



RANDOLPH COLLEGE

Founded as Randolph-Macon Woman's College in 1891

Physics and Astronomy

Physics is a discipline that seeks to explain the behavior of the natural world with a comprehensive set of fundamental laws. It employs the deductive power of mathematics to produce precise descriptions of the universe that can be checked again and again for accuracy. Success in physics requires a keen analytical mind, a strong desire to understand the fundamental principles of nature and the ability to work hard and persevere.

Career Options for the Physics Undergraduate

Research and Technical

Geologist
Instrument Maker
*Geophysicist
Mathematical Technician
Planetary Scientist
*Electrical Engineer
*Computer Engineer
*Particle Physicist
*Aerospace Engineer
*Research Scientist

Communications

Technical Writer
Educational Television Advisor
System Support Representative
Information Specialist
Newspaper Science Writer

Education and Government

Military Officer
Mathematician
Cartographer
Computer Programmer
*Special Librarian
*Nuclear Engineer
*Professor

Business

Electrical Equipment Specialist
Actuary
Sales, Technical Equipment
*Metallurgical and Materials Engineer
*Energy Engineer

**Denotes Careers that may require a Graduate Degree.*

Job Outlook for these Careers:

National: U.S. Department of Labor
www.bls.gov/oco/home.htm

Virginia:
www.vaview.vt.edu/

Internship and Research Opportunities

Lamont-Doherty Earth Observatory
Oak Ridge Institute for Science and Education
American Association for the Advancement
of Science

James Madison University
Thomas Jefferson National Accelerator
Facility
American Physical Society

Employers of Alumnae

U.S. Senate, Office of Senate Security
Center for Earth and Planetary Studies,
Smithsonian Institution
Department of Homeland Security
Sperry Corporation

Shook, Hardy & Bacon
BWX-T
Lexus Nexus
Emory University

Liberal Arts Skills

Investigation

Defining a research problem
Developing a research model
Establishing hypotheses
Gathering/analyzing data
Evaluating ideas
Seeing relationships among factors
Drawing meaningful conclusions

Computation and Mathematical

Measuring distances/sizes/relationships
Performing calculations
Mathematical modeling
Utilizing mathematical formulas

Communication

Developing and writing research proposals
Reviewing scientific literature
Summarizing research findings
Informing/explaining/instructing
Preparing technical reports

Technical

Designing equipment
Identifying and classifying materials and
specimens
Observing data/things
Establishing & controlling experimental designs
Designing/using computer simulations
Using instruments

Graduate Programs Alumnae have Attended

UNC - Chapel Hill
Texas A&M
University of Delaware

University of Virginia
Kansas State University
Pennsylvania State University

Associations related to the Physics Major

Society of Physical Students
American Institute of Physics
American Physical Society

www.sps.org
www.aip.org
www.aps.org

Additional Sources of Information:

Career Development Center
West Hall 434-947-8116
www.randolphcollege.edu/cdc/