

BS: PHYSICS DEGREE PLAN (PHYS)	
UNIVERSITY REQUIREMENTS	
Please see the University Requirements section of this catalog (page 40).	
MAJOR REQUIREMENTS	
Physics	
ENGR 115/116 Intro to Engineering and Physics	4
PHYS 120 Engineering Physics I	(3) ¹
PHYS 121 Engineering Physics I Lab	(1) ¹
PHYS 122 Engineering Physics II	(3) ¹
PHYS 123 Engineering Physics II Lab	(1) ¹
PHYS 230/231 Modern Physics Lecture/Lab	4
PHYS 362/363 Optics	4
PHYS 379 Philosophy of Religion and Science	(3) ¹
PHYS 497/498 Capstone I, II	4
Mathematics	
MATH 185 Calculus I	(3) ¹
Math 186 Calculus II	3
TOTAL	19
¹ Hours (in parentheses) may also fulfill university requirements and are not included in total major hours	
CONCENTRATIONS (CHOOSE ONE)	
Physics Track (PHYS)	
PHYS 335/336 Intro to Electronics w/ Lab	3
PHYS 360 Electricity & Magnetism	3
PHYS 371 Classical Mechanics	3
PHYS 385 Math of Physics and Engineering	3
PHYS 461 Nuclear	3
PHYS 472 Solid State	3
PHYS 481 Thermodynamics	3
PHYS 491 Quantum Mechanics	3
PHYS 493 General Relativity	3
MATH 286 Calculus II	3
MATH 325 Linear Algebra	3
Math 361 Ordinary Differential Equations	3
CHEM 131/133 General Chemistry I w/ Lab	4
CS 120 Programming I	3
TOTAL	43
Medical Physics (PHYM)	
BIOL 112/114 General Biology I w/ Lab	4
BIOL 113/115 General Biology II w/ Lab	4
CHEM 131/133 General Chemistry I w/ Lab	4
CHEM 132/134 General Chemistry II w/ Lab	4
CHEM 221/223 Organic Chemistry I w/ Lab	4
CHEM 322/324 Organic Chemistry II w/ Lab	4
CHEM 453/463 Biochemistry I w/ Lab	4
CS 120 Programming I	3
MATH 123 Intro to Statistics	3
MATH 286 Calculus III	3
MATH 361 Ordinary Differential Equations	3
PHYS 335/336 Intro to Electronics w/ Lab	3
PHYS 360 Electricity & Magnetism	3
PHYS 385 Math of Physics and Engineering	3
PHYS 461 Nuclear	3
TOTAL	52
Engineering Science Technology (PHYA)	
CS 115 or above	3

ENGR 140 Engineering Computer Based Design	3
PHYS 335/336 Introduction to Electronics Lecture/Lab	3
3 additional hours of PHYS	3
TOTAL	12
Engineering Physics (PHYN)	
CS 120 Programming I	3
CS 130 Programming II: Data Structures	3
CHEM 131/133 General Chemistry I w/ Lab	4
ENGR 140 Engineering Computer Based Design	3
ENGR 220 Engineering Mechanics: Statistics	3
ENGR 222 Engineering Mechanics: Dynamics	3
MATH 286 Calculus III	3
MATH 341 Numerical Methods or	
MATH 377 Statistical Methods I	3
MATH 361 Ordinary Differential Equations	3
PHYS 335/336 Introduction to Electronics Lecture/Lab	3
PHYS 360 Electricity & Magnetism	3
PHYS 371 Classical Mechanics	3
PHYS 385 Math of Physics and Engineering	3
PHYS 481 Thermodynamics	3
PHYS 491 Quantum Mechanics	3
PHYS 342/343 Instrumentation Lecture/Lab or	
PHYS 388 Network Analysis	3
TOTAL	49
Computational Physics (PHYC)	
CS 130 Programming II and Data Structures	3
MATH 341 Numerical Methods	3
MATH 377 Statistical Methods I	3
PHYS 451 Computational Physics I: Simulation and Modeling	3
PHYS 453 Computational Physics II: Pattern Recognition	3
3 additional hours from CS 300-499 or	
PHYS 300-499 (except 378)	3
3 additional hours from PHYS 300-499 (except 378)	3
TOTAL	21
ELECTIVES	
Physics Track (PHYS)	10
Medical Physics (PHYM)	1
Applied Physics (PHYA)	41
Engineering Physics (PHYN)	4
Computational Physics (PHYC)	32
TOTAL MAJOR HOURS	72
OTHER GRADUATION REQUIREMENTS	
Minimum grade for PHYS courses	C
Minimum GPA for graduation	2.00
Minimum advanced hours	33
Minimum total hours	128
<i>Courses numbered 0** do not count in minimum hours required for degree.</i>	

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ENGR 115/116
MATH 341 Numerical Methods or
MATH 325 Linear Algebra or
MATH 377 Statistical Methods I
Deleted:
PHYS 342/343 Instrumentation Lecture/Lab
PHYS 388 Network Analysis
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DSGN 232 Digital Design Communication
Deleted: Mathematics
MATH 185 Calculus I
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PHYS 360 Electricity and Magnetism
Deleted: 371 Classical Mechanics
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Deleted: PHYS 385 Math of Physics and Engineering
PHYS 481 Thermodynamics
PHYS 491 Quantum Mechanics (writing-intensive course)
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Other Required Course:
PHIL 379 Philosophy, Religion and Science
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ENGR 115/116 Introduction to Engineering and Physics
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ENGR 115/116 Introduction to Engineering and Physics 4
12 additional hours from [PHYS](#) 300-499 (except [378](#)) 12

SUPPLEMENT FOR MAJOR	
Chemistry/Computer Science/Mathematics	
CHEM 133/131 General Chemistry I Lecture/Lab	4
PHYS 497/498 Capstone I/II	4
CS 120 Programming I	3
MATH 186 Calculus II	3
MATH 286 Calculus III	3
MATH 361 Ordinary Differential Equations	3
TOTAL	20

Minimum Electives 1-10