What Can I Do with a Degree in Physics?

**Courtesy of SFU Career Services**

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Examples of Physics major careers, including careers that may require further education beyond a bachelor’s degree:

1.) **Physicist**
   - Physicists are scientists who play with the building blocks of the universe—matter itself. They conduct research into theoretical areas like the nature of time and the origin of the universe as well as more practical areas like the development of electronic and optical devices.

2.) **Space Marketer**
   - Sell space products like satellites and earth imaging systems. They write proposals to customers to tell them how they can benefit from using new space technology. They also coordinate the efforts of other people like writers and graphic designers who produce marketing material to accompany proposals. Work for large aerospace corporations.

3.) **Health Physicist**
   - Make sure proper precautions are taken around particle accelerators, X-ray machines, nuclear reactors and other sources of radiation used in medical research and therapy. Works for hospitals, research labs or defense plants.

4.) **Nano Technology Researcher**
   - Manipulate atoms and subatomic particles. They are able to arrange single atoms with such precision that the end result is a tiny functioning product. Nanotech theory maintains that the ability to move subatomic particles will enable scientists to change dirt into food and sick cells into healthy cells. Works for universities and large corporations.

5.) **Cryonics Technician**
   - Freeze bodies for future revival. The theory is that if you freeze a person he/she can be revived when a cure for the disease they have is found, or if there’s a cure for old age. Cryonics is a complicated ethical and scientific challenge being handled by private facilities.

6.) **Nuclear & Particle Physicist**
   - Study the smallest detectable units of matter to answer the question: what is the universe really made of? They accelerate and
break up atoms to observe how individual protons, electrons and neutrons behave. Requires a PhD.

7.) Geophysicist
- Study the physical nature of the earth from the core to the atmosphere. Use gravitational, electromagnetic and seismic methods to study earthquakes, the earth’s rotation and atmospheric conditions. Requires a B.Sc and a PhD in geophysics.

8.) Medical Physicist
- Ensures that radiation treatments are administered safely. Ensures that radiation therapy is properly applied in the right dose, to the right area, with the right machine. Requires at least a Masters in physics.

9.) Astronomer
- Carry out observational and theoretical research into the nature of the universe using advanced physics and mathematics. They measure properties such as size, mass, distance and motion to test their hypotheses about the universe and to make sure there are no meteors set to collide with earth.

10.) Economist
- Study how society distributes scarce resources like land, labor and the machinery used to create goods and services. Collect and analyze data on the economy and apply theory and advanced mathematics to interpret the results and forecast future changes.

11.) Data Entry Clerk
- Enter text and data from documents into computer programs. Work on a wide variety of documents like business reports, budgets and statistical reports. Some clerks are also responsible for researching, collecting and analyzing their input.