

# PHYSICS

*What can I do with this major?*

## PRINT RESOURCES

(All Available in the Career Resource Library in The Career Center)

**Opportunities in Aerospace Careers**  
(CS/MA/EG Category)

**Opportunities in Technical Writing Careers**  
(EN/WR Category)

**Careers in Renewable Energy**  
(ENV Category)

**Green Jobs**  
(ENV Category)

**Quick Guide to College Majors & Careers**  
(CP Category)

**Graduate Programs: Physical Sciences, Mathematics, Agriculture Studies, The Environment & Natural Sciences**  
(Grad Section)

**Graduate Programs: Engineering & Applied Sciences**  
(Grad Section)

**How to Write a Winning Personal Statement for Graduate and Professional School**  
(Grad Section)



## OVERVIEW OF MAJOR

A major in physics leads to a fundamental understanding of nature and technology, an ability to think creatively, and a highly developed set of problem solving skills. The analytical track is suited for students preparing for graduate study in physics or a related field. The applied science track is for majors interested in technical subjects such as computing, engineering, or the health professions. The general track allows a concentration in nontechnical areas such as finance, education, or science writing.

**PHYSICS DEPARTMENT SITE:**

[WWW.LOYOLA.EDU/PHYSICS](http://WWW.LOYOLA.EDU/PHYSICS)

**COURSE CATALOGUE:**

[WWW.CATALOGUE.LOYOLA.EDU/CATALOGUES/CURRENT/UNDERGRADUATE/ARTSANDSCI/PHYSICS.HTML#PAGELINK1](http://WWW.CATALOGUE.LOYOLA.EDU/CATALOGUES/CURRENT/UNDERGRADUATE/ARTSANDSCI/PHYSICS.HTML#PAGELINK1)

**ACADEMIC ADVISING AND SUPPORT CENTER:**

[www.loyola.edu/department/aasc.aspx](http://www.loyola.edu/department/aasc.aspx)

## POTENTIAL JOB TITLES

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| ◇ Mathematician                  | ◇ Geophysicist                      |
| ◇ Research Scientist             | ◇ Space Physicist                   |
| ◇ Teacher                        | ◇ Forensic Scientist                |
| ◇ College Professor              | ◇ Industrial Physicist              |
| ◇ Science Writer                 | ◇ Hydrologist                       |
| ◇ Atomic Physicist               | ◇ Bio-physicist                     |
| ◇ Reactor Operator               | ◇ Water Pollution Control Inspector |
| ◇ Environmental Research Analyst | ◇ Aerospace Engineering Technician  |
| ◇ Technical Publications Writer  | ◇ Cartographer (Map Scientist)      |

## WHERE CAN I GET AN INTERNSHIP?

- |                                     |                                   |
|-------------------------------------|-----------------------------------|
| ◇ Loyola University Maryland        | ◇ University of Maryland          |
| ◇ Johns Hopkins Applied Physics Lab | ◇ AmerGen                         |
| ◇ General Physics Corporation       | ◇ Merrill Lynch                   |
| ◇ American Physical Society         | ◇ Verizon Federal Network Systems |
| ◇ State of Maryland                 | ◇ Baltimore County Public Schools |
| ◇ Aberdeen Proving Ground           | ◇ Bechtel Corporation             |

