

SCHOLARSHIPS AND FINANCIAL AID

All new engineering students are encouraged to complete the College of Engineering scholarship application forms. New students automatically receive consideration for SIUC scholarships upon admission to the University.

For more information on financial aid and other SIUC scholarships, visit SIUC's financial aid office Web site at: www.siu.edu/~fao

ADDITIONAL RESOURCES

Professional work experience through our internship program or cooperative education is an excellent way to enhance your degree and finance your education. Students ideally enter the co-op program after their sophomore year, and may work one or two semesters before returning to full-time study. Visit www.engr.siu.edu/outreach/coop/coop.htm

MORRIS LIBRARY

Morris Library, the University's main library, will be an important resource for you. It holds more than 2.4 million volumes, 3.1 million microform units and more than 12,500 current periodicals and serials. You will have access to I-Share (the statewide automated system) as well as a wide array of databases and other electronic data files.

Our library offers a wide range of services, including reference assistance, instructional and technical support, distance learning, geographic information systems (GIS), and multimedia courseware development.

FOR MORE INFORMATION

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WHY STUDY AT SIUC?

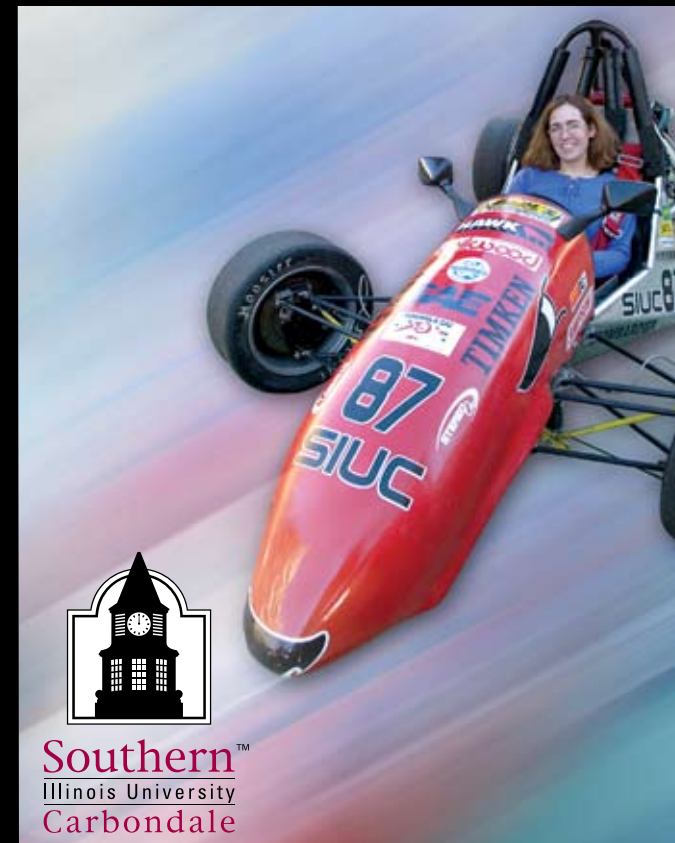
- Our students compete in various collegiate design competitions, including Formula 1 race car, moonbuggy and hovercraft.
- We offer numerous student organizations, including the American Society of Mechanical Engineers, Society of Manufacturing Engineers, Society of Women Engineers, National Society of Minority Engineers and National Society of Hispanic Engineers.
- The Princeton Review rated SIUC as a “Best Midwestern College” and “One of America’s Best Value Colleges” for 2007.
- Shryock Auditorium annually presents the Celebrity Series, a professional artist series of music, drama, dance and multicultural events. The 1,200-seat auditorium is also used by other campus organizations such as the School of Music and the Student Programming Council, which have brought famous jazz and rock groups, popular comedians and television stars to the Shryock stage.
- Campus Lake features a beach, picnic areas, walking/jogging paths and a boat dock where you can rent canoes, paddleboats and rowboats.
- Freshman Interest Groups, which help first-year students adjust to classes and campus life, are available in each on-campus housing area.



Mechanical Engineering



We Have A Place For You!



Southern
Illinois University
Carbondale

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WHY MECHANICAL ENGINEERING?

Do you like to solve problems, take things apart to find out how they work, sometimes get into trouble because of your curiosity, or just like to tinker? Then, you've come to the right place.

When you think about mechanical engineering, most of you probably think about machines such as automobiles, airplanes, the aerospace program, earth-moving equipment and farm implements, and manufacturing. You would be partly correct, but there is so much more to our field. Mechanical engineers work in every major manufacturing industry, scientific organization, the medical industry, government agencies, consulting firms, business and patent law offices and more.

Our students learn that mechanical engineering involves not only machines and their design, but also thermal systems (heating, air conditioning and refrigeration), energy and chemical processes, combustion, materials and their properties, computer simulations, nano-technology and more. Mechanical engineers learn how to identify and solve problems that can help make society safer and better.

BECOME A PROFESSIONAL ENGINEER

Practicing mechanical engineers who graduate from SIUC can get their Professional Engineering license through the state's licensing board, giving them more responsibility and capabilities to practice engineering.

Our successful graduates go on to own their own businesses, manage businesses, and are found in nearly every walk of life, in countries around the world.



OUR FACULTY

The professors in our department all have a doctorate in engineering, with many receiving their degrees from major U.S. universities. All new students are assigned a faculty member in our department to provide mentoring and guidance during their undergraduate studies.

The strength of our undergraduate and graduate programs comes from the diversity of our faculty expertise and their research programs. Many of the faculty have their doctorates in mechanical engineering, while others have their doctorates in chemical engineering, metallurgy, material science and associated areas. Our students learn from professors who teach classes related to their area of expertise and related research.

Almost all of our classes (with few exceptions) are taught by faculty.

In addition to teaching, our faculty members are among the top researchers in the country. Their research involves a wide range of subjects such as: energy from coal and alternative fuels, chemical processes, biomechanical devices, nano-and friction-materials, friction properties, mechanical systems, advanced composites and their properties, thermal systems and heat transfer, computational fluid mechanics, and computational methods and systems, and more.

Recent inventions in the area of biomedical devices and advanced composite materials have potential to revolutionize industry. Researchers are also looking at hydrogen from coal, synthetic fuels and bio-fuels. Over the past five years, our faculty members have received \$ 4.5 million in research grants.

OUR CURRICULUM

We offer degree programs leading to a bachelor of science and master of science in mechanical engineering and a doctorate in engineering science. Our bachelor's degree is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

We use the term Core Curriculum to describe common courses that all SIUC students are required to take, such as English, math, speech, social sciences and humanities. Students working on a bachelor's degree in mechanical engineering must take about 25 percent of their course hours in these Core courses. The remaining hours are split between required courses for the major and elective courses that you choose based on your own interests.

Your first-year engineering courses will be Introduction to Engineering and Engineering Graphics because you will concentrate primarily on your requirements for math, chemistry, physics and English. During your second year, your engineering-related classes include: Fluid Mechanics and Lab, Statistics, Dynamics, Mechanics of Deformable Bodies, and Thermodynamics. In your third and fourth years, your classes will be predominantly mechanical engineering and will include more design and computation.

OUR FACILITIES

You will gain hands-on experience through our well-equipped laboratories:

- Computer lab with state-of-the-art software
- Thermal measurement and control
- Material science
- Pollution control
- Vibration
- Process design and control
- Mechanical systems control
- Combustion
- Chemical processes
- Advanced friction studies
- Tribology
- High-temperature materials
- Composites
- Nano-materials
- Materials testing

