

## Options and Opportunities – Tool #1: Common Job Titles

One way to explore your options is to look through common job titles held by physics bachelor’s recipients and see what interests you. This can help you to discover and narrow down your interests. Use the titles to identify areas in which you would like to do **informational interviews** (see Tool #2). Job titles are divided into four main areas and common job titles for each are presented.

Note that you can find physics majors in ALL kinds of professions—science writing, medicine, law, history of science, acting, music, healthcare, and on and on. This list is composed of common job titles identified by an AIP Statistical Research Center survey on physics bachelor’s degree graduates from the classes of 2011 to 2015. This list is not exhaustive or exclusive but is a guide to start the process.

### Common areas where physics bachelor’s degree recipients find employment:

**Engineering:** Many physics bachelor’s recipients go directly into an engineering field because of the common educational training. There are many fields of engineering, so research them.

**Computer Hardware and Software:** The second most common area of work for physics bachelor’s recipients is in computer hardware and software, which includes programming, modeling, and simulation. “Analyst” also appears in this section because analysts often apply considerable mathematic and software skills to their work.

**Research and Technical:** Physics graduates often take jobs doing scientific research and working in a laboratory environment.

**Education:** Educators with bachelor’s degrees in physics tend to teach middle or high school science. About half of all high school physics teachers in the United States teach mostly or exclusively physics. The other half also teach related subjects such as chemistry and math. There are many other opportunities available in the broad field of education.

Engineering	
Systems Engineer	Application Engineer
Electrical Engineer	Development Engineer
Design Engineer	Engineering Technician
Mechanical Engineer	Field Engineer
Project Engineer	Process Engineer
Optical Engineer	Process Technician
Manufacturing Engineer	Product Engineer
Manufacturing Technician	Product Manager
Laser Engineer	Research Engineer
Associate Engineer	Test Engineer
Technical Services Engineer	General Engineer

Research & Technical
Research Assistant
Research Associate
Research Technician
Lab Technician
Lab Assistant
Accelerator Operator
Physical Sciences Technician

Education
High School Physics Teacher
High School Science Teacher
Middle School Science Teacher
Substitute Science Teacher

Computer Hardware / Software
Software Engineer
Programmer
Web Developer
IT Consultant
Systems Analyst
Technical Support Staff
Analyst

## Exercise - Tool #1: Identifying Job Titles of Interest

Read through the list of common job titles on page 11 and circle the titles that seem most interesting to you. To learn more and explore other options, use the web tools below to read feature profiles of physicists working in other areas, see job titles of other physics alumni from your school and review research conducted by the US Department of Labor on common job titles for physics bachelor's degree holders. **Strongly consider exploring some job titles that you may never have heard of or considered.** You might find a field that fits your interests!

Other resources for finding job titles	
Profiles of people with physics degrees	<p><a href="http://www.spsnational.org/career-resources/physicist-profiles">www.spsnational.org/career-resources/physicist-profiles</a> Careers Using Physics, by the Society of Physics Students</p> <p><a href="http://www.physics.org/careerprofiles.asp">www.physics.org/careerprofiles.asp</a> Physics.org, by the Institute of Physics</p> <p><a href="http://www.aps.org/careers/physicists/profiles">www.aps.org/careers/physicists/profiles</a> Physicist Profiles, by the American Physical Society</p> <p><a href="http://www.physicscentral.org/explore/people/">www.physicscentral.org/explore/people/</a> Physics Central, by the American Physical Society</p>
Job Titles requiring physics knowledge per the Department of Labor	<p><a href="http://www.onetonline.org/find/descriptor/result/2.C.4.b?a=1">www.onetonline.org/find/descriptor/result/2.C.4.b?a=1</a></p>
Physics alumni on LinkedIn	<ol style="list-style-type: none"> <li>1) At <a href="http://www.linkedin.com">www.linkedin.com</a>, search for your school using the top search bar. Select the correct profile page.</li> <li>2) Select "See Alumni".</li> <li>3) In the top right, click "Next &gt;" and add "Physics" under "What they studied".</li> <li>4) Adjust attendance dates to find recent graduates.</li> </ol>
Who's Hiring Physics Bachelors?	<p><a href="http://www.aip.org/statistics/whos-hiring-physics-bachelors">www.aip.org/statistics/whos-hiring-physics-bachelors</a></p>

- ⇒ A different way to explore job titles is to examine projects, products, and companies you are personally excited about and explore the types of positions available. You'd be surprised where you will find physicists and astronomers.
- ⇒ Also, don't forget to ask where department alumni have gone!

**Exercise - Tool #1**

⇒ Select four job titles you are interested in. Spend some time exploring what someone with that title does through online searches and write down key words that describe that job below.

Job title:	Job title:	Job title:	Job title:
Key words:	Key words:	Key words:	Key words:
Organizations with this job title	Organizations with this job title	Organizations with this job title	Organizations with this job title

- ⇒ Do this process iteratively, exploring jobs and job titles until you find a few that seem very interesting to you.
- ⇒ You might want to develop a spreadsheet or use the online version of this form for doing this exercise.
- ⇒ You can also write down what about the job looks appealing. This can help you identify common areas or themes.
- ⇒ It never hurts to look or apply for a wide variety of positions.

