

Civil Engineering (2013-2014)

Below is the *advised sequencing* of courses for this degree,
the **official degree requirements** are found in the University General Catalog.

This plan assumes that you start in the Fall Semester. Notice that 300 and 400 level courses are only offered once a year.

See 3-year plan for information when courses are offered.

FRESHMAN YEAR				SOPHOMORE YEAR			
Fall Semester		Spring Semester		Fall Semester		Spring Semester	
Course	Units	Course	Units	Course	Units	Course	Units
ENGR 102 Intro to Engr.	3	MATH 129 Calculus 2	3	CE 210 Engr. Graphics	3	CE 215 Mech of Solids	3
MATH 122A/B Calculus 1	3	MCB 181R,L or GEOS 251	4	CE 214 Statics	3	CE 218 Mech of Fluids	3
CHEM 151 Lecture/lab	4	PHYS 141 Intro Mech	4	MATH 223 Calculus 3	4	CE 251 Surveying	3
ENGL 101 1st Yr Comp 1	3	ENGL 102 1st Yr Comp 2	3	PHYS 241 or CHEM 152	4	MATH 254 Diff Equ	3
Tier 1 (TRAD) Elective*	3	Tier 1 INDV*	3	Tier 1 TRAD*	3	Tier 1 INDV*	3
TOTAL		TOTAL		TOTAL		TOTAL	
16		17		17		15	

****ADVANCED STANDING IS REQUIRED FOR ALL 300/400 LEVEL COURSES (GPA=>2.25)**

JUNIOR YEAR				SENIOR YEAR			
Fall Semester		Spring Semester		Fall Semester		Spring Semester	
Course	Units	Course	Units	Course	Units	Course	Units
CE 301 Engr Comm	2	CE 310 Prob & Stat in CE	3	CE 408A Issues in Engr Prac	3	CE 408B Senior Design	3
CE 303 Num Anal for CE	3	CE 323 Hydr Engr	4	CE 335 or Tech Elect***	3	CE Tech Elect***	3
CE 333 Elem Struc Anal	3	CE 334 or Tech Elect***	3	CE Tech Elect***	3	CE Tech Elect***	3
CE 343 Geot. Engr & Des.	4	CE 370R,L Wat Sup/Wast Sys	4	CE Tech Elect***	3	CE Lab Elect****	1
CE 363 Trans Engr	4	CE Lab Elect****	1	Engr Sci Elect**	3	Tier 2 Art/Hum*	3
TOTAL		TOTAL		TOTAL		TOTAL	
16		15		16		16	

TOTAL UNITS FOR DEGREE = 128

#**MATH 122A/B** is a 5 unit version of MATH 125. Students taking MATH 122 should consider delaying the Tier 1 INDV course to maintain a reasonable academic load.

***INDV and TRAD** courses must meet University general education requirements. One course must be recognized by the University as focusing on non-western culture, race, gender or ethnicity. TRAD 101 satisfies this requirement and is highly recommended as one of the two TIER 1 (TRAD) courses required. For a civil engineering major, take any Economics class that meets the required TIER 2 (INDV).

** **Engr. Science Elective** - ENGR 211P (Eng Economics) and 2 of the following: ENGR 211I (Dynamics), 211K (Thermodynamics), 211M (Circuits), 211R (Material Science).

*** To meet the **CE Tech. Elective requirement**, students must select 5 courses from the list of acceptable technical electives. A minimum of two of the five technical electives must be taken from the list of design-oriented technical electives. **Prerequisites for these courses are available on the Electronic Catalog.**

****To meet the **CE Lab requirement**, students must complete each of the following laboratory courses: CE 329 (Hydraulics), CE 349 (Soils), CE 389 (Engineering Materials). Co-requisites are as follows: CE 329 (CE 218); CE 349 (CE 343); CE 389 (None).