## **CENTRAL CONNECTICUT STATE UNIVERSITY**

School of Engineering, Science and Technology Physics Major B.S. Engineering Physics Concentration

Name:	ID#:			Matriculation Semester: Date:		
GENER	AL EDUCATION (46 - 47 credits)	Crs.	Grd.	MAJOR	Crs.	Grd.
	STUDY AREAS			PHYSICS: = (39 credits)		
Study Are	a I Arts & Humanities (9 credits)			PHYS 125 University Physics I	4	
ENG literature		3		PHYS 126 University Physics II	4	
		3		PHYS 220 Mechanics I	3	
		3		PHYS 250 Intermediate Lab I	1	
Study Area II Social Sciences (9 credits)		PHYS 305 Foundations of Electricity and Magnetism	3			
		3		PHYS 320 Heat and Thermodynamics	3	
		3		PHYS 325 Optics	4	
		3		PHYS 331 Electronics I	3	
Study Area III Behavioral Sciences (6 credits)		PHYS 350 Intermediate Lab II	1			
		3		PHYS 425 Modern Physics	3	
		3		PHYS 450 Advanced Laboratory	1	
Study Area l	V Natural Sciences (6 or 7credits)			PHYS 452 Indept Study: Senior Capstone Design Project	3	
(double-counted ir	n major)	Х	X	PHYS 470 Quantum Mechanics I	3	
(double-counted in	n major)	Х	Х	PHYS 471 Quantum Mechanics II	3	
	SKILL AREAS			Related Requirements (16 Credits)		
Skill Area I	Communication Skills (6 credits)			CHFM 161 General Chemistry I	3	

Skill Area I Communication Skills (6 credits)			
ENG 110 Freshman Composition	3		
	3		
Skill Area II Mathematics Requirement (6 credits)			
MATH 152 Caclulus I	4		
MATH 221 Calculus II	4		
Skill Area III Foreign Language Proficiency Req. (check one)			
- 3 sequential years of one foreign language at the high school level			
- passed a standardized foreign language exam			
- completion of 112 or 114 foreign language course			
- successful completion of an upper level foreign language course			
- demonstration of native proficiency in a language other than English			
Skill Area IV University Requirement (2 or 3 credits)			
PE 244 (required if matriculated with less than 15 credits)	2 or 3		
International Requirement met			
International Requirement met			
First Year Experience Requirement met			

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PHYSICS: = (39 credits)		
PHYS 125 University Physics I	4	
PHYS 126 University Physics II	4	
PHYS 220 Mechanics I	3	
PHYS 250 Intermediate Lab I	1	
PHYS 305 Foundations of Electricity and Magnetism	3	
PHYS 320 Heat and Thermodynamics	3	
PHYS 325 Optics	4	
PHYS 331 Electronics I	3	
PHYS 350 Intermediate Lab II	1	
PHYS 425 Modern Physics	3	
PHYS 450 Advanced Laboratory	1	
PHYS 452 Indept Study: Senior Capstone Design Project	3	
PHYS 470 Quantum Mechanics I	3	
PHYS 471 Quantum Mechanics II	3	

CHEM 161 General Chemistry I		
CHEM 162 General Chemistry 1 Lab	1	
MATH 222 Calculus III	4	
MATH 226 Linear Algebra & Prb/Engineers	4	
MATH 355 Differential Equations		

## **Engineering Courses (21 credits)**

ENGR 251 Engineering Mechanics - Statics		
ME 258 Engineering Thermodynamics	3	
ME 354 Fluid Mechanics	3	
ENGR 357 Mechanics of Materials	3	
Engineering Electives (ME and/or CE 300 level or above)		

FINAL TOTAL	117-118	