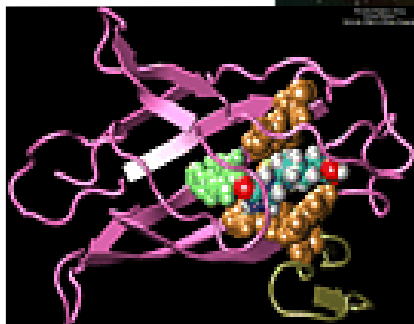


Physics



program

Physics is the study of the world around us in order to discover the principles or laws which govern the natural world. Physicists study an enormous range of topics including the fundamental nature of matter and energy in the universe, complex biological molecules, all the devices of modern electronics, properties of materials, the atmosphere, and alternate forms of energy and its uses. Physics is the basis for much of the innovations in technology. Studying physics prepares some students to expand the boundaries of knowledge in this most fundamental of the natural sciences. For others it provides training in the concepts and methods of science for application in many professional areas.



career opportunities

A bachelor's degree in physics can lead to a variety of career opportunities, including:

- Industrial Research
- Software Engineering
- High School Teaching
- Medical Technology
- Image Processing
- Banking

Many physics majors continue to pursue their studies at the graduate level and earn their Ph.D.'s, specializing in areas such as:

- Elementary Particle Physics
- Astrophysics
- Biophysics
- Physics Education
- Medical Physics
- Nanophysics

These research physicists enter careers at universities, and government and industrial research labs.

picking the right program

The Physics Program at SRU offers several options of study leading to a BS or BA degree:

The physics major (BS) is designed to provide a broad background in physics for individuals planning careers in physics and related technical fields, including those who plan to pursue graduate studies in physics. The physics BS majors have to complete:

1. A prerequisite introductory physics sequence
2. A core sequence of upper level physics courses
3. Related field work in chemistry and mathematics

The BA major is for students wishing a broad liberal education with an emphasis in physics. These majors will follow the same math and physics prerequisites as the physics BS, but somewhat lighter core content.

The pre-masters of education in physics is offered in cooperation with the department of secondary education at SRU. Upon completion of the physics major, the students in this program enroll in a three semester Master of Education degree program with an area of emphasis in physics education. Successful completion of the masters program can lead to state certification.

A Certification in Nanotechnology is offered in partnership with Penn State University. Physics majors spend one semester at Penn State to complete 18 credit hours of laboratory and class work in a state-of-the-art nanotechnology laboratory. Completion of the course work lead to a certification in Nanofabrication Manufacturing Technology.

Majors and Minor

Majors:

- Physics (BA)
- Physics (BS)
- Physics-Computational (BS)
- Physics-Pre-Masters of Education (BA)
- Physics-Pre-Masters of Education (BS)
- Pre-Engineering (3+2 dual-degree with Penn State or Youngstown State)

Minor:

- Physics

<http://www.sru.edu>

SlipperyRock
University
of Pennsylvania

@ Slippery Rock University of Pennsylvania

Physics



picking the right program

Pre-Engineering, Dual-Degree program enables a student to pursue a career in engineering while experiencing the broader scope of a Slippery Rock University education. The physics program at SRU offers two 3+2 year options for students who wish to enter the engineering profession with: Penn State University or Youngstown State University.

This cooperative program of study leads to two baccalaureate degrees, one in physics awarded by SRU and one in an area of engineering from either Youngstown State or Penn State. Students can choose from among, aerospace, chemical, civil, computer, electrical, mechanical, and biomedical to name a few.

research and resources

Undergraduates who have participated in research projects are better prepared for the regimen of a graduate program or typical entry-level positions in the private sector. SRU physics majors have the opportunity to be involved in faculty/student research projects in areas such as liquid crystals, computational physics, and gravitational lensing.

Resources

The East Gym is home to the physics program at SRU and is complete with state-of-the-art undergraduate laboratories and other resources. The facility also includes six labs for physics instruction, with modern equipment:

- Computational physics research lab
- Fully equipped optics lab
- Light scattering/liquid crystal lab
- Planetarium



Contact Info:

Admissions Office

146 North Hall Welcome Center
Slippery Rock University
Slippery Rock, PA 16057
Phone: 724-738-2015

E-mail: admissions@sru.edu

Campus Tours: 1-800-929-4778

Web: www.sru.edu/undergraduateadmissions

Department Contact:

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Slippery Rock University is an equal opportunity/affirmative action institution
A member of the Pennsylvania State System of Higher Education