



Below is the natural sequence of Civil Engineering program courses designed for students to register per semester. Other degree requirements and comprehensive details are to be found in the AUIS Academic Catalog.

Course Code and Description	Credits	Prerequisite(s)	
<b>1st Semester</b>			
ENGR 230 - Engineering Drawing (Major)	3	None	
R 100 - Reading (Core)	3	None	
W 100 - Writing (Core)	3	None	
MTH 232 - Calculus I (Core)	3	None	
CHEM 232 + CHEML 232 - Chemistry I + Chemistry Lab I (Core)	4	None	
<b>Total Credits</b>	<b>16</b>		
<b>2nd Semester</b>			
CIV 101 - The Ancient World History (Core)	3	W 100, R 100	
ENGR 231 - Fabrication Shop (Team-based Problem Solving) (Major)	3	ENGR 230	
ENGR 248 - Engineering Geology (Major)	3	CHEM 232 + CHEML 232	
ENG 101 - Argument (Core)	3	W 100, R 100	
MTH 233 - Calculus II (Core)	3	MTH 232	
<b>Total Credits</b>	<b>15</b>		
<b>3rd Semester</b>			
ENG 102 - Critical Reading (Core)	3	ENG 101	
ENGR 373 - Material of Construction (Major)	3	CHEM 232 + CHEML 232	
Core Elective: Humanities, Social Science (Core)	3	See Course Description	
PHYS 232 + PHYS 232 - Calculus Based Physics I + Calculus	4	MTH 232	
MTH 331 - Calculus III (Core)	3	MTH 233	
<b>Total Credits</b>	<b>16</b>		
<b>4th Semester</b>			
ENGR 344 - Mechanics I (Major)	3	PHYS 232 + PHYS 232	
ENGR 475 - Soil Mechanics (Major)	3	ENGR 248	
PHYS 233 + PHYS 233 - Calculus Based Physics II + Calculus	4	PHYS 232 + PHYS 232	
MTH 340 - Linear Algebra (Core)	3	MTH 232	
ENGR 244 - Engineering Computing and Numerical Analysis (Major)	3	MTH 340 (Corequisite)	
<b>Total Credits</b>	<b>16</b>		
<b>5th Semester</b>			
ENGR 356 + ENGR 356L - Fluid Mechanics (Major) + Fluids Laboratory	4	ENGR 344	
MTH 332 - Differential Equations (Core)	3	MTH 233	
ENGR 358 - Mechanics of Materials (Major)	3	ENGR 344	
ENGR 348 - Mechanics II (Major)	3	ENGR 344	
ENGR 370 - Surveying (Major)	3	MTH 232	
<b>Total Credits</b>	<b>16</b>		
<b>6th Semester</b>			
STT 342 - Engineering Statistics (Major)	3	ENGR 244	
ENGR 473 - Structural Analysis (Major)	3	ENGR 358	
ENGR 484 - Engineering Laboratory (Major)	3	ENGR 373	
ENGR 430 - Engineering Hydrology (Major)	3	ENGR 356 + ENGR 356L	
ENGR 474 - Steel Design (Major)	3	ENGR 358	
<b>Total Credits</b>	<b>15</b>		
<b>7th Semester</b>			
ENGR 444 - Engineering Project Management (Major)	3	ENGR 231	
ENGR 485 - Hydraulic Structures (Major)	3	ENGR 356 + ENGR 356L	
ENGR 476 - Concrete Design I (Major)	3	ENGR 473	
ENG 203 - Research & Project - Writing (Core)	3	ENG 102	
ENGR 493 - Highway Engineering and Design (Major)	3	ENGR 370	
<b>Total Credits</b>	<b>15</b>		
<b>8th Semester</b>			
ENGR 486 - Concrete Design II (Major)	3	ENGR 476	
ENGR 477 - Foundation Design (Major)	3	ENGR 476	
Engineering Elective	3	See Course Description	
Engineering Elective	3	See Course Description	
ENGR 491 - Design I (Major)	3	ENG 203 + 75 Credit Hours	
<b>Total Credits</b>	<b>15</b>		
<b>9th Semester</b>			
ENGR 492 - Design II (Major)	3	ENGR 491	
CIV 203 - Civilization III: The Ancient World (Humanities) (Core)	3	CIV 101	
Engineering Elective	3	See Course Description	
<b>Total Credits</b>	<b>9</b>		
<b>Summer/Winter</b>			
ENGR 490 - Engineering Internship (Major)	1	Senior Standing (to be taken alone)	
<b>Program Total Credits</b>	<b>134</b>		
<b>Program Credits</b>			
Core	51 Credits (16 Courses)		
Major	74 Credits (25 Courses)		
Engineering Electives	9 Credits (3 Courses)		
<b>Total</b>	<b>134 Credits (44 Courses)</b>		

#### General Tips and Recommendations

Engineering electives are 200+ Engineering courses.

#### Varied Degree Paths:

Student degree paths may vary slightly from this form. If academic record differs from the courses listed in this form, please contact the Registration