

Four-Year Plan for B.S. Degree in Physics
Computational Physics Concentration
Tennessee Tech University
Effective August 1, 2025

FIRST YEAR			
FALL	Total Cr. Hrs.	15	SPRING
Course	Cr. Hrs.		Course
ENGL 1010 English Composition I	3		ENGL 1020 English Composition II
PHYS 1137 Frontiers of Physics	1		MATH 1920 Calculus II
MATH 1910 Calculus I	4		PHYS 2110 Calc-based Physics I w/Lab
CHEM 1110 General Chemistry I	4		CSC 1300 Intro Prob Solving & Comp Prog
PC 2500 Communicating in the Profs	3		

SECOND YEAR			
FALL	Total Cr. Hrs.	15	SPRING
Course	Cr. Hrs.		Course
ENGL 2130 or ENGL 2235 or ENGL 2330	3		MATH 2120 Differential Equations
MATH 2110 Calculus III	4		PHYS 3020 Topics in Modern Physics
PHYS 2120 Calc-based Physics II w/Lab	4		PHYS 3021 Modern Physics Laboratory
CSC 1310 Data Structures & Algorithms	4		PHYS 3060 Math Techniques in Physics
			CSC 2220 Data Science & AI for Everyone

THIRD YEAR			
FALL	Total Cr. Hrs.	15	SPRING
Course	Cr. Hrs.		Course
PHYS 3610 Classical Mechanics	3		PHYS 3120 Statistical Thermal Physics
PHYS 4610 Classical E & M I	3		PHYS 3810 Quantum Mechanics I
MATH 3470 Intro to Probability & Stats	3		CSC 2770 Intro to Systems & Networking
Humanities/Fine Arts	3		CSC 2400 Design of Algorithms
CSC 3220 Fundamentals of Data Science	3		Social/Behavioral Sciences

FOURTH YEAR			
FALL	Total Cr. Hrs.	14	SPRING
Course	Cr. Hrs.		Course
PHYS 4711 Adv. Experimental Physics	2		PHYS 4130 Computational Physics
CSC Elective sequence ¹	3		CSC Elective sequence ¹
HIST 2010 American History I	3		CSC/PHY Elective ²
Social/Behavioral Sciences	3		HIST 2020 American History II
Elective	3		Humanities/Fine Arts
			Elective

¹ Students choose from one of the following sequences: (CSC 2520 and CSC 4760) or (CSC 2700 and CSC 3300).

² Student choose from either CSC 3020 or PHYS 4760.