

2028 Academic Planning Form: PHYSICS B.S.

5/31/2024

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
1 st 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	
2 nd 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	
3 rd 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	
4 th 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
<i>PHY Majors fulfill the Quantitative Reasoning and Natural Science Cores along with the Intensive Writing II and Oral Communication Proficiencies within the standard curriculum.</i>					
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) 		