

2027 Academic Planning Form: PHYSICS B.S.

5/18/2023

1st course(s) recommended for Physics (Engineering-Physics Systems) B.S. - EPS 101 and/or 131, MTH 131

	Fall Semester	# of Credits	Spring Semester	# of Credits	Total Year Credits
1st Year	DWC 101 (4 credit hrs; Honors 5 credit hrs)	4	DWC 102 (4 credit hrs; Honors 5 credits hrs)	4	
	MTH 131 Calc & Analytical Geometry I (Quantitative Reasoning Core)	4	MTH 132 Calc & Analytical Geometry II	4	
	EPS 101 General Physics I w/ Lab	4	EPS 102 General Physics II w/ Lab	4	
	EPS 131 Intro to Engineering (1 cr, taken as 5th course)	1	Core	3	
	Core	3	Core	3	
		16		18	
2nd Year	DWC 201 (4 credit hrs; Honors 5 credit hrs)	4	DWC 202 (4 credit hrs; Honors 5 credits hrs)	4	
	MTH 223 Calc. & Analytical Geometry III	4	MTH 304 Differential Equations	3	
	EPS 201 Intro. Modern Physics w/ Lab (Oral Communication Proficiency)	4	EPS 301 Mechanics	3	
	Core	3	Core	3	
	Core	3	Core/Free Elective	3	
		18		16	
3rd Year	MTH 318 Topics in Applied Math	3	EPS 202 Electronics w/ lab (Intensive Writing II Proficiency)	4	
	EPS 221 Scientific Programming	3	EPS 430 Thermodynamics	3	
	CHM 101 General Chemistry I w/ Lab (or CHM 121) (Natural Science Core)	4	CHM 102 General Chemistry II w/ Lab (or CHM 122)	4	
	Core	3	Core	3	
	Core	3	Core/Free Elective	3	
		16		17	
4th Year	EPS 302 Electromagnetism	3	EPS 448 Applied Quantum Physics	3	
	EPS 401 Classical Dynamics	3	EPS 496 Research or Internship (or EPS 450)	3	
	EPS 495 Research or Internship (or EPS 450)	3	Free Elective	3	
	Free Elective	3	Free Elective	3	
	Free Elective	3	Free Elective	3	
		15		15	
Graduation Requirement includes a minimum of 120 credit hours			Total Program of Study Credits		131
PHY Majors fulfill the Quantitative Reasoning and Natural Science Cores along with the Intensive Writing II and Oral Communication Proficiencies within the standard curriculum.					
Core requirements include a foundational component and satisfaction of all proficiencies.					
Foundational Component:			Proficiencies:		
<ul style="list-style-type: none"> • DWC - 4 semester sequence, 16-20 cr. • Theology (200 & 300 level) - 6 cr. • Philosophy (1 Ethics) - 6 cr. • Natural Science - 3 cr. (CHM 101) • Social Science - 3 cr. • Quantitative Reasoning - 3 cr. (MTH 131) • Fine Arts - 3 cr. 			<ul style="list-style-type: none"> • Intensive Writing - I • Intensive Writing - II (EPS 202) • Diversity • Civic Engagement • Oral Proficiency (EPS 201) 		
Major Requirements (PHY Courses):					
<ul style="list-style-type: none"> • EPS 101, 102, 131, 201, 202, 221, 222, 301, 302, 401, 430, 448, 495, 496 (450 may be substituted for 495, 496, or both, with proper advance planning.) [295, 296, 395, 396 or combinations thereof do not substitute for 495 or 496] 			<ul style="list-style-type: none"> • MTH 131, 132, 223, 304, 318 • CHM 101-102 (or 121-122) 		