

# B.S. MECHANICAL ENGINEERING & B.A. GERMAN

## Plan of Study

Year 1	<b>Fall</b>		<b>Spring</b>	
	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	
	GERM 111 Elementary German I		GERM 112 Elementary German II	
	CORE requirement			
	<b>January-term</b>		<b>Summer</b>	
CORE requirement		CORE requirement		
Year 2	<b>Fall</b>		<b>Spring</b>	
	ENGR 220 Statics		ENGR 221 Mechanics of Materials (Lab)	
	MATH 200 Multi-Variable Calculus		CHEM 109 General Chemistry for Engineers (Lab)	
	PHYS 212 Classical Physics II		CORE requirement	
	GERM 211 Intermediate German I		GERM 212 Intermediate German II	
	<b>January-term</b>		<b>Summer</b>	
CORE requirement		CORE requirement		
Year 3	<b>Fall</b>		<b>Spring</b>	
	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)	
	MATH 210 Introduction to Differential Equations & Systems		ENGR 381 Thermodynamics (Lab)	
	GERM 300 Introduction to German Studies		GERM (1) 3XX or 4XX	
	<b>January-term</b>		<b>Summer</b>	
CORE requirement		LOCAL Internship		
Year 4	<b>Fall - In Germany</b>		<b>Spring - In Germany</b>	
	GERM (2) 3XX or 4XX		ENGR XXX Internship Engineering Elective	
	GERM (3) 3XX or 4XX		GERM (4) 477 or 478 Experiential Learning	
	CORE requirement			
Year 5	<b>Fall</b>		<b>Spring</b>	
	ENGR 480 Engineering Design Clinic I		ENGR 481 Engineering Design Clinic II	
	ENGR 410 Control Systems & Automation (Lab)		ENGR 361 Engineering Materials (Lab)	
	ENGR 383 Fluid Mechanics (Lab)		ENGR 384 Heat Transfer (Lab)	
	GERM (5) 3XX or 4XX		GERM (6) 3XX or 4XX	
	<b>January-term</b>		<b>Summer</b>	
CORE requirement				

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

\* Arrows indicate that the two courses can be interchanged

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## Plan of Study

### **Complete Course Listing:**

#### **Engineering Courses: 60 Engineering Credits**

ENGR 100 - Introduction to Engineering (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 - Internship in Germany

#### **Allied Requirements: 32 Allied Requirement Credits**

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)

#### **German Requirements: 44 German Credits**

GERM 111 - Elementary German I (4 credits)  
GERM 112 - Elementary German II (4 credits)  
GERM 211 - Intermediate German I (4 credits)  
GERM 212 - Intermediate German II (4 credits)  
GERM 300 - Introduction to German Studies (4 credits)  
GERM 3XX or 4XX - (24 credits)

#### **University of St. Thomas Core Curriculum: 37 Core Curriculum Credits**

FYEX Foundation for College Success (1 credit)  
Literature and Writing (4 credits)  
Philosophy and Theology (12 credits)  
Social Analysis (4 credits)  
Fine Arts (4 credits)  
Historical Studies (4 credits) - Allied European History  
Integrations in the Humanities (8 credits)  
Some of these courses must satisfy the flagged requirements; check your degree evaluation