

## Bachelor of Science in Physics – Computational Physics Concentration (BIC)

*A Suggested Sequence of Required Courses (2017-2018 Catalog)*

F r e s h m a n Y e a r			
Fall			Spring
_____	0	Chapel (CHA 1088)	_____
_____	2	BIC 1212 Examined Life I	_____
_____	3	BIC 1314 World Cultures I	_____
_____	4	BIC 1413 Rhetoric I	_____
_____	3	MTH 1321 (if eligible) Calculus I	_____
_____	4	<b>PHY 1420 Physics I (Cal. Based)</b>	_____
_____	4	CSI 1430 Intr. To Comp Sci. w/ Lab	_____
_____	3	MTH 1322 Calculus II	_____
_____	3	BIC 1323 Rhetoric II	_____
_____	3	BIC 1324 World Cultures II	_____
_____	0	Chapel (CHA 1088)	_____
<b>Total:</b>	<b>16</b>		<b>Total:</b> 17
S o p h o m o r e Y e a r			
Fall			Spring
_____	3	BIC 2330 Social World I	_____
_____	4	CSI 1440 Intro. To Comp. Sci II w/ Lab	_____
_____	3	MTH 2311 Linear Algebra	_____
_____	3	MTH 2321 Calculus III	_____
_____	1	<b>PHY 2135 Basic Electronics Lab</b>	_____
_____	3	<b>PHY 2350 Modern Physics</b>	_____
_____	3	BIC 2340 Social World II	_____
_____	3	BIC 2344 World Cultures IV	_____
_____	3	CSI 2350 Discrete Structures	_____
_____	3	CSI 2334 Intro. To Comp. Systems	_____
_____	1	<b>PHY 2190 Intr to Research</b>	_____
_____	3	<b>PHY 2360 Math. And Comp. Physics</b>	_____
<b>Total:</b>	<b>17</b>		<b>Total:</b> 16
J u n i o r Y e a r			
Fall			Spring
_____	3-4	Foreign Language 1401/12 (see reverse)	_____
_____	3	MTH 3325 Ordinary Diff. Equations	_____
_____	1	<b>PHY 3175 Int. Physics Lab I</b>	_____
_____	3	<b>PHY 3320 Int. Classical Mechanics</b>	_____
_____	3	<b>PHY 3372 Intro. To Quantum Mech. I</b>	_____
_____	3	CSI 3324 Numerical Methods	_____
_____	3	BIC 3358 Biblical Heritage/Ethics	_____
_____	3-4	Foreign Language - 1402/2310 (see reverse)	_____
_____	3	<b>PHY 3330 Int. Electricity and Mag.</b>	_____
_____	3	<b>PHY 3373 Intro. To Quantum Mech.II</b>	_____
_____	3	<b>PHY or CSI (3000 or 4000 level)</b>	_____
_____	3	MTH 3326 Partial Diff. Equations	_____
<b>Total:</b>	<b>16-17</b>		<b>Total:</b> 15-16
S e n i o r Y e a r			
Fall			Spring
_____	3	Foreign Language 2310	_____
_____	1	<b>PHY 4190 Dissemination of Research</b>	_____
_____	3	<b>PHY 4340 Stat. and Thermal Physics</b>	_____
_____	3	<b>PHY or CSI (3000 or 4000 level)</b>	_____
_____	0	<b>PHY 4001 Exit Exam</b>	_____
_____	1	Lifetime Fitness	_____
_____	3	BIC 2334 World Cultures III	_____
_____	3	Foreign Language 2320	_____
_____	3	<b>PHY 4360 Computer Models in Physics</b>	_____
_____	3	<b>PHY or CSI (3000 or 4000 level)</b>	_____
_____	3	Elective (variable depending on hours)	_____
_____	1	Lifetime Fitness	_____
<b>Total:</b>	<b>14</b>		<b>Total:</b> 13

*All students must graduate with a minimum of 124 hours,  
36 of which must be at the 3000/4000 level.*

### Notes about major requirements:

- Prior to taking PHY 4190, students are expected to make substantial progress on a research project. Research typically begins when PHY 2190 is taken in the sophomore year. Students involved in research during their junior year should enroll in PHY 3V95 (Undergraduate Research). In addition, students are strongly encouraged to participate in summer research opportunities.
- Many required courses are offered only one time each year in either the fall semester or the spring semester.
- Check your degree audit often through Bearweb to ensure that you are making timely progress towards your degree.
- For more information, see the undergraduate catalog.