YOU HAVE OPTIONS!

preparing for
a successful career
with your
physics degree

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WHAT AM I SUPPOSED TO DO WITH MY PHYSICS DEGREE?
Acknowledgements

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The Perception
of physics career options
at the bachelor’s level

Become a professor
DO RESEARCH
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Data. How many?

Good news.

Physics bachelor’s degree production is on the rise.
Physics students have broad interests

- About 1/3 of all physics majors graduate with a double major

Most Common Double Majors of Physics Bachelors

- Mathematics
- Astronomy & Astrophysics
- Engineering
- Chemistry
- Computer & Information Sciences
- Music & Fine Arts
- Philosophy & Theology
- Education & Teaching Certification
- Biology
- Economics
One year later.

Good news!
Physics Bachelors 1 Year Later
7,430 Recent Degree Recipients

Workforce
46%

Graduate Study
Astronomy or Physics
32%

Graduate Study
Other Fields
22%

Private Sector
26%
High School Teaching
4%
College & University
4%
Active Military
3%
Government
2%
Other
2%
Unemployed, Seeking
5%

Physics
26%
Astronomy
6%

Engineering
10%
Other Science & Math
5%
Medicine & Law
3%
Education
2%
Other
2%
Field of Employment for New Physics Bachelors
Employed in the Private Sector

- Engineering
- Computer or Information Systems
- Other STEM
- Physics or Astronomy
- Non-STEM: Regularly Solves Technical Problems
- Non-STEM: Rarely or Never Solves Technical Problems

Percent
0  5  10  15  20  25  30  35
Typical Starting Salaries for Physics Bachelors, Classes of 2013 & 2014 Combined

Employer

- Private Sector STEM
- Private Sector non-STEM
- Civilian Govt. (incl. Natl. Labs)
- Active Military
- High School Teachers
- College or University

Typical Salaries (in thousands of dollars)
What about PhDs?

Less than 5% of Physics Bachelor’s degree recipients will enter academia in a tenure track position.

Primary employment for PhD physicists is in the private sector!


- The noticeable drop from 2008 to 2010 is likely due to the 2008 recession.
So, where do all those BS/BA physics graduates go?
Students should be equipped for the path they choose when they complete their bachelor’s degree.

Departments that provide robust programs addressing a broad range of career trajectories for undergraduate students tend to be most successful.
Resources are FREE.

https://www.spsnational.org/career-resources/career-pathways

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Skills Used Regularly
New Physics Bachelors Employed in STEM Fields

- Work on a Team
- Manage Projects
- Work with Customers
- Manage People
- Manage Budgets
- Solve Technical Problems
- Technical Writing
- Perform Quality Control
- Design & Development
- Applied Research
- Programming
- Use Specialized Equip.
- Knowledge of Phys. or Ast.
- Advanced Math
- Simulation or Modeling
- Tech Support

Percent Regularly Using Knowledge or Skill
# Physics – Common skills / skill sets

<table>
<thead>
<tr>
<th>Working with laboratory instruments</th>
<th>Computer hardware and software</th>
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<tbody>
<tr>
<td>Conducting research</td>
<td>Analysis and quantitative thinking</td>
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<tr>
<td>Communicating complex ideas</td>
<td>Working with others</td>
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<tr>
<td>Problem solving and critical thinking</td>
<td>Others??</td>
</tr>
</tbody>
</table>
I can’t wait to hear where *your* Career pathway takes you!
References

• AIP Statistical Research Center, AIP Physics Trends: Research Experiences of Physics Undergraduates, Fall 2009.
• AIP Statistical Research Center, AIP Physics Trends: Physics Students Have Broad Interests, Spring 2011.
• Susan White and Raymound Chu, Physics Enrollments in Two-Year Colleges, April 2013.