

An SEM sample image captured by a student.

Fundamental And Leading-Edge

Physics majors have the power to change the world.

Take almost any significant human endeavor – from the invention of electricity to advances in medicine, computer science, smartphone technology, astronomy, etc. – and physics has played a role in its development. With physics knowledge, you can understand how the world works. You can analyze and problem-solve. In a complex world, the study of physics at Rose-Hulman becomes a useful building block for the quantitative and analytical skills necessary in almost any career.

As a Physics major at Rose-Hulman, you will immerse yourself in mastering the fundamental concepts of science, math and engineering that undergird the study of physics. You'll then choose from a wide array of potential subjects for a deeper dive.

Research Areas

Our students often conduct research in: astronomy, imaging, magnetics, MEMS and microfabrication, optics, semiconductor materials, solid-state devices, ultrafast lasers, X-ray diffraction, and X-ray absorption with synchrotron radiation.

"Rose-Hulman's physics program gave me both the flexibility and the support to funnel my passion for astronomy into pursuing my PhD – something I had never considered before coming to Rose."

- Dr. Elizabeth Melton, alumna and assistant professor of physics and optical engineering and director of the Oakley Observatory







We are big believers in learning by doing. That is why you'll have plenty of opportunities to apply what you learn in our labs, maker space and classrooms.

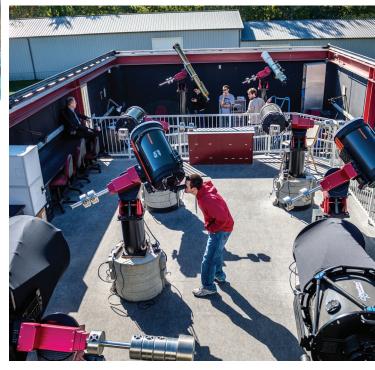
- Micro-Nanoscale Device and Systems (MiNDs) Lab
- Materials Processing Lab featuring Scanning Electron Microscope (SEM)
- Oakley Observatory
- Optical Communications Lab
- Magneto-optics Lab
- X-Ray Diffraction (XRD) Lab
- National labs synchrotron facilities
- Teaching labs, research labs, and more

Rose undergrads get access to and are encouraged to use equipment you might often see reserved for graduate students in other settings.









Oakley Observatory

The Oakley Observatory on campus features eight telescopes for the study of the night sky. The Oakley Southern Sky Observatory located in New South Wales, Australia, allows students to identify new asteroids, measure asteroid rotation periods and conduct research.



Physics students at Rose can expand on classroom learning by joining an extracurricular club, such as: the Astronomy Club, Physics Club, Photonics Squad, and Rocketry Club.

Majors, Minors And Concentrations

Broaden the scope of your physics degree with the possibility of double majoring in a variety of engineering disciplines including optical engineering and engineering physics, or adding one of the following concentrations:

- Astronomy
- Semiconductor Materials & Devices
- Solid State Physics/Materials Science
- Optical Engineering
- Imaging



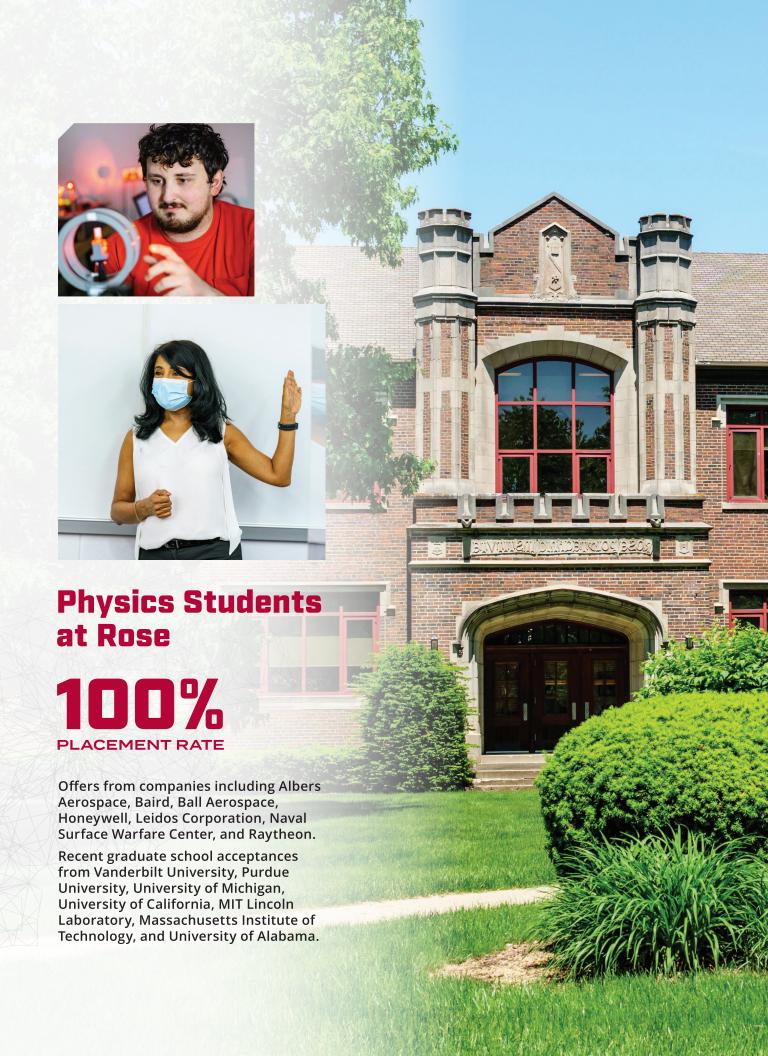
For more information on majors, minors and areas of concentration scan this code on your smartphone

Get In Touch!

Department of Physics and Optical Engineering

812-877-8309

www.rose-hulman.edu/physics





ABOUT ROSE-HULMAN

Rose-Hulman is one of the nation's top undergraduate engineering, science, and mathematics colleges. Our 1,300 acre scenic campus is home to 2,100 students with a passion for STEM and learning. We are consistently rated among the best colleges and universities in the country for return on investment, internships, and career placement.

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