

Roanoke College
Department of Mathematics/Computer Science/Physics
 Physics Career Advising Guide

MAJORS	SKILLS/ATTRIBUTES	RELATED OCCUPATIONS*	EXTRACURRICULAR ACTIVITIES
Physics B.A. Physics B.S.	Likes mathematics and science Perseveres Imagination Curiosity about how things work Accurate with details Good visual and spatial perception Ability to: Organize data Make critical observations and appropriate decisions. Conduct and explain scientific research Operate and use information derived from computers.	Astronomer Biophysicist High School Teacher Geophysicists Physicist Seismologist Health Physics Engineer: Acoustical, Aeronautical, Aerospace, Agricultural, Architectural, Bioengineering, Chemical, Civil, Computer, Electrical, Environmental, Industrial, Materials, Mechanical, Nuclear	Society of Physics Students ext 2013 Sigma Pi Sigma (National Physics Honor Society) ext 2013

Physics involves the study of matter and energy. It attempts to find out how and why physical matter and energy interact as well as to describe force, motion, and gravity. Considered the foundation of science and technology, physics overlaps astronomy, engineering, chemistry, mathematics, geology, biology, and many other fields.

The B.A. in physics is used as preparation for other professional schools such as law, medicine, business, dentistry, optometry, or osteopathy and as preparation to be a secondary school teacher. Through proper choice of electives, it is frequently used as entry into the job market upon graduation.

The B.S. in physics is designed for students preparing for graduate school in physics or as employment as a physicist.

The Dual-Degree Engineering program is designed for students desiring an engineering degree with broader background in both physics and the liberal arts. The program consists of three years at RC, the successful completion of which aids in admission to one of two engineering schools. The successful completion of two or more years at the engineering school results in two degrees, a B.S. in Physics from RC and a B.S. in Engineering from the Engineering school.

Average Starting Salary: \$45,000

*A Bachelor's, Master's degree, or Ph.D. in physics would be useful in pursuing these occupations. These positions may be found at the federal, state, local and international level in large and small industry and person consulting firms as well as the military and general government.

Physics Research areas (Ph.D. required): Acoustics, Astrophysics, Atomic Physics, Biophysics, Chemical Physics, Geophysics, Low-Temperature Physics, Medical Physics, Meteorology, Nuclear Physics, Oceanography, Optics, Particle Physics, Plasma Physics, Rheology, Condensed-matter Physics, Vacuum Physics. Research is done in universities, industrial, private and governmental labs.