

What Can I Do With a Major in **PHYSICS?**

Physics is the discipline of science dealing with the properties of matter and energy. Includes; acoustics, atomic physics, cryogenics, electromagnetism, elementary particle physics, fluid dynamics, geophysics, mathematical physics, mechanics, molecular physics, nuclear physics, optics, plasma physics, quantum physics, solid state physics, statistical mechanics, thermodynamics. It is the branch of science concerned with the study of properties and interactions of space, time, matter and energy.

Typical Coursework

Calculus	Modern Experimental Physics
Classical Mechanics	Modern Physics
Differential Equations	Optics and Wave Phenomena
Electricity and Magnetism	Quantum and Atomic Physics
English Composition	Scientific Computer Programming
General Chemistry	Special Relativity
Instrumental Methods	Thermodynamics & Statistical Mechanics

Related Major Skills

Investigation	Communication	Computational	Technical
Define research problems	Develop & write research proposals	Measure distances/relationships	Design equipment
Develop research models	Review scientific literature	Perform calculations	Identify/classify materials
Establish hypotheses	Summarize research findings	Mathematical modeling	Observe data
Gather/analyze data	Inform, explain, instruct	Maintain records	Establish experimental designs
Evaluate ideas	Prepare technical reports	Utilize math formulas	Use instruments
See relationships among factors	Draw meaningful conclusions		

Directly Related Occupations (may require advanced education)

Astronomer	Natural Science Manager
Astrophysicist	Nuclear Physicist
Biophysicist	Oceanographer
Fluids Physicist	Physicist
Geologist	Seismologist
Geophysicist	University and College Professors
Meteorologist	

Who Hires for this Occupation?

Federal & state government agencies, research & development firms, engineering firms, scientific consulting firms, and colleges & universities.

Minnesota Colleges & Universities with a major in PHYSICS

Augsburg College	Saint John's University
Bethel University	Saint Mary's University of MN, Winona
Carleton College	Southwest Minnesota State University
College of Saint Benedict	St. Cloud State University
Concordia College	St. Olaf College
Gustavus Adolphus College	University of MN, Duluth
Hamline University	University of MN, Morris
Macalester College	University of MN, Twin Cities
Minnesota State Univ., Mankato	University of St. Thomas
Minnesota State Univ., Moorhead	Winona State University

Professional Association Links

American Institute of Physics, www.aip.org

American Astronomical Society, www.aas.org

American Physical Society, www.aps.org

Institute of Physics, www.iop.org

National Aeronautics and Space Administration, www.nasa.gov

Society of Nuclear Medicine, www.snm.org

For More Information

Contact ARCC Career Counseling: (763) 433-1240 (CR campus), (763) 433-1840 (Cambridge campus) or stop by the campus Information Desk

Information adapted from: Minnesota Career Information System <https://mncis.intocareers.org>, and the Career Center at the University of North Carolina, Wilmington <http://uncw.edu/career/WhatCanIDoWithaMajorIn.html>