DUAL DEGREE:
PHYSICS (B.A) AND ELECTRICAL ENGINEERING (B.S.)

UNIVERSITY OF ST. THOMAS, COLLEGE OF ARTS AND SCIENCES

Engineering Courses

ENGR 150	Introduction to Engineering (1 credit)	■
ENGR 230	Digital Design	■
ENGR 240	Circuit Design	■
ENGR 330	Microprocessors I	■
ENGR 331	Microprocessors II	■
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 Electives For a B.A. in physics you will need to complete an additional physics courses from the list below.

PHYS 104	Astronomy
PHYS 105	Musical Acoustics
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	■
CICS 130	Introduction to Programming and Problem Solving in the Sciences	■