

**Tennessee Technological University**  
 Additional Endorsement Program  
 Secondary Science Education (Grades 7-12)  
 Physics - Endorsement Code 417

**General Core**

SEED 4123 Or 5123	Materials & Methods of Teaching Science	3	
FOED 3820	Field Experience in Education	1	
	Or CUED 6800 Field Experience		

**General / Physical Science Core**

Science Sequence (Biology or Chemistry or Physics or Geology)		8-12	
Two courses, one in each of the areas not taken as a sequence		6-8	
	BIOL 1310 Concepts of Biology		
	Or BIOL 1010 Intro to Biology I		
	CHEM 1310 Concepts of Chemistry		
	Or CHEM 1110 General Chemistry I		
	GEOL 1310 Concepts of Geology		
	Or GEOL 1040 The Dynamic Earth		

**Science Specialization - Physics \***

PHYS 2110 & 2120	General Physics I & II	6	
PHYS 2111 & 2121	General Physics Lab I & II	2	
PHYS 2420	Modern Physics	3	
PHYS 2920	Mathematical Physics	3	
MATH 1910 & 1920	Calculus I & II	8	
PHYS Upper Division Elective: Choose 1		3	
	PHYS 3120 Statistical Thermal Physics		
	Or PHYS 3610 Classical Mechanics		
	Or PHYS 3810 Quantum Mechanics		
	Or PHYS 4610 Classical Electricity and Magnetism		

\*The following are pre-or co-requisites for upper division physics courses.

They are not courses that are required for the physics specialization.

MATH 2110	Calculus III	3	
MATH 2120	Differential Equations	3	
MATH 4510	Advanced Mathematics for Engineers	3	