why SHSU?

This is a university that thinks big but feels small. With a student population of over 18,000, SHSU prides itself with creating a close community. Current students and alumni alike attest to the warm, supportive environment found all over the SHSU campus. Faculty members are more than professors—they are mentors, advisors, informal tutors, and personal links to great career connections.

Sam Houston State University has something—and then some—for everyone. No matter where you look, you will find ways to have fun, make great friends, enjoy the arts, serve others, and challenge yourself.

An education from Sam Houston State University prepares graduates to be a vital part of the world. It gives them the theoretical and practical knowledge to understand and solve challenges. It equips them with the experience and confidence to become effective leaders. It develops in them a heart for service to their communities. It gives them the tools they need to have an impact—as new graduates and for the rest of their lives.

There are many ways to learn more about Sam Houston State University, but the best way is to come visit campus and experience it for yourself.

The Department of Physics at Sam Houston State University offers a Bachelor of Science in Physics and a Pre-Engineering Program.

Physicists seek to understand the inner workings of nature, while engineers seek to harness and develop practical applications of nature’s fundamental rules. Both fields appeal to creative, intuitive, and inquisitive students with a talent for observing unique solutions to challenging technical problems.
In the Physics and Pre-Engineering Program at Sam Houston State University (SHSU), you will work closely with a caring and technically proficient faculty to become a strong candidate for real-world employment or for admission to graduate study at the master's or doctoral level. We provide valuable hands-on research experience, mentored by a diverse team of specialists in the fields of Experimental (Lithium-Ion Batteries, Superconductors, X-Ray Spectroscopy, Exotic Molecular Materials), Theoretical (Quantum Hall Effect, Supersymmetric Grand Unification), Computational (Numerical Analysis of Entangled Quantum Systems, Hadron Collider Simulation), and Astro (Gravitational Lensing by Dark Matter, Popular Science Writing, Improving Astronomy Education) Physics.

**SCHOLARSHIPS**

Students may apply for physics scholarships, internships, and non-degree specific scholarships by completing the ScholarX online application. All physics majors are eligible for departmental employment as laboratory assistants. Transfer scholarships are available for students who would like to continue their academic career at Sam Houston. SHSU provides a quality education at an affordable cost.

**COURSEWORK**

All physics majors or pre-engineering students must complete the “Physics Bootcamp” course during their first semester to gain a strong foundation in the mathematics that will be required for the degrees offered.

In addition to the bachelor’s degree in physics, students interested in engineering have several attractive options to choose from. The two-year program provides a host of essential prerequisites for transfer to a college of engineering. The “3/2” dual degree program stipulates an additional third year of intensive physics study at SHSU prior to transferring out; upon completion of an accredited engineering degree program (normally a two-year commitment), all credits are retro-actively transferred back to SHSU for the immediate award of a second degree in physics. Alternately, the four-year physics degree program graduates from SHSU may be accepted into various master’s programs in engineering.