

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

## Plan of Study

Year 1	<b>Fall</b>		<b>Spring</b>
	<b>FYEX</b> Foundation for College Success		
	<b>ENGR 100</b> (FYE) Introduction to Engineering Design		<b>CISC 130</b> Introduction to Programming & Problem Solving in the Sciences
	<b>ENGR 175</b> Introduction to Electrical & Computer Engineering		<b>PHYS 211</b> Classical Physics I
	<b>MATH 113</b> Calculus I		<b>MATH 114</b> Calculus II
	<b>GERM 111</b> Elementary German I		<b>GERM 112</b> Elementary German II
	<b>CORE</b> requirement		<b>CORE</b> requirement
	<b>January-term</b>		<b>Summer</b>
<b>CORE</b> requirement		<b>PHYS 212</b> Classical Physics II	
Year 2	<b>Fall</b>		<b>Spring</b>
	<b>ENGR 230</b> Digital Design (Lab)		<b>ENGR 240</b> Circuit Analysis (Lab)
	<b>ENGR 330</b> Microprocessor Architectures (lab)		<b>ENGR 331</b> Designing with Microprocessors (Lab)
	<b>CISC 230</b> Object-Oriented Design & Programming		<b>MATH 210</b> Introduction to Differential Equations & Systems
	<b>GERM 211</b> Intermediate German I		<b>GERM 212</b> Intermediate German II
	<b>January-term</b>		<b>Summer</b>
<b>CORE</b> requirement		<b>CORE</b> requirement	
Year 3	<b>Fall</b>		<b>Spring</b>
	<b>ENGR 345</b> Electronics I (Lab)		<b>ENGR 432</b> Current Trends in Computing Systems
	<b>ENGR 431</b> Design of Embedded Systems (Lab)		<b>CISC 231</b> Data Structures using Object-Oriented Design (Lab)
	<b>MATH 128</b> Introduction to Discrete Mathematics		<b>GERM (1) 3XX or 4XX</b>
	<b>GERM 300</b> Introduction to German Studies		<b>CORE</b> requirement
	<b>January-term</b>		<b>Summer</b>
<b>CORE</b> requirement			
Year 4	<b>Fall - In Germany</b>		<b>Spring - In Germany</b>
	<b>GERM (2) 3XX or 4XX</b>		<b>ENGR XXX Internship</b> Engineering Elective 1
	<b>GERM (3) 3XX or 4XX</b>		<b>GERM (4) 477 or 478</b> Experiential Learning
	<b>Allied European</b> or <b>STEM History</b>		
<b>CORE</b> requirement			
Year 5	<b>Fall</b>		<b>Spring</b>
	<b>ENGR 480</b> Engineering Design Clinic I		<b>ENGR 481</b> Engineering Design Clinic II
	<b>MATH/SCI XXX</b> Elective 1		<b>MATH/SCI XXX</b> Elective 2
	<b>ENGR/CISC XXX</b> Elective 1		<b>ENGR/CISC XXX</b> Elective 2
	<b>GERM (5) 3XX or 4XX</b>		<b>GERM (6) 3XX or 4XX</b>
	<b>January-term</b>		<b>Summer</b>
<b>CORE</b> requirement			

\* arrow indicates that the two courses can be interchanged

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

## **Complete Course Listing:**

### **Engineering Courses:**

ENGR 100 - Introduction to Engineering (2 credits)  
ENGR 175 - Introduction to Electrical & Computer Engineering (2 credits)  
ENGR 230 - Digital Design (4 credits)  
ENGR 240 - Circuit Analysis (4 credits)  
ENGR 330 - Microprocessor Architectures (4 credits)  
ENGR 331 - Designing with Microprocessors (4 credits)  
ENGR 345 - Electronics I (4 credits)  
ENGR 431 - Design of Embedded Systems (4 credits)  
ENGR 432 - Current Trends in Computing Systems (4 credits)  
ENGR 480 - Engineering Design Clinic I (4 credits)  
ENGR 481 - Engineering Design Clinic II (4 credits)  
40 Engineering Credits

### **Allied & Elective Requirements:**

MATH 113 - Calculus I (4 credits)  
MATH 114 - Calculus II (4 credits)  
MATH 128 - Introduction to Discrete Mathematics (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 Science (4 credits)  
CISC 230 - Object-Oriented Design & Programming (4 credits)  
CISC 231 - Data Structures using Object-Oriented Design (4 credits)  
ENGR/CISC XXX - Elective (8 credits)  
MATH/SCI XXX - Elective (8 credits)  
52 Allied & Elective Requirement Credits

### **German Requirements:**

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)  
44 German Credits - One Academic Year in Germany  
Plus, Allied European History Requirement (4 Credits, See Core Curriculum Below)

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

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  
37 Core Curriculum Credits