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 111**	
	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 112		**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)
2008 –2010 CATALOG

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 111	Introduction to Classical Physics I	■
PHYS 112	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.