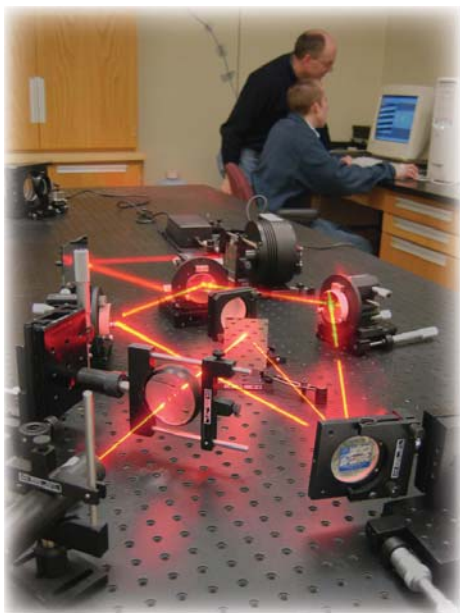


Research Opportunities

Students have opportunities to learn from and contribute to ongoing research programs through student-faculty collaborations in the following areas:

- Interstellar medium
- Laser spectroscopy
- Materials science, condensed matter
- Planetary science
- Theoretical nuclear physics
- Theoretical quantum mechanics
- Symmetries in physics
- Liquid crystals
- Nonlinear optics



Laboratory Facilities

- Teaching and research laboratories with engaging experiments and instrumentation supporting traditional activities enhanced with computational tools.
- Recently renovated planetarium with a Chronos Star projector and dome. More information at: www.stcloudstate.edu/physics/planetarium.asp
- Student-run observatory with 16-inch Meade S/C telescope and Celestron 11-inch telescope with optical CCD imaging camera and spectroscopic capabilities.

Physics, Astronomy & Engineering Science

324 Wick Science Building
St. Cloud State University
720 Fourth Avenue South
St. Cloud, MN 56301-4498
320.308.3252
physics@stcloudstate.edu
www.stcloudstate.edu/physics/

Office of Admissions

115 Administrative Services Building
St. Cloud State University
720 Fourth Avenue South
St. Cloud, MN 56301-4498
320.308.2244
scsu4u@stcloudstate.edu
www.stcloudstate.edu/admissions

Office of Scholarships and Financial Aid

financialaid@stcloudstate.edu
www.stcloudstate.edu/financialaid/

Office of Residential Life

reslife@stcloudstate.edu
www.stcloudstate.edu/reslife/



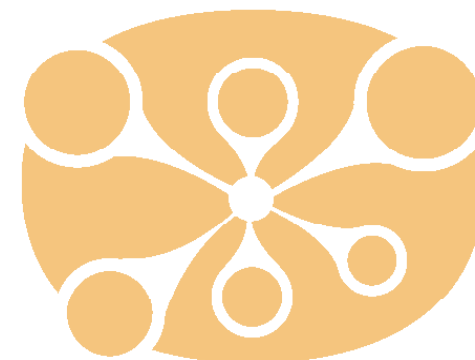
TTY: 1.800.627.3529

SCSU is an affirmative action/equal opportunity educator and employer. This material can be made available in an alternative format; Contact the Applied Research and Development Center, 320.308.3909.

Michelle Collelo, designer; Irene Voth, project manager; Dale Williams, director, SCSU College of Science and Engineering's Applied Research and Development Center, 2007

Physics, Astronomy & Engineering Science

Learning in
and out
of the classroom.



COLLEGE OF SCIENCE AND ENGINEERING

ST. CLOUD STATE
UNIVERSITY.

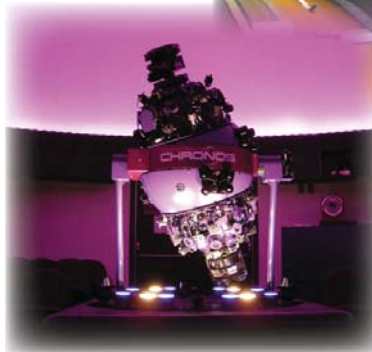
What is a Physicist?

Physicists study the science of matter and energy, their properties and interactions.

Physicists may study experimentally, discovering or verifying the laws of nature, or theoretically, creating mathematical models to describe nature.

You might pursue a degree in physics if you...

- are a problem solver
- are inquisitive
- like working independently
- are persistent and determined
- are imaginative and creative
- have computer skills
- have mathematical ability
- have writing skills
- want to understand nature



Related Student Organizations

A few student organizations that might interest those in a physics major are:

- Physics & Astronomy Club
- National Science Teachers Association
- A number of engineering-related groups

There are hundreds of student organizations at St. Cloud State University to choose from. For more information, visit the Web site at: www.stcloudstate.edu/csold/studentorganizations/

Career Possibilities

Physics graduates may find employment in many areas such as:

- Laboratories
- Government agencies
- K-12 schools
- Colleges & Universities
- Graduate or Professional schools
- Industrial research and development

More information on careers for each major is available through Career Services at: www.stcloudstate.edu/careerservices/.

PROGRAMS OF STUDY

Bachelor of Science

Physics Comprehensive Major

Within the comprehensive physics major, students must identify one of the following tracks (areas of emphasis):

- Professional Physics
- Astrophysics
- Mathematical Physics
- Electro-optics
- Engineering Science
- Self-selection

Science Teaching Major – Physics Emphasis

This program prepares candidates to apply for a physics teaching licensure in Minnesota, which permits the teaching of all science disciplines 5-8, integrated science, and physics 9-12.

Physics Minor Optics Minor

Both of the bachelor of science minors can be earned with any B.A. or B.S. major in another department.

Bachelor of Elective Studies

Physics Major (56 credits)

Recommended first year studies include physics, calculus, and general education requirements. Second year studies include two upper division physics courses, chemistry, general education requirements, and major electives.

For information on the Nuclear Medicine Technology and Radiologic Technology programs please go to: www.stcloudstate.edu/healthsciences/.

Program descriptions are available at: bulletin.stcloudstate.edu/ugb/programs/physics.asp

Degree maps are available at: www.stcloudstate.edu/physics/undergrad.asp

For more information contact the physics department: 320.308.2011
physics@stcloudstate.edu
www.stcloudstate.edu/physics/

