

Baccalaureate Civil Engineering & Honors Curriculum Fall 2009

FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
<u>Freshman Year</u>			
Chem 105 Principles of Chem I (1 yr hs chem. or Chem 101; Math 107 or c//)	4	Biol 102 OR MBioS 101 ²	4
Engl 298 Intro Writing	3	UH 280	3
EconS 198 Economics Honors ⁶	3	Math 172 Calculus II or Math 182 (Math 171) ^{1, 7}	4
Math 171 Calculus I (Math 107) ¹	4	Math 220 Linear Alg or Math 230 (Math 171 c//)	2
ENGR 120 Innovation in Design	<u>2</u>	ForL 203	<u>4</u>
	16		17
<u>Sophomore Year</u>			
CE 211 Statics (Math 172 c//; Phys 201 c//) ¹	3	ME 212 Dynamics (CE 211)	3
ForL 204	4	CE 215 Mech of Material (CE 211)	3
EE 221 Numerical Computing for Engrs (Math 172, 220)	2	Cst M 254 Const Graphics (certified)	2
Math 273 Calculus III or Math 283 (Math 172)	2	Math 315 Diff Eq (Math 273, 220 c//)	3
Phys 205 Science & Eng Honors Phys (Math 171) ^{1, 7}	<u>5</u>	ME 220 Materials Lab (CE 215 c//)	1
	16	Phys 202 Classical Phys (Phys 201)	
		OR Geo 102 OR Chem 106 or 116 ^{2, 7}	<u>4</u>
CERTIFY ¹			16
<u>Junior Year</u>			
Writing Portfolio: must complete after 60 credits			
Apply for Graduation after 70 credits			
CE 302 Intro to Surveying (Math 171) ⁵	2	CE 303 CE Computer Applications (CstM 254)	2
CE 315 Fluid Mechanics (ME 212; Math 315) ⁵	3	CE 322 Trans Engr (Math/Stat 360 c//; CE 301) ⁵	3
CE 317 Geotech Engr (CE 215; CE 315 c//) ⁵	3	CE 351 Water Resources (CE 315) ⁵	3
CE 330 Structural Engineering (CE 215) ⁵	3	Math/Stat 360 or 370 Statistics (Math 172)	3
CE 341 Environmental Engr (Chem 105; MBioS 101 rec)	3	Engl 402 Technical Writing	3
EE 304 Electric Circuits (Math 315 c//)	<u>2</u>	UH 370	<u>3</u>
	16		17
<u>Senior Year</u>			
<u>All students required to take Fundamentals of Engineering Exam and fulfill the Experiential Requirement prior to graduation.</u>			
UH 380	3	CE 465 Integrated C E Des [M] ^{4*}	3
CE Laboratory (CE 400, 414, 415, 416) ⁵	3	CE 466 FE Exam Review	1
CE Electives ³	9	CE 480 Ethics & Professionalism [M] ⁵	1
CE 463 Engineering Administration	<u>3</u>	UH 390	3
	18	CE Electives ³	<u>9</u>
			17

See the department for senior year options.

¹These classes must be completed prior to certification.

²Course strongly recommended for an Environmental Engineering emphasis.

³Elective Courses: The total credit hours for elective courses must be distributed such that at least 3 courses, not including the lab are DES (design emphasis) in order for a student to qualify for a degree. CE electives including CE laboratory will be selected from at least two different areas (environmental, geotechnical, hydraulics, structural, and transportation/pavement).

⁴CE 465 will fulfill the Honors Senior Thesis Option and the Research Seminar.

⁵Certified major in C E, or instructor permission required.

⁶EconS 198 is an approved substitution for UH 270 for Engineering majors.

⁷Engineering students who take Phys 205, Chem 116, or Math 182 do not take U H 290.

*Two CE elective courses must be completed before enrollment in CE 465.

**Removed ComSt 102 as requirement for Honor's students due to the extensive writing, presenting, essays, research, and discussions in seminar courses.