

UNIVERSITY OF ST. THOMAS DOUBLE MAJOR IN PHYSICS (B.A.) AND ELECTRICAL ENGINEERING (B.S.)

Sample Schedule Physics

	FALL	J-TERM	SPRING	SUMMER
FRESHMAN	ENGR 150	Gen XXX		Gen XXX
	MATH 113		PHYS 211	
	Gen XXX		MATH 114	
	Gen XXX		CISC 130	
	Gen XXX		Gen XXX	
	courses (4)	courses (1)	courses (4)	courses (1)
SOPHOMORE	ENGR 230	Gen XXX	ENGR 240	Gen XXX
	PHYS 212		PHYS 225	
	MATH 200		MATH 210	
	Gen XXX		Gen XXX	
	courses (4)	courses (1)	courses (4)	courses (1)
JUNIOR	ENGR xxx elective	Gen XXX	ENGR 331	
	ENGR 340		ENGR 410	
	ENGR 345		ENGR 346	
	PHYS 215		Gen XXX	
	courses (4)	courses (1)	courses (4)	courses (1)
SENIOR	ENGR xxx elective	Gen XXX	ENGR 481	
	ENGR 480		PHYS 342 / ENGR 342	
	PHYS 341			
	PHYS XXX		ENGR xxx elective	
	courses (4)	courses (1)	courses (4)	

- Notes:
- 1 - The combination of ENGR 230 and ENGR 240 is used in place of PHYS 260.
 - 2 - Some of the physics electives are taught every other year.
 3. Four Technical Electives required from 1 or more tracks including physics.

UNIVERSITY OF ST. THOMAS
DUAL DEGREE
PHYSICS (BA) AND ELECTRICAL ENGINEERING (BS)

Engineering Courses		
ENGR 150	Introduction to Engineering (1 credit)	■
ENGR 230	Digital Design	■
ENGR 240	Circuit Design	■
ENGR 330**	Microprocessor Architectures	■
ENGR 331	Applications of Microprocessors	■
ENGR 340	Signals and Systems	■
ENGR 345	Electronics I	■
ENGR 346	Electronics II	■
ENGR 410	Control Systems and Automation	■
ENGR 431**	Design of Embedded Systems	■
ENGR 480	Engineering Design Clinic I	■
ENGR 481	Engineering Design Clinic II	■

Physics Courses		
PHYS 211	Introduction to Classical Physics I	■
PHYS 212	Introduction to Classical Physics II	■
PHYS 215	Foundations of Modern Physics: From the Atom to the Big Bang	■
PHYS 225	Applications of Modern Physics: From the Atom to the Diode	■
PHYS 341	Electricity and Magnetism	■
PHYS/ENGR 342	Electromagnetic Waves	■
Physics/EE Electives	For a BA in Physics you will need to complete an additional physics courses from the list below. These also count as EE electives.	
PHYS 323*	Experimental Methods	
PHYS 331*	Theoretical Mechanics	
PHYS 347*	Optics	
PHYS 410*	Statistical Physics & Thermal Physics	
PHYS 431*	Quantum Mechanics	

Allied Courses		
MATH 113	Calculus I	■
MATH 114	Calculus II	■
MATH 200	Multi-Variable Calculus	■
MATH 210	Introduction to Differential Equations and Systems	■
CISC 130	Introduction to Programming and Problem Solving in the Sciences	■

* These physics electives also count as engineering electives in the EE program.

** Four Technical Electives required from 1 or more tracks (including physics).
Consult EE Program Director for alternatives.