The Department of Physics at USM offers a Bachelor of Arts 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.

**Program Objectives**

**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?*

<table>
<thead>
<tr>
<th>AREA</th>
<th>EMPLOYERS</th>
<th>INFORMATION/STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astronomy</td>
<td>Observatories, Laboratories, Planetariums, Science museums, Federal government</td>
<td>• Obtain experience through part-time or voluntary</td>
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<td>• Cultivate broad knowledge of astronomy and speaking skills</td>
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<td>• Seek undergraduate research opportunities with professors.</td>
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<td>• Develop a specialty area of expertise</td>
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<td></td>
<td>• Obtain a Ph.D. for teaching and advanced research</td>
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<tr>
<td>Science Education</td>
<td>School systems, K-12, Publishing companies, Software developers, Libraries</td>
<td>• Gain experience working with age group of interest</td>
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<td>• Become skilled in the use of computers and equipment.</td>
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<td>• Current knowledge of state and national teacher licensure.</td>
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<td>• Seek advanced degree required for specialists, education administration, college</td>
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<tr>
<td>Nuclear Physics</td>
<td>Colleges and universities, Military, Industry e.g., security/weapon, Government laboratories/research agencies</td>
<td>• Acquire a strong mathematics, computer science, and chemistry background.</td>
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<td>• Choose a theoretical or experimental track.</td>
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<td>• Seek internship experience in your specialty area.</td>
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<td></td>
<td>• Pursue master’s degree or Ph.D. for advanced positions in industry.</td>
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<tr>
<td>Biophysics</td>
<td>Colleges and universities, Medical and dental schools, Government laboratories, Nonprofit research centers, Industry, Hospitals</td>
<td>• Biophysics is considered an interdisciplinary field</td>
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<td></td>
<td>• Plan to specialize in an area</td>
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<td></td>
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<td>• Research experience through work with professor or internships.</td>
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<tr>
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<td>• Earn a bachelor’s degree for most technician positions.</td>
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<tr>
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<td>• Obtain advanced degree for higher-level positions</td>
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</tbody>
</table>

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

### Enrichment Opportunities

- **Internships**
  - For more information contact Dept. of Physics.
  - [usm.maine.edu/cecd](http://usm.maine.edu/cecd)

- **Study Abroad**
  - For more information contact the USM Office of International Programs.
  - [usm.maine.edu/international/study-abroad](http://usm.maine.edu/international/study-abroad)

- **Clubs & Organizations**
  - [Physics Symposium](http://webapp.usm.maine.edu/pathways/list)

- **USM Corporate Partners**
  - The USM Corporate Partners are over 350 business people, from nearly 100 companies.
  - [usm.maine.edu/corporatepartners](http://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](http://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](http://onetonline.org)

- **Occupational Outlook Handbook:**
  - Learn more about a career opportunity by researching it with OOH. [bls.gov/ooh](http://bls.gov/ooh)

- **PROFESSIONAL ASSOCIATIONS To name a few...**
  - American Physical Society
  - American Institute of Physics
  - American Astronomical Society