations such as the American Society of Mechanical Engineers, the Society of Automotive Engineers, and Women of Mechanical and Nuclear Engineering.

CREATIVE INQUIRY DESIGN TEAMS

SAE AERO TEAM

Students design and build a remote-controlled model aircraft in a team environment.

SAE FORMULA TEAM — POWERCAT MOTORSPORTS

Powercat Motorsports is a design-build team that develops a small-scale Formula One race car.

SAE BAJA TEAM

This team creates a rugged, single-seat, off-road recreational vehicle for competition.

AUVSI UNMANNED AERIAL SYSTEM TEAM

The team designs, builds and tests an unmanned aerial system to compete in an annual competition.

WILDCAT WIND POWER

The K-State Wildcat Wind Power Team designs, builds and tests a small-scale wind turbine.

OPPORTUNITIES

CAREERS

Mechanical engineering graduates are employed in a variety of industries including aerospace, vehicle design, power generation and plant design, petroleum production, materials processing, machinery, robotics, environmental control and nuclear medicine.

Mechanical engineering graduates pursue careers as —

- manufacturing engineers
- project managers
- consultants
- environmental engineers
- logistics directors
- production supervisors
- nuclear reactor designers
- aerospace engineers
- automotive engineers

95%

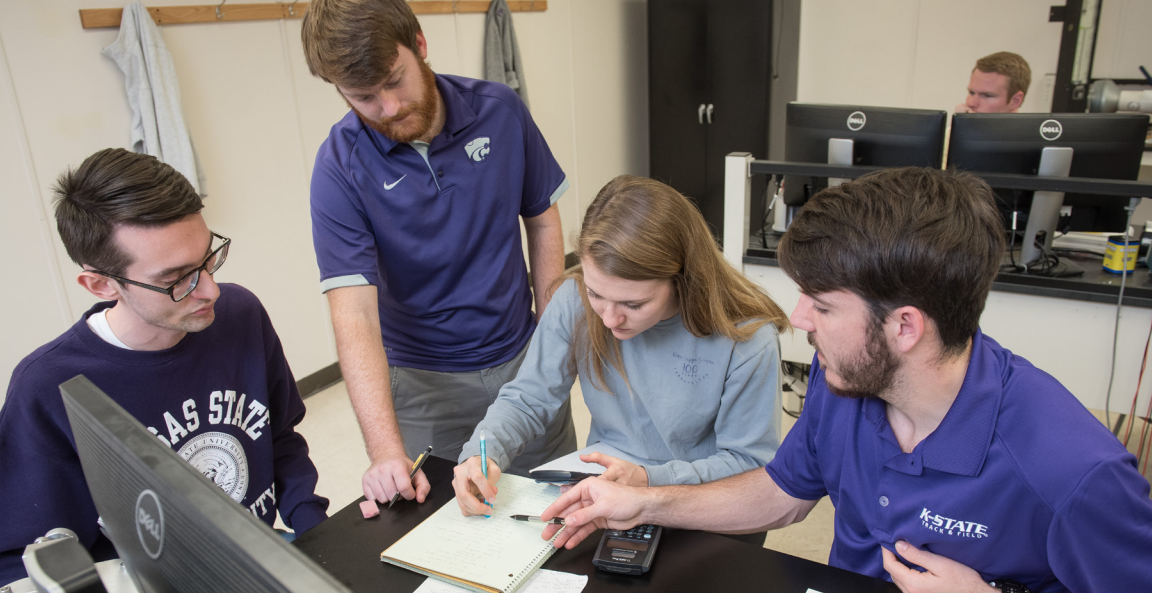
OF K-STATE COLLEGE OF ENGINEERING GRADUATES ARE EMPLOYED, OR ENROLLED IN GRADUATE OR PROFESSIONAL SCHOOLS WITHIN SIX MONTHS OF GRADUATION.

$60,538

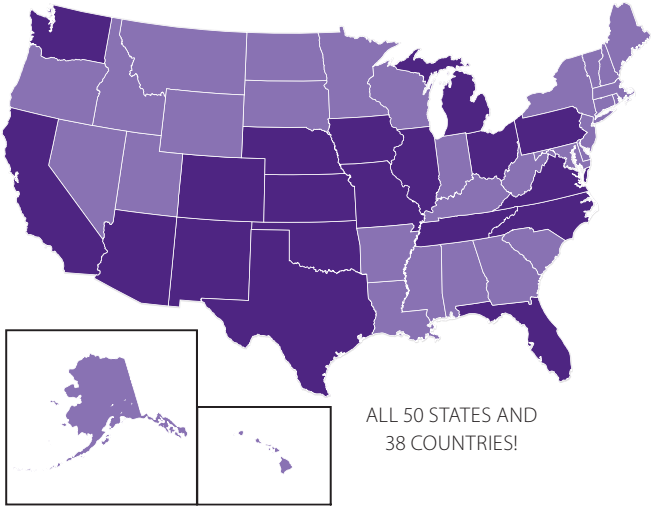
IS THE AVERAGE STARTING SALARY FOR A K-STATE MECHANICAL ENGINEERING GRADUATE.

INTERNSHIPS

Internships allow mechanical engineering students to gain industry experience in the summers during their collegiate career. Internships provide a competitive edge when graduates look for permanent positions.



K-STATE MECHANICAL ENGINEERING ALUMNI LIVE IN...



ALL 50 STATES AND
38 COUNTRIES!

NUMBER OF ALUMNI: 50+ 1-49 0

"One aspect of earning my degree from K-State that continues to stand out and bring benefits is the department's 'hands-on' approach to learning."

— David McPherson '98,
mechanical engineering

TAKE THE NEXT STEP.

Apply online at k-state.edu/admit to start your future at the Kansas State University Department of Mechanical and Nuclear Engineering.

CONNECT WITH US

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mne.k-state.edu

785-532-5455

KANSAS STATE UNIVERSITY

Program Accreditation
The Bachelor of Science in mechanical engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Notice of Nondiscrimination
Kansas State University is committed to nondiscrimination in admissions, programs and employment. Inquiries and complaints: Contact Director of Institutional Equity, Kansas State University, 103 Edwards Hall, Manhattan, KS 66506-4801, (Phone) 785-532-6220; (TTY) 785-532-4807.