SAMPLE WEB RESOURCES	POSSIBLE CAREER FIELDS
<p><b>American Association for the Advancement of Science</b>  <a href="http://www.aaas.org">www.aaas.org</a></p> <p><b>American Geophysical Union</b>  <a href="http://www.agu.org">www.agu.org</a></p> <p><b>American Institute of Aeronautics and Astronautics</b>  <a href="http://www.aiaa.org">www.aiaa.org</a></p> <p><b>American Institute of Physics</b>  <a href="http://www.aip.org">www.aip.org</a></p> <p><b>American Physical Society</b>  <a href="http://www.aps.org/careers">www.aps.org/careers</a></p> <p><b>Institute of Physics</b>  <a href="http://www.iop.org">www.iop.org</a></p> <p><b>Physics Today Career Network</b>  <a href="http://www.physicstoday.org/jobs">www.physicstoday.org/jobs</a></p> <p><b>Society of Physics Students</b>  <a href="http://www.spsnational.org/cup">www.spsnational.org/cup</a></p>	<p><b>ASTRONOMY</b>            TEACHING ◊ RESEARCH ◊ WRITING</p> <p><b>ACOUSTICAL PHYSICS</b>            BASIC &amp; APPLIED RESEARCH ◊ DEVELOPMENT ◊ TEACHING ◊ CONSULTING            ADMINISTRATION ◊ TESTING</p> <p><b>ASTROPHYSICS, BIOPHYSICS, FLUID &amp; PLASMA PHYSICS</b>            TEACHING ◊ CONSULTING ◊ ADMINISTRATION ◊ DEVELOPMENT ◊ DESIGN            BASIC &amp; APPLIED RESEARCH</p> <p><b>GEOPHYSICS, NUCLEAR PHYSICS, SOLID STATE PHYSICS</b>            BASIC &amp; APPLIED RESEARCH ◊ DEVELOPMENT ◊ TEACHING ◊ CONSULTING            ADMINISTRATION ◊ EXPLORATION ◊ QUALITY CONTROL ◊ LAW</p> <p><b>HEALTH, MEDICAL &amp; OPTICAL PHYSICS</b>            BASIC &amp; APPLIED RESEARCH ◊ DEVELOPMENT ◊ TEACHING ◊ CONSULTING            ADMINISTRATION ◊ MONITORING/INSPECTION</p> <p><b>SCIENCE EDUCATION</b>            TEACHING ◊ COMPUTER SOFTWARE DEVELOPMENT ◊ WRITING &amp; EDITING            EDUCATIONAL RESEARCH ◊ LIBRARY &amp; INFORMATION SCIENCES</p> <p><b>TECHNICAL</b>            ENGINEERING (PROCESS &amp; TESTING) ◊ QUALITY CONTROL ◊ RESEARCH            DESIGN/DEVELOPMENT ◊ TECHNICAL WRITING ◊ COMPUTER TECHNOLOGY</p>
 <p><b>Sample graduate programs pursued by</b></p> <p><b>Physics majors:</b></p> <ul style="list-style-type: none"> <li>◊ MS/PhD, Applied Physics or Physics</li> <li>◊ MS, Electrical, Mechanical, Materials Engineering</li> <li>◊ MS, Space Sciences</li> <li>◊ Master of Medical Physics</li> <li>◊ MD/PhD</li> <li>◊ MS, Geophysics, Nanoscale Physics</li> <li>◊ MA/PhD, Teaching or Education</li> <li>◊ Master of Health Physics</li> <li>◊ JD, Law</li> <li>◊ Master in Scientific Computing, Computer Game Design, Computer Animation</li> </ul>	<p><b>POSSIBLE WORK SETTINGS</b></p> <p>COLLEGES &amp; UNIVERSITIES ◊ OBSERVATORIES ◊ MILITARY ◊ SCHOOLS            GOVERNMENT LABORATORIES &amp; AGENCIES ◊ CONSULTING FIRMS ◊ LIBRARIES            NON-PROFIT FOUNDATIONS &amp; RESEARCH CENTERS ◊ SCIENCE MUSEUMS            MILITARY ◊ HOSPITALS ◊ ENVIRONMENTAL &amp; ENGINEERING FIRMS            SOFTWARE DEVELOPERS ◊ RESEARCH &amp; DEVELOPMENT FIRMS ◊ AIRPORTS            ATOMIC &amp; NUCLEAR LABS ◊ PROFESSIONAL &amp; TECHNICAL JOURNALS</p> <p><b>IMPORTANT SKILLS &amp; ABILITIES</b></p> <p>COMMUNICATION ◊ RESEARCH ◊ MATHEMATICAL ◊ LABORATORY            COMPUTER ◊ ANALYTICAL ◊ WRITING ◊ DETAIL ORIENTED ◊ REASONING            PROBLEM SOLVING ◊ TECHNOLOGY ◊ SYNTHESIZING</p> <p><b>Contact The Career Center:</b></p> <p>Phone: 410-617-2232</p> <p>Email: <a href="mailto:thecareercenter@loyola.edu">thecareercenter@loyola.edu</a></p> <p>Website: <a href="http://www.loyola.edu/thecareercenter">www.loyola.edu/thecareercenter</a></p>