

**B.S. CIVIL ENGINEERING**  
*(Air Force ROTC)*  
**Plan of Study**

	Fall		Spring
Year 1	FYEX Foundation for College Success		
	ENGR 100 (FYE) Introduction to Engineering Design		CISC 130 Introduction to Programming & Problem Solving in the Sciences
	ENGR 160 Surveying		PHYS 211 Classical Physics I
	MATH 113 Calculus I		MATH 114 Calculus II
	AERO 111 Heritage & Values of the U.S. Air Force I		AERO 112 Heritage & Values of the U.S. Air Force II
	CORE requirement		CORE requirement
	January-term		Summer
Year 2	Fall		Spring
	ENGR 220 Statics		ENGR 221 Mechanics of Materials (Lab)
	MATH 210 Introduction to Differential Equations &		GEOL 163 Applied Geology (Lab)
	PHYS 212 Classical Physics II	↔	CHEM 109 General Chemistry for Engineers (Lab)
	AERO 211 Team & Leadership Fundamentals I		AERO 212 Team & Leadership Fundamentals II
	CORE requirement		CORE requirement
	January-term		Summer
Year 3	Fall		Spring
	ENGR 364 Structural Analysis		ENGR 363 Construction Materials (Lab)
	ENGR 362 Construction & Engineering Economic Analysis (Lab)		ENGR 222 Dynamics for Civil Engineering
	STAT 220 Statistics I (Lab)	↔	CORE requirement
	AERO 321 Leading People & Effective Communication I		AERO 322 Leading People & Effective Communication II
	January-term		Summer
	Year 4	Fall	
ENGR 368 Fluid Mechanics for Civil Engineering (Lab)			ENGR 365 Design of Steel & Concrete Structures (Lab)
CORE requirement			ENGR 466 Transportation Engineering
AERO 421 National Security & Preparation for Active Duty I			AERO 422 National Security & Preparation for Active Duty II
CORE requirement			CORE requirement
January-term			Summer
Year 5		Fall	
	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 (Lab)		CORE requirement
	CORE requirement		CORE requirement

\* this illustrates just one example of how all courses could be taken within a 5-year plan

\* 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 113 - Calculus I (4 credits)  
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)

36 Allied Requirement Credits

**Aerospace Studies Minor Requirements:**

AERO 111 Heritage & Values of the United States Air Force I (1 credit)  
AERO 112 Heritage & Values of the United States Air Force II (1 credit)  
AERO 211 Team & Leadership Fundamentals I (1 credit)  
AERO 212 Team & Leadership Fundamentals II (1 credit)  
AERO 321 Leading People & Effective Communication I (4 credits)  
AERO 322 Leading People & Effective Communication II (4 credits)  
AERO 421 National Security & Preparation for Active Duty I (4 credits)  
AERO 422 National Security & Preparation for Active Duty II (4 credits)  
AERO 450 Field Training (2 credits)  
AERO 200 Leadership Laboratory (0 credits) - Must be taken every fall & spring semester.  
AERO 201 Physical Fitness Laboratory (0 credits) - Must be taken every fall & spring semester.

22 Aerospace Studies Minor Requirement Credits

**University of St. Thomas Core Curriculum:**

FYEX Foundation for College Success (1 credit)  
Literature and Writing (4 credits)  
Language and Culture (0-8 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