Physics Major (Advanced Focus) - New GE

Year	Autumn Semester	Credit Hours	Comment	Spring Semester	Credit Hours	Comment
1	Physics 1270 <sup>1</sup>	5	Intro Physics I	Physics 1271 <sup>1</sup>	5	Intro Physics II
	Math 1151	5	Calculus I	Math 1152	5	Calculus II
	ASC 1100	1	Survey	CSE 1222 <sup>2</sup>	3	C++ Programming
	World Language 1	4		World Language 2	4	
	Total Hours	15		Total Hours	17	
2	Physics 2300	4	Mechanics I	Physics 2301	4	Mechanics II
	Physics 2095	1	Seminar	Physics 3700	3	Data Ana. Lab
	Math 2153	4	Calculus III	Math 2415 <sup>4</sup>	3	Diff. Equations
	World Language 3	4		Writing & Info Literacy	3	Gen Ed
	GenEd 1201 <sup>3</sup>	1	Launch Seminar	Literary, Visual, Performing Arts	3	Gen Ed
	Total Hours	14		Total Hours	16	
3	Physics 5500	4	Quantum I	Physics 5501	4	Quantum II
	Physics 4700 <sup>5</sup>	3	Electronics Lab	Physics 5400	4	E&M
	Historical & Cultural Stds	3	Gen Ed	Social & Behavioral Sciences	3	Gen Ed
	Citizenship Theme GE <sup>8</sup>	3	Gen Ed	Race, Ethnicity, Gender Diversity	3	Gen Ed
	Total Hours	13		Total Hours	14	
						T
4	Physics 5600	4	Stat. Mech.	Physics 5300	4	Theoretical Mech.
	Physics 5700	3	Senior Lab	Physics Elective <sup>7</sup>	4	
	Thematic Pathways GE <sup>8</sup>	3	Gen Ed	GenEd 4001	1	Reflection Seminar
	Citizenship Theme GE <sup>8</sup>	3	Gen Ed	Free Elective <sup>6</sup>	4	
	Free Elective <sup>6</sup>	3		Thematic Pathways GE <sup>8</sup>	3	Gen Ed
	Total Hours	16		Total Hours	16	

Courses in yellow are only offered during the term shown

<sup>&</sup>lt;sup>1</sup> Students can take 1250-1251 or 1260-1261 (for students who started in Engineering Honors) in place of 1270-1271

<sup>&</sup>lt;sup>2</sup> or CSE 1223 or CSE 1224 or Astronomy 1221

<sup>&</sup>lt;sup>3</sup> Students are required to complete the Launch Seminar within their first three semesters on campus

 $<sup>^{4}</sup>$  or 2174 or 2255 or 5520H. Linear Algebra (Math 2568) is recommended, but not required.

<sup>&</sup>lt;sup>5</sup> or Physics 5680 (Big Data Analytics) or Physics 5810 (Computational Physics)

<sup>&</sup>lt;sup>6</sup> Free electives are only required if a student needs to take extra courses in order to reach the minimum 121 credit hour requirement set by the College of Arts and Sciences.

<sup>&</sup>lt;sup>7</sup> Acceptable physics electives include Physics 3470, Physics 5261,
Physics 5680 (if not taken as a lab), Physics 5810 (if not taken as a lab), and Physics 68xx

<sup>&</sup>lt;sup>8</sup> The requirement is to take either two 3-credit hour courses (as shown above) or one 4-credit hour course