BA in Physics: Computational Physics Option Sample Course Plan (begin w/ Calc)

Freshman Year							
Autumn Courses			Spring Courses				
PHSX 101	Freshman Physics Experience	1	PHSX 217	Fundamentals of Physics II with Calculus	4		
PHSX 215	Fundamentals of Physics I with Calculus	4	PHSX 218	Physics Laboratory II with Calculus	1		
PHSX 216	Physics Laboratory I with Calculus	1	CSCI 136	Fundamentals of Computer Science II	3		
M 171	Calculus I	4	M 172	Calculus II	4		
CSCI 135	Fundamentals of Computer Science I	3	*WRIT 101	College Writing I	3		
Elective	Elective course	2					
	Total:	15		Total:	15		

^{*} Semester of enrollment in WRIT 101 depends on beginning letter of student's last name.

Sophomore Year

Autumn Courses		Spring Courses			
PHSX 311	Oscillations and Waves	2	PHSX 301	Introduction to Theoretical Physics	3
M 273	Multivariable Calculus	4	M 221	Intro to Linear Algebra	4
M 225	Introduction to Discrete Math	3	CSCI 216E	Technology, Ethics, and Society	3
CSCI 250	Comp. Modeling for Scientists	3	GenEd	General Education course	3
Gen Ed	General Education course	3	Elective	Elective course	2
	Total:	15		Tota	al: 15

Junior Year

Autumn Courses			Spring Courses		
PHSX 343	Fundamentals of Modern Physics	3	PHSX 320	Classical Mechanics	3
CSCI 232	Data Structure and Algorithms	4	*PHSX 330	Communicating Physics	3
GenEd	General Education courses	6	CSCI 332	Design/Analysis of Algorithms	3
Elective	Elective course	2	CSCI 200+	CSCI Elective	3
			GenEd	General Education course	3
Total: 15				Total:	15

^{*}PHSX 330 offered alternate years - may be taken Junior or Senior year.

Senior Year

Autumn Courses		Spring Courses			
PHSX 323	Intermediate Lab (elective)	3	*PHSX 333	Computational Physics	3
PHSX 423	Electromagnetism I	3	PHSX 425	Electromagnetism II (elective)	3
PHSX 499	Senior Capstone Seminar	1	Elective	Elective courses	4
#For Lang	Foreign Language (optional)	5	#For Lang	Foreign Language (optional)	5
GenEd	General Education course	3			
	Total:	15		Total:	15

^{*} PHSX 333 offered alternate years - may be taken Junior or Senior year.

[#] Foreign Language optional. Students may elect Symolic Systems (Math) for their FL requirement.