

# Physics BA Standard Option – *PENDING APPROVAL*

45-47 credits

(Major Code: 084, Concentration Code: 08A)

BA/MA Program (Major Code: 085)

## 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 242 (243)	Thermodynamics (and Statistical Mechanics)	3 (4)	
Phys 260	Introduction to Modern Physics	4	
Phys 310	Electromagnetism I	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 311	Electromagnetism II	3
Phys 320W	Research and Writing in the Sciences	3
Phys 345	Solid State Physics	4
Phys 383	Special Topics	3
Phys 390	Internship	3
Phys 393	Special Problems	3
Phys 396W	Senior Research Project II	3

### Math Prerequisite (needed for course number in parentheses)

Number	Title	Credit
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)	Calculus	4

AoK = Area of Knowledge

NS = Natural Science

NS-L = Natural Science with Lab (only if including the 4 credit related lecture course)