

# B.S. CIVIL ENGINEERING

(Math 114)

## Plan of Study

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

Year 1	Fall		Spring	
	FYEX Foundation for College Success			
	ENGR 100 (FYE) Introduction to Engineering Design			
	ENGR 160 Surveying		GEOL 163 Applied Geology (Lab)	
	MATH 114 Calculus II		MATH 210 Introduction to Differential Equations & Systems	
	CISC 130 Introduction to Programming & Problem Solving in the Sciences		PHYS 211 Classical Physics I	
	CORE requirement		CORE requirement	
	January-term		Summer	
	CORE requirement	↔		
Year 2	Fall		Spring	
	ENGR 220 Statics		ENGR 221 Mechanics of Materials (Lab)	
	STAT 220 Statistics I (Lab)		ENGR 222 Dynamics for Civil Engineering	
	CHEM 109 General Chemistry for Engineers		CORE requirement	
	CORE requirement		CORE requirement	
	January-term		Summer	
	CORE requirement	↔		
Year 3	Fall		Spring	
	ENGR 362 Construction & Engineering Economic Analysis (Lab)		ENGR 363 Construction Materials (Lab)	
	ENGR 364 Structural Analysis		ENGR 365 Design of Steel & Concrete Structures (Lab)	
	ENGR 368 Fluid Mechanics for Civil Engineering (Lab)		PHYS 212 Classical Physics II	
	CORE requirement		CORE requirement	
	January-term		Summer	
Year 4	Fall		Spring	
	ENGR 480 Engineering Design Clinic I		ENGR 481 Engineering Design Clinic II	
	ENGR 467 Water Resources		ENGR 468 Environmental Engineering	
	ENGR 463 Soil Mechanics & Foundations		ENGR 466 Transportation Engineering	
	CORE requirement		CORE requirement	
	January-term		Summer	

\* arrow indicates that the two courses can be interchanged

## **Complete Course Listing:**

### **Engineering Courses:**

ENGR 100 - Introduction to Engineering Design (2 credits)  
ENGR 160 - Surveying (1 credit)  
ENGR 220 - Statics (4 credits)  
ENGR 221 - Mechanics of Materials (4 credits)  
ENGR 222 - Dynamics for Civil Engineering (4 credits)  
ENGR 362 - Construction & Engineering Economic Analysis (4 credits)  
ENGR 363 - Construction Materials (4 credits)  
ENGR 364 - Structural Analysis (4 credits)  
ENGR 365 - Design of Steel & Concrete Structures (4 credits)  
ENGR 368 - Fluid Mechanics for Civil Engineering (4 credits)  
ENGR 463 - Soil Mechanics & Foundations (4 credits)  
ENGR 466 - Transportation Engineering (4 credits)  
ENGR 467 - Water Resources (4 credits)  
ENGR 468 - Environmental Engineering (4 credits)  
ENGR 480 - Engineering Design Clinic I (4 credits)  
ENGR 481 - Engineering Design Clinic II (4 credits)  
59 Engineering Credits

### **Allied Requirements:**

MATH 114 - Calculus II (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)  
CISC 130 - Introduction to Programming and Problem Solving in the Sciences (4 credits)  
GEOL 163 - Applied Geology (4 credits)  
CHEM 109 - General Chemistry for Engineers (4 credits)  
STAT 220 - Statistics I (4 credits)  
32 Allied 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 (12 credits)  
Social Analysis (4 credits)  
Fine Arts (4 credits)  
Historical Studies (4 credits)  
Integrations in the Humanities (8 credits)  
*Some of these courses must satisfy the flagged requirements; check your degree evaluation*  
45 Core Curriculum Credits