

ABOUT THE MAJOR

Biophysics bridges the gap between physics and life sciences, unlocking the secrets of how living systems function.

You'll apply cutting-edge techniques to tackle urgent global challenges – climate change, water scarcity, and more – through innovative research, problem-solving and hands-on learning.

CONTACT US

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From curiosity to discovery, Biophysics takes
you further.

OUTCOMES & OPPORTUNITIES

- Our students collaborate closely with faculty on diverse research projects, gaining hands-on experience that prepares them for graduate studies and competitive research opportunities across the country.
- Many of our graduates go on to advanced study in biomedical engineering, medical physics, biostatistics, medicine, optometry, and atmospheric science at top institutions such as Columbia, Carnegie Mellon, Johns Hopkins and the University of Pennsylvania.
- Our graduates work at employers such as Geisinger Commonwealth School of Medicine, GESTAR, Penn Medicine Valley Forge, and Thorlabs, Inc.



BIOPHYSICS

129 Credits

LEARN
MORE!



1st Year: FALL

COURSE#	COURSE TITLE	CREDITS
PHYS 140/PHYS 140L	Elements of Physics I	4
BIOL 141/141L	General Biology	4.5
MATH 109	Pre-Calculus Mathematics or MATH 114 Calculus I	4
PHYS 150	Foundations of Physics & Engineering or ENGR 150 Foundations of Physics & Engineering	3
First Year Seminar		0

Total Credits: 15.5

1st Year: SPRING

COURSE#	COURSE TITLE	CREDITS
PHYS 141/PHYS 141L	Elements of Physics II	4
BIOL 142/BIOL 142L	General Biology	4.5
MATH 114	Calculus I or MATH 221 Calculus II	4
WRTG 107	Composition	3
First Year Seminar		0

Total Credits: 15.5

2nd Year: FALL

COURSE#	COURSE TITLE	CREDITS
PHYS 270/PHYS 270L	Elements of Modern Physics	4
CHEM 112/112L	General Chemistry	4.5
EE 250/EE250L	Computational Tools for Physics and Engineering	4
MATH 221	Calculus II or MATH 222 Calculus III	4
PHIL 120	Introduction to Philosophy	3

Total Credits: 19.5

2nd Year: SPRING

COURSE#	COURSE TITLE	CREDITS
PHYS 352	Statistical and Engineering Thermodynamics	3
CHEM 113/113L	Analytical Chemistry	4.5
EE 241/EE 241L	Circuit Analysis	4
MATH 341	Differential Equations	4

Total Credits: 15.5

3rd Year: FALL

COURSE#	COURSE TITLE	CREDITS
PHYS/BIOL/CHEM ELECT	Physics, Biology or Chemistry Elective	3
CHEM 232/232L	Organic Chemistry	4.5
T/RS 121	Theology I: Introduction to the Bible	3
PHIL 210	Ethics	3
S/BH ELECT	Social/Behavioral Elective	3

Total Credits: 16.5

3rd Year: SPRING

COURSE#	COURSE TITLE	CREDITS
CHEM 233/233L	Organic Chemistry	4.5
T/RS 122	Theology II: Introduction to Christian Theology	3
PHIL ELECT	Philosophy Elective or T/RS ELECT Theology Elective	3
S/BH ELECT	Social/Behavioral Elective	3
HUMN ELECT	Humanities Elective	3

Total Credits: 16.5

4th Year: FALL

COURSE#	COURSE TITLE	CREDITS
PHYS/BIOL/CHEM ELECT	Physics, Biology or Chemistry Electives	6
HUMN ELECT	Humanities Electives	6
FREE ELECT	Free Elective	3

Total Credits: 15

4th Year: SPRING

COURSE#	COURSE TITLE	CREDITS
PHYS/BIOL/CHEM ELECT	Physics, Biology or Chemistry Electives	6
HUMN ELECT	Humanities Electives	6
FREE ELECT	Free Elective	3

Total Credits: 15

This is a sample curriculum. Please refer to the 2025-2026 Undergraduate Catalog at scranton.edu/catalog.