

# BA in Physics with concentration in Computational Physics

Below is a sample 4-year plan for students pursuing the B.A. in Physics with a concentration in Computational Physics. To view the list of courses approved to fulfill KU Core 34, please visit the KU Core 34 page (<https://catalog.ku.edu/core34/>).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to freshman year, fall semester.

## Freshman

Fall	Hours Spring	Hours
KU Core 34: English (SGE) <sup>010</sup>	3 MATH 126 (B.A. Quantitative Reasoning (QR), Major Pre-requisite)	4
MATH 125 (KU Core 34: Math and Statistics (SGE); Major Pre-requisite) <sup>030*</sup>	4 KU Core 34: English (SGE) <sup>010</sup>	3
CHEM 130 (KU Core 34: Natural and Physical Sciences (SGE); B.A. Laboratory/Field Experience (LFE), Major Pre-requisite) <sup>040*</sup>	5 KU Core 34: Communications (SGE) <sup>020</sup>	3
1st Semester Language (B.A. Second Language)	5 2nd Semester Language (B.A. Second Language)	5
PHSX 150	0.5	
	<b>17.5</b>	<b>15</b>

## Sophomore

Fall	Hours Spring	Hours
MATH 320 or 220 (Major Pre-requisite)	3 ECON 142 (KU Core 34: Social and Behavior Science (SGE); Major Pre-requisite) <sup>050*</sup>	3
PHSX 213 or 211 <b>and</b> 216 (Major Requirement)	5 PHIL 310 (KU Core 34: Arts and Humanities (SGE); Major Pre-requisite) <sup>060*</sup>	3
3rd Semester Language (B.A. Second Language)	3 MATH 290 or 291 (Major Pre-requisite)	2
Second Area of Study/ Elective/Degree/Junior-Senior Hours <sup>5</sup>	3 PHSX 214 or 212 <b>and</b> 236 (Major Requirement)	4
	4th Semester Language, or 1st semester of Another Language (B.A. Second Language) <sup>1</sup>	3
	<b>14</b>	<b>15</b>

## Junior

Fall	Hours Spring	Hours
PHSX 313 & PHSX 316 (Major Requirement) <sup>3</sup>	4 EECS 268 (Major Pre-requisite)	4

EECS 168 (Major Pre-requisite)	4 PHSX 521 (Major Requirement)	3
KU Core 34: Global Culture (SGE) <sup>070</sup>	3 KU Core 34: US Culture (SGE) <sup>070</sup>	3
Second Area of Study/ Elective/Degree/Junior-Senior Hours <sup>5</sup>	3 KU Core 34: Arts and Humanities (SGE) <sup>060</sup>	3
	Second Area of Study/ Elective/Degree/Junior-Senior Hours <sup>5</sup>	3
	<b>14</b>	<b>16</b>

## Senior

Fall	Hours Spring	Hours
PHSX 531 (Major Requirement)	3 PHSX 500 (Capstone Requirement)	3
PHSX 536 or 616 <sup>4</sup>	4 PHSX 615 (Major Requirement)	3
KU Core 34: Social and Behavior Science (SGE) <sup>050</sup>	3 PHSX 616 or 536 (or elective (Major Requirement)) <sup>4</sup>	4
Second Area of Study/ Elective/Degree/Junior-Senior Hours <sup>5</sup>	3 Second Area of Study/ Elective/Degree/Junior-Senior Hours <sup>5</sup>	3
Second Area of Study/ Elective/Degree/Junior-Senior Hours <sup>5</sup>	3	
	<b>16</b>	<b>13</b>

## Total Hours 120.5

- For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.
- Prerequisite for MATH 125: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics; or a qualifying score on the mathematics placement test.
- MATH 320 or MATH 220 (or MATH 221) is a pre-requisite for PHSX 313.
- Either PHSX 536 or PHSX 616 is required for the major, not both.
- Hour requirements (incl. 45 jr/sr hrs) are typically met through KU Core 34, degree, major, second area of study and/or elective hours. Students completing the B.G.S. with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

## Please note:

All students in the College of Liberal Arts & Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

## Notes:

\* - This course is a Required major course and is also part of KU Core 34: Systemwide General Education. If this course is not taken to fulfill the KU Core 34:SGE requirement, it must be taken in place of elective hours.

\*\* - This course is a Recommended KU Core 34: Systemwide General Education course. This specific course is not required but is recommended by the program's faculty.

\*\*\* - This course is a Required KU Core 34: Systemwide General Education course. This program is approved by the Kansas Board of Regents to require this specific KU Core 34: Systemwide General Education course. If a student did not take this course it must be taken in addition to other degree requirements.