

# Physics, A.S.

## General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (<http://registrar.wvu.edu/gef/>)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
<b>General Education Foundations</b>		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

## Curriculum Requirements

Code	Title	Hours
<b>GEF Requirements (4, 5, 6, and 7)</b>		<b>12</b>
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	4
WVUE 191	First Year Seminar	1
Elective		9
Total Hours		60

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L (GEF 2)		4 CHEM 116 & 116L (GEF 8)	4
MATH 155 (GEF 3)		4 MATH 156 (GEF 8)	4

ENGL 101	3 PHYS 111 & 111L (GEF 8)	4
GEF Elective (GEF 4)	3 GEF Elective (GEF 5)	3
WVUE 191	1	
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	15	15

**Second Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ENGL 102 (GEF 1)		3 MATH 261	4
MATH 251		4 GEF Elective (GEF 6)	3
PHYS 112 & 112L		4 GEF Elective (GEF 7)	3
Elective		3 Elective	6
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		14	16

Total credit hours: 60

**Major Learning Outcomes****PHYSICS**

Upon successful completion of an A.S. degree, physics majors will be able to:

1. Solve basic conceptual and quantitative problems in theoretical mechanics and electricity and magnetism.
2. Perform accurate measurements of physical systems and communicate the results and implications of those measurements in writing.
3. Use mathematical and chemical concepts to solve physics-related problems.
4. Transfer into a bachelor degree program in physics.