

B.S. MECHANICAL ENGINEERING

(Peace Engineering Minor)

Plan of Study

Year 1	Fall		Spring	
	FYEX Foundation for College Success			
	ENGR 100 (FYE) Introduction to Engineering Design		CISC 130 Introduction to Programming & Problem Solving in the Sciences	
	ENGR 170 Mechanical Engineering Graphics		PHYS 211 Classical Physics I	
	MATH 113 Calculus I		MATH 114 Calculus II	
	CORE requirement		CORE requirement	
	CORE requirement			
	January-term		Summer	
CORE requirement		↔		
Year 2	Fall		Spring	
	ENGR 220 Statics		ENGR 221 Mechanics of Materials (Lab)	
	MATH 200 Multi-Variable Calculus		↔	
	MATH 210 Introduction to Differential Equations & Systems		↔	
	PHYS 212 Classical Physics II		CHEM 109 General Chemistry for Engineers (Lab)	
	JPST 250 Introduction to Justice and Peace Studies		↔	
CORE requirement		CORE requirement		
January-term		Summer		
Year 3	Fall		Spring	
	ENGR 255 Fabrication Skills (Lab)			
	ENGR 322 Dynamics (Lab)		↔	
	ENGR 350 Introduction to Electronics (Lab)		↔	
	ENGR 371 Manufacturing Processes & Statistical Control		ENGR 320 Machine Design & Synthesis (Lab)	
	ENGR 381 Thermodynamics (Lab)		ENGR 383 Fluid Mechanics (Lab)	
	CORE requirement		↔	
JPST 3XX Justice & Peace Focus Course				
January-term		Summer		
		ENGR 480 Engineering Design Clinic I		
Year 4	Fall		Spring	
	ENGR 481 Engineering Design Clinic II		THEO 227 Contexts: Justice & Peace	
	ENGR 410 Control Systems & Automation (Lab)		↔	
	ENGR 384 Heat Transfer (Lab)		↔	
	ENGR 361 Engineering Materials (Lab)		ENGR XXX Engineering Elective	
	CORE requirement		CORE requirement	
JPST 473 Vocational Seminar				
January-term		Summer		

* arrow indicates that the two courses can be interchanged

* this illustrates just one example of how all courses could be taken within a 4-year plan

Complete Course Listing:

Engineering Courses:

ENGR 100 - Introduction to Engineering Design (2 credits)
ENGR 170 - Mechanical Engineering Graphics (2 credits)
ENGR 220 - Statics (4 credits)
ENGR 221 - Mechanics of Materials (4 credits)
ENGR 255 - Fabrication Skills (0 credits)
ENGR 320 - Machine Design and Synthesis (4 credits)
ENGR 322 - Dynamics (4 credits)
ENGR 350 - Introduction to Electronics (4 credits)
ENGR 361 - Engineering Materials (4 credits)
ENGR 371 - Manufacturing Processes and Statistical Control (4 credits)
ENGR 381 - Thermodynamics (4 credits)
ENGR 383 - Fluid Mechanics (4 credits)
ENGR 384 - Heat Transfer (4 credits)
ENGR 410 - Control Systems and Automation (4 credits)
ENGR 480 - Engineering Design Clinic I (4 credits)
ENGR 481 - Engineering Design Clinic II (4 credits)
4 Credits of Engineering Electives
60 Engineering Credits

Allied Requirements:

MATH 113 - Calculus I (4 credits)
MATH 114 - Calculus II (4 credits)
MATH 200 - Multi-Variable Calculus (4 credits)
MATH 210 - Introduction to Differential Equations and Systems (4 credits)
PHYS 211 - Classical Physics I (4 credits)
PHYS 212 - Classical Physics II (4 credits)
CHEM 109 - General Chemistry for Engineers (4 credits)
CISC 130 - Introduction to Programming and Problem Solving in the Sciences (4 credits)
32 Allied Requirement Credits

Peace Engineering Minor Requirements:

JPST 250* - Introduction to Justice & Peace Studies (4 credits)
JPST 3XX* - Justice & Peace Focus Course (4 credits)
THEO 227 - Contexts: Justice & Peace (4 credits)
ENGR 480/481 - Engineering Design Clinic I & II (Peace Engineering Designated Project, 8 credits) [see ENGR]
JPST 473 - Vocational Seminar (Concurrent with ENGR 480 or 481, 0 credits)
Essay on community experience of poverty, injustice, social conflict, or marginalization (0 credits)
*credits will count towards Integration in the Humanities (submitted for approval)
12 Peace Engineering Minor Requirement Credits

University of St. Thomas Core Curriculum:

FYEX Foundation for College Success (1 credit)
Language and Culture (0-8 credits)
Literature and Writing (4 credits)
Philosophy and Theology (8 credits) [4 additional credits counted in Peace Engineering Requirement]
Social Analysis (4 credits)
Fine Arts (4 credits)
Historical Studies (4 credits)
Some of these courses must satisfy the flagged requirements; check your degree evaluation
33 Core Curriculum Credits