

# PHYSICS MAJOR

## Acceptance to Major Requirements

Course Requirements:

Code	Title	Hours
PHYS 191	Foundations of Physics I	4
PHYS 200	Foundations of Physics II	4
PHYS 211	Foundations of Physics III	4
PHYS 332	Intermediate Physics Laboratory	1
MATH 120	Calculus II	4
MATH 239	Linear Algebra	4

Minimum Grade and/or GPA for required courses: 2.00 GPA

Minimum Cumulative GPA: 2.00

Code	Title	Hours
PHYS 191	Foundations of Physics I	4
PHYS 200	Foundations of Physics II	4
PHYS 211	Foundations of Physics III	4
PHYS 320	Modern Physics	4
PHYS 339	Physical Mechanics	4
PHYS 341	Electricity and Magnetism	4
PHYS 346	Quantum Mechanics I	4
PHYS 343	Thermodynamics	2
PHYS 344	Statistical Mechanics	2
PHYS 372	Senior Research	1
or PHYS 374	Senior Engineering Design Project	
PHYS 373	Senior Thesis	1
PHYS 332	Intermediate Physics Laboratory (two semesters) <sup>1</sup>	2
PHYS 370	Advanced Physics Laboratory (two semesters) <sup>2</sup>	2
PHYS (300-Level) courses		6
MATH 119	Calculus I	4
MATH 120	Calculus II	4
MATH 239	Linear Algebra	4
MATH 305	Multivariable Calculus	4
TPHYS XXX <sup>3</sup>		
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Take both semesters Sophomore year

<sup>2</sup> Take both semesters Junior year

<sup>3</sup> The Major Field Test in Physics is to be taken in the spring semester of the senior year

## Additional Requirements:

### General Education Requirements:

All undergraduate students must complete the requirements of the Integrations Curriculum (IC) which is designed to ensure all of our students receive a liberal arts education. Please review details of the Integrations Curriculum (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/integrations-curriculum/>) requirements

here (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/integrations-curriculum/>).

### Graduation Requirements:

In addition to the Integrations Curriculum, all undergraduate students must meet the following minimum degree requirements to earn their degree from CSB and SJU.

**Credits:** 124 total credits, 40 of which must be from upper division coursework

**GPA:** 2.0 or higher\*

**Residency:** At least 24 of your last 32 credits must be completed at CSB/SJU

Please visit Graduation (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/graduation/>) under the Academic Policies and Regulations (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/>) portion of the catalog for additional details regarding degree requirements.

\* Cumulative GPA as well as major(s)/minor(s) GPA. Please note some majors/minors may require a higher GPA to earn their degree.

## Four Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MATH 119	Calculus I	4
PHYS 191	Foundations of Physics I	4
INTG 105	College Success	1
INTG 100	Foundations	4
Language 111		4
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Cultural and Social Difference - Identity		4
Language 112		4
PHYS 200	Foundations of Physics II	4
MATH 120	Calculus II	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
THEO 100	Theological Explorations	4
Language 211		4
MATH 239	Linear Algebra	4
PHYS 211	Foundations of Physics III	4
PHYS 332	Intermediate Physics Laboratory	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Cultural and Social Difference - Systems		4
Way of Thinking		4
PHYS 320	Modern Physics	4
PHYS 332	Intermediate Physics Laboratory	1
Free electives		4
<b>Hours</b>		<b>17</b>
<b>Third Year</b>		
<b>Fall</b>		
Way of Thinking with Thematic Focus		4
MATH 305	Multivariable Calculus	4
PHYS 339	Physical Mechanics	4
PHYS 370	Advanced Physics Laboratory	1
PHYS electives		2
<b>Hours</b>		<b>15</b>

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**Spring**

Way of Thinking		4
PHYS 341	Electricity and Magnetism	4
PHYS 370	Advanced Physics Laboratory	1
PHYS electives		2
Free electives		4
<b>Hours</b>		<b>15</b>

**Fourth Year**

**Fall**

THEO 3XX		4
PHYS 346	Quantum Mechanics I	4
PHYS 372	Senior Research	1
PHYS electives		2
Free electives		4
<b>Hours</b>		<b>15</b>

**Spring**

INTG 300	Learning Integrations	4
PHYS 343	Thermodynamics	2
PHYS 344	Statistical Mechanics	2
PHYS 373	Senior Thesis	1
Free electives		6
<b>Hours</b>		<b>15</b>

**Total Hours** 127