

SOUTHERN ARKANSAS UNIVERSITY

ENGINEERING AND PHYSICS

Kahli Remy
web.saumag.edu/kahli

COLLEGE OF SCIENCE AND ENGINEERING

Interested in Engineering, Electronics, or Astronomy?
Become a part of the engineering and physics programs at SAU!

- **B.S. Engineering**
- **Engineering-Physics options:**
Mechanical Engineering, Chemical Engineering, Industrial Technology

Southern Arkansas University offers the only engineering program in the southern half of Arkansas. With a Bachelor of Science in Engineering degree program, SAU gives students a balanced and strong engineering curriculum. Courses emphasize solving engineering problems and obtaining practical experience through internship opportunities. Small class sizes and hands-on experiences ensure our students have practical involvement during laboratory classes while also working with regional industry.

SAU students have the opportunity to participate in undergraduate research during their studies. Students can perform collaborative research on a national level as well. SAU's laboratories are equipped with state-of-the-art instruments with modern data acquisition systems.



SAU Engineering students get to work hands-on with the latest technologies, including 3-D printer technology, in the SAU Science Center and Natural Resource Research Center laboratories.

The goal of the SAU engineering program is to prepare our students for careers in engineering that will serve industry in Magnolia and the region. Our graduates may also continue their education in advanced engineering programs at universities around the nation. Several SAU alumni are working towards earning their Ph.D. degrees in engineering or physics at esteemed research universities.

For more information about SAU engineering, call us at (870) 235-4290, or by e-mail at sjtelford@saumag.edu. Check out our website at <http://web.saumag.edu/engineering/>.



Department of Engineering and Engineering Physics

The Bachelor of Science degree in Engineering with the *mechanical focus* is a comprehensive degree that offers a balanced and strong engineering curriculum that prepares our undergraduates to be able to undertake product design and development roles in industry and take on engineering tasks in a technical setting. The bachelor degree provides a broad background in mechanics of materials, structures and control systems. Our engineering program enjoys a unique partnership with local industries; real world engineering problem-solving is enhanced by practical experience our majors receive through industry internship opportunities. The students are also required to work on a senior capstone engineering design project overseen by a faculty member.

The Chemical Engineering option is a comprehensive degree that trains the students to apply the principles of chemistry to solve problems involving the production or use of chemicals. Chemical engineers transform raw materials into high-value products, design processes and equipment for large-scale chemical manufacturing, plan and test methods of manufacturing product and treatment of byproducts, and supervise the overall production process. Magnolia ,Arkansas, is home to many world-class leading developers, manufacturers and marketers of complex chemicals and services. Our program offers students numerous opportunities to engage in real world chemical engineering that is guaranteed by practical experience our students will receive through co-ops and industry internship opportunities.

The Engineering Physics bachelor's degree with *science* sub-plan is versatile and designed to provide students with a solid foundation in physics, mathematics and core engineering concepts, all of which are necessary to pursue graduate work in multidisciplinary complex areas. The curriculum leaves students with a variety of career choices. Graduates are able to seek innovative careers in industry, typically in research and development where problem-solving skills and an understanding of engineering are necessary, while at the same time, it provides a firm foundation for the pursuit of graduate studies in interdisciplinary engineering or physics topics at esteemed research universities. To name a few, our graduates may continue their education in advanced engineering and physics programs such as microelectronics, photonics, nuclear engineering, biomedical engineering, biophysics, radiation physics, nanotechnology or any discipline where the principles of physics are applied.

The Industrial Technology option is designed to prepare technical and management oriented professionals for leadership responsibilities and employment in business, industry, education, and government. Industrial Technology is primarily involved with the management, operation, and maintenance of complex, technological systems. Typical positions held by graduates include, but are not limited to, industrial managers, training directors, operations managers, plant managers, production supervisors, and quality and safety engineers. Core classes include fundamentals of manufacturing, quality, maintenance management, production and inventory control, industrial safety, work analysis, industrial management, engineering economic analysis, manufacturing policy and ethics.

