Sample schedule for BS in physics (without concentration)

Number of credits in parentheses.

Courses designated "Elective" are entirely at the student's discretion.

At least 45 credits must be upper-level (300 or above). This sample schedule satisfies this requirement.

Students who are not completing a second major take 6 credits of physics and astronomy electives. In this sample schedule, ASTR 210 and PHYS 412 are selected; other options are possible.

ASTR 124 and PHYS 122 and 123 are not required. They are included to bring the total credit number to 120. A single 3-credit elective could be substituted for these.

Fall of Year 1 (15)

MATH 113	(4)	Calculus I
ENGH 101	(3)	Composition
Mason Core	(3)	
Mason Core	(3)	
PHYS 122	(1)	Inside Relativity
PHYS 123	(1)	Inside the Quantum World

Spring of Year 1 (15)

MATH 114	(4)	Calculus II
PHYS 160	(3)	Physics I
PHYS 161	(1)	Physics I lab
Mason Core	(3)	
Mason Core	(3)	
ASTR 124	(1)	Introduction to Observational Astronomy

Fall of Year 2 (16)

MATH 213	(3)	Calculus III
PHYS 260	(3)	Physics II
PHYS 261	(1)	Physics II lab
PHYS 251	(3)	Intro to Computer Techniques in Physics (satisfies Mason Core IT)
Mason Core	(3)	
Mason Core	(3)	

Spring of Year 2 (15)

MATH 214	(3)	Differential Equations
PHYS 307	(3)	Thermal Physics
PHYS 308	(3)	Modern Physics
ASTR 210	(3)	Introduction to Astrophysics
Elective	(3)	

Fall of Year 3 (15)

PHYS 301	(3)	Analytical Methods of Physics
PHYS 303	(3)	Classical Mechanics
PHYS 305	(3)	Electromagnetic Theory
PHYS 311	(3)	Instrumentation
ENGH 302	(3)	Advanced Composition

Spring of Year 3 (15)

PHYS 306	(3)	Wave Motion and Electromagnetic Radiation
PHYS 312	(3)	Waves and Optics
PHYS 402	(3)	Introduction to Quantum Mechanics and Atomic Physics
Elective	(3)	
Elective	(3)	

Fall of Year 4 (14)

PHYS 403	(3)	Quantum Mechanics II
PHYS 407	(4)	Senior Laboratory
PHYS 408 or 409	(3)	Senior Research or Physics Internship
PHYS 410	(3)	Computational Physics I
PHYS 416	(1)	Special Topics in Modern Physics

Spring of Year 4 (15)

PHYS 412	(3)	Solid State Physics and Applications
PHYS 428	(3)	Relativity
Elective	(3)	
Elective	(3)	
Elective	(3)	