

Four-Year Plan for B.S. Degree in Physics, Option II with Emphasis in Computer Science
Tennessee Technological University

First Year		Fall	Spring
ENGL 1010-1020	Writing I, II	3	3
PHYS 1020 or MSCI 1020 ¹	First-year Connections	1	
PHYS 1137	Frontiers of Physics	1	
MATH 1910-1920	Calculus I-II	4	4
CHEM 1110-1120	General Chemistry I-II	4	4
PHYS 2110	Calculus-based Physics I		4
Humanities/Fine Arts		3	
Total		16	15
Second Year		Fall	Spring
ENGL 2130/2235/2330	Literature	3	
MATH 2110	Calculus III	4	
MATH 2120	Differential Equations		3
PHYS 2120	Calculus-based Physics II	4	
PHYS 2420	Modern Physics		3
PHYS 2920	Mathematical Physics		3
CSC 1300	Intro to Problem Solving & Computer Programming	4	
CSC 1310	Data Structures & Algorithms		4
PC 2500	Communicating in the Professions		3
Total		15	16
Third Year		Fall	Spring
PHYS 3610	Classical Mechanics	3	
PHYS 4610-4620	Classical Elec. and Magnetism	3	3
PHYS 3120	Statistical Thermal Physics		3
PHYS 3810	Quantum Mechanics I		3
MATH 3470	Intro. Prob. and Statistics	3	
MATH 4510	Adv. Math for Engineers	3	
CSC 2400 ²	Design of Algorithms	3	
CSC 3220 ²	Fundamentals of Data Science		3
Humanities/Fine Arts			3
Total		15	15
Fourth Year		Fall	Spring
PHYS 4711	Advanced Experimental Physics	2	
PHYS 3820	Quantum Mechanics II	3	
PHYS 4730	Research Planning	1	
PHYS 4740	Research		2
PHYS 4130 ²	Computational Physics		3
CSC 4220 ²	Data Mining and Machine Learning	3	
HIST 2010-2020	American History I-II	3	3
Social/Behavioral Sciences		3	3
Elective			3
Total		15	14

¹Not part of 120-hour curriculum

²Other Computer Science courses may be chosen as long as 8 upper-division hours in Computer Science are included.