Physics B.S.

57-58 credits (Major Code: 083)

Courses Required for Major:

Number	Title	Credits	Perspectives
PHYS 145.4	Principles of Physics I	4	AoK: NS
PHYS 145.1	Principles of Physics I Laboratory	1	AoK: NS-L
PHYS 146.4	Principles of Physics II	4	AoK: NS
PHYS 146.1	Principles of Physics II Laboratory	1	AoK: NS-L
PHYS 222	Optics	3	
PHYS 233	Intermediate Methods of Math Physics I	3	
PHYS 234	Intermediate Methods of Math Physics II	3	
PHYS 235	Classical Physics Laboratory	2	
PHYS 237	Mechanics	4	
PHYS 243	Thermodynamics and Statistical Mechanics	4	
PHYS 260	Introduction to Modern Physics	4	
PHYS 310	Electromagnetism I	4	
PHYS 311	Electromagnetism II	4	
PHYS 345	Solid State Physics	4	
PHYS 365	Principles of Quantum Mechanics	4	
PHYS 377	Modern Physics Laboratory	2	

Elective Courses (One Course):

PHYS 221	Optoelectronics	3
PHYS 225	Solid State Electronics	4
PHYS 227	Physical Principles of Telecommunications	3
PHYS 265	Electrical Circuits	3
PHYS 280	Introduction to Cosmology	3
PHYS 320W	Research and Writing in the Sciences	3
PHYS 383	Special Topics	3
PHYS 390	Internship	3
PHYS 393	Special Problems	3
PHYS 396W	Senior Research Project II	3

Students can also take one additional 3 or 4 math/science course approved by the department

Math Prerequisites (needed for course number in parentheses)

Number	Title	Credits
MATH 151 (for PHYS 145)	Calculus/ Differentiation & Integration	4
MATH 152 (for PHYS 146)	Calculus/ Integration & Infinite Series	4
OR		
MATH 141 (for PHYS 145)	Calculus/Differentiation	3
MATH 142 (for PHYS 146)	Calculus/Integration	3
MATH 201 (for PHYS 233)	Multivariable Calculus	4

AoK = Area of Knowledge
NS = Natural Science
NS-L = Natural Science with Lab (only if including the 4 credits related lecture course)