

## B.S. in Civil Engineering and B.A. in German – Plan of Study

	<b>Fall</b>	<b>Spring</b>	<b>Summer/ J-Term</b>
<b>Year 1</b>	<b>ENGR 160</b> Surveying (LAB)		
	<b>MATH 113</b> Calculus I	<b>MATH 114</b> Calculus II	<b>THEO 101</b> The Christian Theological Tradition
	<b>ENGR 171</b> Engineering Graphics and Design	<b>CISC 130</b> Introduction to Programming and Problem Solving in the Sciences (LAB)	<b>HIST 1XX</b>
	<b>ENGL 121</b> Critical Thinking: Literature & Writing	<b>PHYS 111</b> Classical Physics I	
	<b>GERM 111*</b>	<b>GERM 112*</b>	
<b>Year 2</b>	<b>ENGR 220</b> Statics (LAB)	<b>ENGR 221</b> Mechanics of Materials (LAB)	<b>ENGL 20X</b> Texts in Conversation
	<b>MATH 210</b> Introduction to Differential Equations and Systems	<b>GEOL 163</b> Applied Geology (LAB)	
	<b>PHYS 112</b> Classical Physics II	<b>CHEM 109</b> General Chemistry for Engineers (LAB)	<b>PHIL 115</b> Philosophy of the Human Person (Sum)
	<b>GERM 211*</b>	<b>GERM 212</b>	
<b>Year 3</b>	<b>ENGR 362</b> Construction and Engineering Economic Analysis (LAB)	<b>ENGR 363</b> Civil Engineering Materials (LAB)	<b>Social Science</b>
	<b>ENGR 364</b> Structural Analysis	<b>ENGR 365</b> Design of Steel and Concrete Structures	<b>THEO 2XX or 3XX**</b>
	<b>GERM 300</b>	<b>GERM (1) 3xx or GERM 4xx</b>	
	<b>ENGR 368</b> Fluid Mechanics for Civil Engineers	<b>STAT 220</b> Statistics I	
<b>Year 4</b>	Fine Arts Elective**		
	<b>HIST (European)***</b>	<b>Internship (ENGR XXX</b> Engineering Elective)	<b>Year 4 in Germany</b>
	<b>GERM (2) 3xx or 4xx</b>		
	<b>GERM (3) 3xx or 4xx</b>	<b>GERM (4) 477 or 478</b> Experiential Learning	
<b>Year 5</b>	<b>ENGR 480</b> Engineering Design Clinic I	<b>ENGR 481</b> Engineering Design Clinic II	<b>PHIL 214</b> Introductory Ethics
	<b>ENGR 466</b> Transportation Engineering	<b>ENGR 467</b> Environmental Engineering/Hydraulics/Hydrology	<b>THEO 4XX</b>
	<b>ENGR 463</b> Soil Mechanics and Foundations (LAB)	<b>ENGR 322</b> Dynamics (LAB)	
	<b>GERM (5) 3xx or 4xx</b>	<b>GERM (6) 3xx or 4xx</b>	

\* May place out of one or more semesters if proficient at 3<sup>rd</sup> Level

\*\* May satisfy human diversity requirement

\*\*\* Allied with German – may be satisfied by another course; program director approval necessary

## B.S. in Civil Engineering and B.A. in German – Plan of Study

### Complete Course Listing:

#### Engineering Courses

ENGR 160 Surveying (1 credit)  
ENGR 171 Engineering Graphics and Design (4 credits)  
ENGR 220 Statics (4 credits)  
ENGR 221 Mechanics of Materials (4 credits)  
ENGR 322 Dynamics (4 credits)  
ENGR 362 Construction and Engineering Economic Analysis (4 credits)  
ENGR 363 Civil Engineering Materials (4 credits)  
ENGR 364 Structural Analysis (4 credits)  
ENGR 365 Design of Steel and Concrete Structures (4 credits)  
ENGR 368 Fluid Mechanics for Civil Engineering (4 credits)  
ENGR 463 Soil Mechanics and Foundations (4 credits)  
ENGR 466 Transportation Engineering (4 credits)  
ENGR 467 Environmental Engineering, Hydrology and Hydraulics (4 credits)  
ENGR 480 Engineering Design Clinic I (4 credits)  
ENGR 481 Engineering Design Clinic II (4 credits)

#### **57 Engineering Credits**

#### Allied Requirements

CHEM 109 General Chemistry for Engineers (4 credits)  
CISC 130 Introduction to Programming and Problem Solving in the Sciences (4 credits)  
GEOL 163 Applied Geology (4 credits)  
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)  
STAT 220 Statistics I (4 credits)

#### **36 Allied Requirement Credits**

#### German Courses:

GERM 111 – Beginning German 1 (WTL) (4 credits)  
GERM 112 – Beginning German 2 (WTL) (4 credits)  
GERM 211 – Intermediate German 1 (WTL) (4 credits)  
GERM 212 – Intermediate German 2 (WTL) (4 credits)  
GERM 300 – Introduction to German Studies (WID) (4 credits)  
GERM 311 – Conversation and Composition (may be WI) (4 credits)  
GERM 315 – Influential Ideas in Non-Fictional German (4 credits)  
GERM 320 – Contemporary Germany and Current Events (4 credits)  
GERM 341 – Highlights of German Literature I (may be WI) (4 credits)  
GERM 342 – Highlights of German Literature II (may be WI) (4 credits)  
GERM 345 – Austria: The Golden Age (4 credits)  
GERM 350 – Genre Studies in German Literature (may be taken multiple times) (4 credits)  
GERM 401 – German Poetry (4 credits)  
GERM 410 – German Opera (4 credits)  
GERM 440 – Introduction to Business German and German Business (4 credits)  
GERM 475, 476 – Experiential Learning (2 credits)  
GERM 477, 478 – Experiential Learning (4 credits)  
GERM 483, 484 – Seminar (2 credits)  
GERM 485, 486 – Seminar (4 credits)  
GERM 487, 488 – Topics (2 credits)  
GERM 489, 490 – Topics (4 credits)  
GERM 269, 389, 491 – Research (2 or 4 credits)  
GERM 243, 393, 495 – Individual Study (2 or 4 credits)

#### **32 GERMAN credits**

#### Allied Requirements:

HIST – European History

#### **4 allied requirements credits**

#### Core Curriculum

Two courses in English (8 credits)

Three courses in Theology\*\* (12 credits)

Two courses in Philosophy (8 credits)

One Fine Arts course\*\* (4 credits)

Social Science Course (4 credits)

\*\*One of these courses must satisfy the human diversity requirement

#### **36 core curriculum credits**

#### **Total Credit Count: 165 credits**