

# PHYSICS, BS

Code	Title	Credits
<b>Physics</b>		<b>32</b>
PHYS-103 & PHYL-103	GENERAL PHYSICS I and GENERAL PHYSICS I LAB	
PHYS-104 & PHYL-104	GENERAL PHYSICS II and GENERAL PHYSICS LAB II	
PHYS-201	THEORETICAL MECHANICS	
PHYS-203	MODERN PHYSICS	
PHYS-301	ELECTRICITY & MAGNETISM I	
PHYS-302	ELECTRICITY & MAGNETISM II	
PHYS-304	THERMODYNAMICS	
PHYS-309	EXPERIMENTAL PHYSICS I	
PHYS-406	INTRODUCTORY QUANTUM MECHANICS	
PHYS-490	SENIOR COMPREHENSIVES	
Elective		
<b>General Education Requirements</b> ( <a href="https://catalog.sbu.edu/undergraduate/degree-requirements">https://catalog.sbu.edu/undergraduate/degree-requirements</a> ) <sup>1</sup>		<b>37</b>
<b>Foreign Language 202</b> <sup>2</sup>		<b>3</b>
<b>Chemistry</b>		<b>8</b>
<b>Mathematics</b>		<b>21</b>
ENGR-220	INTRODUCTION TO MATLAB	
<b>General Electives</b>		<b>19</b>
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> The Writing Intensive, Diversity Coded, and Quantitative Literacy course requirements may be met by any major, general education, or elective courses designated as such.

<sup>2</sup> The foreign language must be at the level of 202 or higher. Students not prepared to begin at this level will need to take additional courses in language.

## Departmental Comprehensive Requirement (PHYS-490)

The comprehensive requirement for physics is satisfied by

1. service as a teaching aide in one introductory physics lab section and
2. passing an oral exam given at the end of a student's last semester of study.

First Year		
Fall	Credits Spring	Credits
SBU-101	2 SBU-102	1
PHYS-103	3 PHYS-104	3
PHYL-103	1 PHYL-104	1
MATH-151	4 ENGR-220	3
ENG-101	3 MATH-152	4
Language 101/Elective	3 ENG-102	3
		15

Second Year		
Fall	Credits Spring	Credits
PHYS-201	3 PHYS-203	3
MATH-251	4 MATH-252	3
CHEM-101 & CHML-101	4 CHEM-102 & CHML-102	4

CHML-101	1 CHML-102	1
Elective	3 FS/THEO-101	3
Foreign Language 202 <sup>1</sup>		3
		15
		17

Third Year		
Fall	Credits Spring	Credits
PHYS-301	3 PHYS-302	3
PHYS-304	3 PHYS-309	3
General Education Requirement	3 Math Elective <sup>2</sup>	3
General Elective	6 General Education Requirement	3
General Elective		3
		15
		15

Fourth Year		
Fall	Credits Spring	Credits
PHYS-406	3 Physics Elective <sup>3</sup>	3
General Education Requirements	9 General Elective Requirement	3
General Elective	3 General Electives	6
PHYS-490		0
		15
		12

Total Credits 120

<sup>1</sup> The foreign language must be at the level of 202 or higher. Students not prepared to begin at this level will need to take additional courses in language.

<sup>2</sup> The Mathematics Elective is to be chosen from the following: MATH-207, MATH-208, MATH-241, MATH-322, MATH-323, MATH-341, MATH-342, MATH-345, MATH-351, MATH-352, MATH-413, MATH-431, or MATH-453.

<sup>3</sup> The Physics Elective is to be chosen from: PHYS-312, PHYS-404, PHYS-406, PHYS-408, PHYS-409, PHYS-410, PHYS-451, or PHYS-452.