COMPUTATIONAL PHYSICS, BS

Degree Requirements

In addition to the requirements stated below, students must complete 34-35 hours of General Education (https://catalog.washburn.edu/undergraduate/programs-degrees-graduation-requirements/general-education-requirements/), all requirements for a Bachelor of Science (https://catalog.washburn.edu/undergraduate/college-arts-sciences/degrees/bachelor-science/) degree, and any additional hours needed to reach the minimum 120 credit hours required for graduation. Some of the courses below may also fulfill general education or other degree requirements. Please see your advisor for more information.

Code	Title	Hours
Required Courses Inside Department		
PS 103	Physics & Engineering Seminar I	1
Select one of the following physics sequences:		10
PS 261 & PS 262	College Physics I and College Physics II	
PS 281 & PS 282	General Physics I and General Physics II	
PS 303	Physics & Engineering Seminar II	1
PS 320	Electromagnetic Theory I	3
PS 330	Optics	3
PS 334	Thermodynamics	3
PS 335	Theoretical Mechanics I	3
PS 340	Computer Interfacing and Instrumentation	3
PS 350	Modern Physics I	3
PS 365	Introduction to Theoretical Physics	3
PS 366	Introduction to Computational Physics	3
PS 368	Computational Physics Research	1
Subtotal		37
Required Courses Outside Department		
Computer Information Sciences		
CM 111	Introduction to Structured Programming	4
CM 245	Contemporary Programming Methods	3
CM 290	Introduction to Python Programming	3
CM 307	Data Structures & Algorithmic Analysis	3
Mathematics and Statistics		
MA 140	Statistics	3
MA 151	Calculus & Analytic Geometry I	5
MA 152	Calculus & Analytic Geometry II	5
MA 253	Calculus/Analytic Geometry III	3
MA 206	Discrete Mathematics for Computing	3
MA 301	Linear Algebra	3
MA 331	Differential Equations	3
MA 340	ANOVA/Design of Experiments	3
or MA 341	Nonparametric Tests/Quality Control	
or MA 342	Statistical Computing	
Subtotal		41
Total Hours		**78**