

# B.S. COMPUTER ENGINEERING

## 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>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>CISC 130</b> Introduction to Programming & Problem Solving in the Sciences		<b>ENGR 230</b> Digital Design (lab)
	<b>CORE</b> requirement		<b>CORE</b> requirement
	<b>January-term</b>		<b>Summer</b>
<b>CORE</b> requirement	↔		
Year 2	<b>Fall</b>		<b>Spring</b>
	<b>ENGR 240</b> Circuit Analysis (Lab)		<b>CISC 230</b> Object-Oriented Design & Programming
	<b>ENGR 330</b> Microprocessor Architectures		<b>ENGR 331</b> Designing with Microprocessors (Lab)
	<b>PHYS 212</b> Classical Physics II		<b>MATH 210</b> Introduction to Differential Equations & Systems
	<b>CORE</b> requirement		<b>CORE</b> requirement
	<b>January-term</b>		<b>Summer</b>
<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>ENGR/CISC XXX</b> Elective 1
	<b>CORE</b> requirement		<b>CORE</b> requirement
	<b>January-term</b>		<b>Summer</b>
Year 4	<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 2		<b>CORE</b> requirement
	<b>CORE</b> requirement		<b>CORE</b> requirement
	<b>January-term</b>		<b>Summer</b>

\* 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 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) or CISC 340 Computer Architecture (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 in Sciences (4 credits)

CISC 230 - Object-Oriented Design and 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

### **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