

Binary Program Course Requirements
Case School of Engineering

Civil Engineering
(DRAFT)

Courses equivalent to the following need to be taken prior to admission to Case School of Engineering for all degree programs

Subject Code	Course Number	Course Title	Semester Credit Hours
CHEM	105	Principles of Chemistry I	3
CHEM	106	Principles of Chemistry II	3
CHEM	113	Principles of Chemistry Lab	2
ENGR	131	Elementary Computer Programming	3
MATH	121	Calculus for Science & Engineering I	4
MATH	122	Calculus for Science & Engineering II	4
MATH	223	Calculus for Science & Engineering III	3
MATH	224	Elementary Differential Equations	3
PHYS	121	General Physics I	4
PHYS	122	General Physics II	4
		Humanities and Social Sciences	22
		(including college level writing proficiency)	0
		Physical Education (2 semesters)	0
			55

Other courses for the Civil Engineering major to be taken prior to CSE enrollment

Subject Code	Course Number	Course Title	Semester Credit Hours	
*	ENGR	200	Statics and Strength of Materials	3
*	EMAE	250	Computers in Mechanical Engineering	3

* required course

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Civil Engineering

Fall Year 1

Subject Code	Course Number	Course Title	Hours per Week		Semester Credit Hours
			Class	Lab	
ECIV	310	Strength of Materials	3	0	3
ECIV	211	Civil Engineering Materials	1	3	3
ECIV	320	Structural Analysis 1	3	0	3
ENGL	398N	Professional Communication	3	0	3
ENGR	225	Thermo, Fluid, Heat and Mass Transfer	3	0	4
			13	3	16

Spring Year 1

Subject Code	Course Number	Course Title	Hours per Week		Semester Credit Hours
			Class	Lab	
ECIV	322	Structural Design 1	2	2	3
ECIV	330	Soil Mechanics	3	2	4
ECIV	351	Engineering Hydraulics and Hydrology	3	0	3
ECIV	368	Environmental Engineering	2	2	3
		Approved Elective	3	0	3
			13	6	16

Fall Year 2

Subject Code	Course Number	Course Title	Hours per Week		Semester Credit Hours
			Class	Lab	
ECIV	160	Surveying and Computer Graphics	2	3	3
ECIV	340	Construction Management	3	0	3
ECIV	398	Civil Engineering Senior Project	0	6	3
EMSE	201	Intro to Materials Science and Engineering	3	0	3
		Approved Elective	3	0	3
		Approved Elective	3	0	3
			11	9	18

Spring Year 2

Subject Code	Course Number	Course Title	Hours per Week		Semester Credit Hours
			Class	Lab	
ENGR	210	Intro to Circuits and Instrumentation	3	2	4
ECIV	360	Civil Engineering Systems	3	2	3
EMAE	181	Dynamics	3	0	3
PHYS	221	Intro to Modern Physics (or)	4	0	3
		Approved Natural Science Elective	-	-	-
		Approved Elective	3	0	3
			16	4	16