What do you do with a Physics Degree?

What can’t you do with a Physics degree...Physicists don’t all work in labs or teach physics, although many do, and love their jobs. A physics degree will qualify you for a variety of careers from inventing to analyzing to improving. Find out the diversity of physics by exploring.

- Medical Physics
  - Additional areas: Non-ionizing radiating (Lasers, Ultraviolet, etc.), Electrocardiography, Near infrared spectroscopy

- Astronomy
  - Diagnostic or Imaging Physics and Radiological Sciences: X-rays, MRI, Single photon emission computed tomography (SPECT) and positron emission tomography (PET)
  - Radiation Safety, Protection & Health Physics: Dosimetry - calculate the dose of radiation to best destroy tumors without damage to normal tissues
  - Nuclear Medicine: Computed X-ray tomography (CT), destroy tumors through radiation exposure
  - Radiation Oncology or Therapeutic Physics: Gamma knife, Cyberknife, Proton Therapy, and TomoTherapy
  - Classical Research (PhD): runs a telescope, analyzes data and publishes papers
  - Research Support (BS or MS): telescope operator, observer, software developer.
  - Common Astro career hurdle: geography, job market is specialized and competitive. Astronomers don’t often get to pick an area to live in, follow the job.

- Museums & Planetariums: teach and outreach astronomy to the public.

- National Observatories and Research Centers: ground based optical telescopes, or spaced based telescopes, support many Earth weather related agencies.


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Career Planning

- Go to class. Study daily, pass your classes.
- Gain exposure to a diverse topics within physics: read everything, talk with peers, attend department Colloquia/Seminars, participate with research on-campus, check out Open-courseware, and speak with your instructors. Check-out SPS (Society of Physics Students, PSF-478), and check out SunDial(Michael.c.ritchie@asu.edu).
- Peace Corps/AmeriCorps/Nonprofit: serve in communities in various needed areas, water treatment, teaching, farming, engineering
  *Some Chemistry jobs require additional certification or schooling.
- Science Reporter/Journalist: blogs, books, magazines, newspapers report in laymen terms high end scientific based stories
- "Chemists: compile analyze test information, evaluate lab safety procedures, develop products, equipment, write technical papers/reports
- "Architectural & Engineering Managers: design, direct, produce technical activities in architecture or engineering projects
- "Some Engineering jobs require additional certification or schooling.
- Nanosystem Engineers: create new lightweight fabrics, batteries, industrial or consumer products using nanotechnology and material science
- Photonics Engineers: Build electro-optical applications or devices for commercial, industrial, scientific, or consumer. Train operators, document design process.
- Validation Engineers: Solve Problems! Fix testing problems by modifying testing methods or revising test objectives/standards. Communicate with regulatory agencies for compliance/validation.
- Business: financial analysis, contract negotiation, sales, software development, small business owner, entrepreneur, venture capitalist,
- Education: High School Physics/Math/Natural Science Teacher, curriculum designer, government consultant, lab coordinator, technical school professor, community college assistant professor