Four-Year Plan for B.S. Degree in Physics

Applied Physics Concentration

Tennessee Tech University Effective August 1, 2025

FIRST YEAR					
FALL To	tal Cr. Hrs.	15	SPRING	Total Cr. Hrs	s. 15
Course		Cr. Hrs.	Course		Cr. Hrs.
ENGL 1010 English Composition	I	3	ENGL 1020 English Compositio	n II	3
PHYS 1137 Frontiers of Physics		1	MATH 1920 Calculus II		4
MATH 1910 Calculus I		4	PHYS 2110 Calc-based Physics	I w/Lab	4
CHEM 1110 General Chemistry I		4	CSC 1300 Intro Prob Solving &	Comp Prog	4
Humanities/Fine Arts		3			

SECOND YEAR					
FALL Total Cr. Hrs	. 15	SPRING Total Cr. Hrs	s. 14		
Course	Cr. Hrs.	Course	Cr. Hrs.		
ENGL 2130 or ENGL 2235 or ENGL 2330	3	MATH 2120 Differential Equations	3		
MATH 2110 Calculus III	4	PHYS 3020 Topics in Modern Physics	3		
PHYS 2120 Calc-based Physics II w/Lab	4	PHYS 3021 Modern Physics Laboratory	1		
CSC 1310 Data Structures & Algorithms	4	PHYS 3060 Math Techniques in Physics	4		
		PC 2500 Communicating in the Professions	3		

THIRD YEAR						
FALL Total Cr.	Hrs. 15	SPRING Total Cr. H	lrs. 15			
Course	Cr. Hrs.	Course	Cr. Hrs.			
PHYS 3610 Classical Mechanics	3	PHYS 3120 Statistical Thermal Physics	3			
PHYS 4610 Classical E & M I	3	PHYS 3810 Quantum Mechanics I	3			
MATH 3470 Intro to Probability & Stats	3	Science/Engineering ²	6			
Science/Engineering ²	3	Social/Behavioral Sciences	3			
Humanities/Fine Arts	3					

FOURTH YEAR						
FALL Tota	l Cr. Hrs.	16	SPRING	Total Cr. Hrs	s. 15	
Course		Cr. Hrs.	Course		Cr. Hrs.	
PHYS 4711 Adv. Experimental Phys	sics	2	HIST 2020 American History II		3	
Physics Elective ¹		3	Physics Elective ¹		3	
Science/Engineering ²		3	Science/Engineering ²		3	
HIST 2010 American History I		3	Elective		6	
Social/Behavioral Sciences		3				
Elective		2				

¹ Students choose two from the following: PHYS 3820, PHYS 4130, PHYS 4620, or PHYS 4760.

² Students minor in a Technical Field or agreed interdisciplinary program (15 cr. hrs.) which includes at least 6 cr. hrs. of upper division. The minor may be in any of the Natural Sciences disciplines offered in the College of Arts and Sciences (except Physics or Math), or any of the disciplines in the College of Engineering.