



PHYSICS

Program Objectives

The Department of Physics at USM offers a [B.A. in Physics](#), with four faculty members pursuing research topics in Physics and Astronomy such as Light Scattering, studies of Asteroid Composition and Dynamics, Stellar Classification, Computational Physics, Brownian Motion, and Torsion Pendulum Physics.

Many of our graduating seniors have gone on to Ph.D. programs; some have taken jobs in industry. If you're interested in studying the most fundamental of sciences, this is the place to be. If you are interested in going on to graduate school, we encourage you to work hard and pursue work on a research project with one of our faculty members. You can see more information on research in the department on our [Research page](#).

Degrees & Concentrations Offered

Graduation Planner: usm.maine.edu/advising/degreeplanning

Degree Offered: Bachelor of Arts

Major Offered: Physics

Minor Offered: Physics

Department of Physics

Portland Campus, 26 Science Building
(207) 780-4231

Web Address: usm.maine.edu/phy

Career Possibilities*

Adapted Physical Education Specialists
Astronomers
Atmospheric, Earth, Marine, and Space
Sciences Teachers
Education Administrators
Engineering Teachers
Life, Physical, and Social Science
Technicians,
Mathematical Science Teachers
Nuclear Monitoring Technicians
Occupational Health and Safety Specialists
Physical Medicine and Rehabilitation
Physicians
Physical Scientists,
Physical Therapist Aides
Physical Therapists
Physician Assistants
Physicists
Physics Teachers

* Additional education, training or experience may be required.

Acquired Transferable Skills

Science
Mathematics
Critical Thinking
Complex Problem Solving
Reading Comprehension
Speaking
Active Listening
Active Learning
Judgment and Decision Making
Learning Strategies

For more information on transferable skills go to:
usm.maine.edu/community-engagement-career-development/career-tools

What can I do with this major?*

AREA	EMPLOYERS	INFORMATION/STRATEGIES
Astronomy	Observatories Laboratories Planetariums Science museums Federal government	<ul style="list-style-type: none"> • Obtain experience through part-time or voluntary • Cultivate broad knowledge of astronomy and speaking skills • Seek undergraduate research opportunities with professors. • Develop a specialty area of expertise • Obtain a Ph.D. for teaching and advanced research
Science Education	School systems, K-12 Publishing companies Software developers Libraries	<ul style="list-style-type: none"> • Gain experience working with age group of interest • Become skilled in the use of computers and equipment. • Current knowledge of state and national teacher licensure. • Seek advanced degree required for specialists, education administration, college
Nuclear Physics	Colleges and universities Military Industry e.g., security/weapons, Government laboratories/research Government agencies	<ul style="list-style-type: none"> • Acquire a strong mathematics, computer science, and chemistry background. • Choose a theoretical or experimental track. • Seek internship experience in your specialty area. • Pursue master's degree or Ph.D. for advanced positions in industry.
Biophysics	Colleges and universities Medical and dental schools Government laboratories Nonprofit research centers Industry Hospitals	<ul style="list-style-type: none"> • Biophysics is considered an interdisciplinary field • Plan to specialize in an area • Research experience through work with professor or internships. • Earn a bachelor's degree for most technician positions. • Obtain advanced degree for higher-level positions

*To learn about these areas and much more visit: whatcanidowiththismajor.com/major • © 2011 What Can I Do With This Major - The University of Tennessee

Enrichment Opportunities

<u>Internships</u>	For more information contact Dept. of Physics. usm.maine.edu/cecd
<u>Study Abroad</u>	For more information contact the USM Office of International Programs. usm.maine.edu/international/study-abroad
<u>Clubs & Organizations</u>	Physics Symposium For a complete list of student organizations: webapp.usm.maine.edu/pathways/list
<u>USM Corporate Partners</u>	The USM Corporate Partners are over 350 business people, from nearly 100 companies. usm.maine.edu/corporatepartners

Helpful Career Links

USMCareerConnections:

USM's career network for job and internship searches. usm.maine.edu/community-engagement-career-development/usmcareerconnections

O*NET OnLine:

Learn more about a career opportunity by researching it with O*NET. onetonline.org

Occupational Outlook Handbook:

Learn more about a career opportunity by researching it with OOH. bls.gov/oooh

PROFESSIONAL ASSOCIATIONS To name a few...

[American Physical Society](#)

[American Institute of Physics](#)

[American Astronomical Society](#)



Office of Community Engagement and Career Development • usm.maine.edu/cecd

(207) 228-8091
usmcareers@maine.edu

P.O. Box 9300, Portland, ME 04104-9300
100 Payson Smith Hall, 96 Falmouth St., Portland Campus