SKILLS & ABILITIES OF THE BIOPHYSICS MAJOR

Key Skills

- Analytical Thinking—Analyzing information and addressing issues as they come up
- Attention to Detail—Must be skilled at data collection, observation, and analysis
- Initiative—Willingness to take on responsibilities and occasionally work independently
- Ethical Integrity—Remain objective and honest during data collection and observation
- Drive for Knowledge—Enjoy learning new techniques and theories within their scope of practice

Abilities

- Oral and Written Communication
- Data Analysis
- Experiment Knowledge
- Mathematical Modeling Abilities
- Observation
- Research
- Ability to Create Formulas
- Ability to Establish Hypotheses
- Comfortable operating a variety of laboratory equipment

POTENTIAL CAREERS

- Analytical Chemistry Technician
- Applications Scientist
- Biochemist
- Bioinformatics Scientist
- Biologist
- Biophysicist
- Cancer Research
- Chemical Engineer
- Clinical Radio Chemist
- Computational Biologist or Chemist
- Crystallographer
- Physiologist
- Skin Scientist
- Enzymologist
- Field Manager
- Lab Technician
- Logistics Associate
- Medical Imaging Specialist
- Molecular Biologist
- Neuroscientist
- Pharmacist
- Professor
- Research Scientist
- Research Programmer
- Technologist
- Writer
POTENTIAL INDUSTRIES

- Research and development in the physical, engineering, and life sciences
- Colleges, universities, and professional schools; state, local, and private
- Pharmaceutical and medicine manufacturing
- Basic chemical manufacturing
- Management, scientific, and technical consulting services

Biophysicists typically work in laboratories and offices, to conduct experiments and analyze the results. Most biochemists and biophysicists work on teams. Research projects are often interdisciplinary, and biochemists and biophysicists frequently work with experts in other fields, such as physics, chemistry, computer science, and engineering.

ADDITIONAL RESOURCES

- O*NET OnLine has detailed descriptions of the world of work
- Xavier University Physics Department
- Biophysical Society
- American Institute of Physics

Sources: The College Majors Handbook (Fogg, Harrington, & Harrington, 2012), Bureau of Labor Statistics, University of Oregon—Career Services