

# PHYSICS, BACHELOR OF SCIENCE (BS)

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
PHYS 213	General Physics III/ Lab	4
MATH 230	Calculus II	4
Rock Studies 2 Requirement ( <a href="https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/">https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/</a> )		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
MATH 231	Calculus III	4
PHYS 212	General Physics II with Lab	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Rock Studies 2 Requirement ( <a href="https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/">https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/</a> )		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CPSC 146	Programming Principles	3
MATH 301	Differential Equations I	3
Rock Studies 2 Requirement ( <a href="https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/">https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/</a> )		3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MATH 240	Linear Algebra and Differential Equations	3
PHYS 312	Modern Physics 1	3
PHYS 314	Statics	3
PHYS 331	Mathematical Methods of Physics	3

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<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PHYS 375	Thermal Physics	3
PHYS 315	Dynamics	3
PHYS 381 or PHYS 382	Advanced Physics Laboratory or Optics Laboratory	2
PHYS 412	Modern Physics 2	1
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PHYS 371	Physical Optics	3
Physics Elective		3
Rock Studies 2 Requirement ( <a href="https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/">https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/</a> )		3
Rock Studies 2 Requirement ( <a href="https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/">https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/</a> )		3
Free Elective		2-3
<b>Hours</b>		<b>14-15</b>
<b>Spring</b>		
PHYS 381 or PHYS 382	Advanced Physics Laboratory or Optics Laboratory	2
PHYS 410	Electricity and Magnetism	3
PHYS 480	Quantum	3
Rock Studies 2 Requirement ( <a href="https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/">https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/</a> )		3
Technical Elective		3
<b>Hours</b>		<b>14</b>
<b>Total Hours**</b>		<b>120-121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6164

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