

# Civil Engineering Flow Chart 2017-2018

Name \_\_\_\_\_  
Student ID# \_\_\_\_\_

	Semester Course					Hours	Semester Offered	Course Number	Title	Pre-Requisites		
	Hours	Hours	Hours	Hours	Hours							
Term 1	CHM 114 Gen Chem	FSE 100 Intro to CE	ENG 101 Fr Comp	MAT 265 Calc I	HU/SB Elective	ASU 101-CEE ASU Exp	2	F, S	FSE 100	Intro Civil Engineering	CEE student	
							3	F, S, SU	CEE 210	Statics	FSE 100, MAT 266, PHY 121/122	
							3	F, S, SU	CEE 212	Dynamics	CEE 210, MAT 275	
							3	F, S, SU	CEE 213	Deformable Solids	CEE 210, MAT 275	
							3	F, S, SU	CEE 300	Engineering Business Practice	Junior/senior standing, MAT 267	
	4	2	3	3	3	1					16	
Term 2	MAT 242 Lin Alg	ENG 102 Fr Comp	MAT 266 Calc II	PHY 121 & 122 Physics I	HU/SB & G Elective		4	F, S	CEE 321	Structural Analysis & Design	CEE 212, CEE 213	
							4	F, S, SU	CEE 341	Fluid Mechanics	CEE 212, CEE 213, pre/co-req CEE 384	
							4	F, S, SU	CEE 351	Geotechnical Engineering	CEE 213	
							4	F, S, SU	CEE 353	Civil Engineering Materials	CEE 213	
							4	F, S, SU	CEE 361	Intro to Envrn Engineering	CEE 213, CHM 114 or CHM 116 (D), pre/co-req IEE 380 (D)	
	2	3	3	3+1	3						15	
Term 3	CEE 210 Statics	MAT 267 Calc III	PHY 131 & 132 Physic II	MAT 275 Mod Diff O	ECN 211 or 212		3	F, S, SU	CEE 372	Transportation Engineering	CEE 213, pre/co-req IEE 380 (D)	
							3	F, S, SU	CEE 384	Numerical Methods	MAT 242, MAT 275, pre/co-req MAT 267	
							3	F, S, SU	CEE 400	Earth Systems Eng Mgt	CEE 300	
							4	F, S	CEE 486	Integrated Civil Eng Design	last semester and department consent	
												16
Term 4	Basic Sci Elective	CEE 213 Def Solids	CEE 212 Dynamics	IEE 380 Prob/Stat	HU/SB & C Elective		4	F, S, SU	EEE 202	Circuits I	MAT 274 or 275, PHY 131 (D)	
							3	F, S, SU	MAE 241	Intro to Thermofluids I	MAT 267, PHY 121 (Extra Hour needed)	
							3	F, S, SU	IEE 380	Prob Stats Eng Prob Solving	MAT 266 or MAT 271	
												15
Term 5	CEE 384 Num Meth	CEE 353 CE Mat	CEE 321 Struct Analys	CEE 351 Geo Eng			3	F, S, SU	MAT 242	Elementary Linear Algebra	MAT 265	
							3	F, S, SU	MAT 265	Calculus for Engineers I	MAT 170 or equiv	
							3	F, S, SU	MAT 266	Calculus for Engineers II	MAT 265	
							3	F, S, SU	MAT 267	Calculus for Engineers III	MAT 266	
							3	F, S, SU	MAT 275	Modern Differential Equations	MAT 266	
	3	4	4	4							15	
Term 6	MAE 241 or EEE 202	CEE 372 Trans Eng	CEE 341 Fluid Mech	CEE 361 Env Eng			3	F, S, SU	PHY 121	Univ Physics I: Mechanics	MAT 265 , pre/co-req MAT 266	
							1	F, S, SU	PHY 122	Univ Physics Lab I	pre/co-req PHY 121	
							3	F, S, SU	PHY 131	Univ Physics II: Elect & Mag	MAT 266, PHY 121, pre/co-req MAT 267	
							1	F, S, SU	PHY 132	Univ Physics Lab II	pre/co-req PHY 131	
												15
Term 7	CEE 300 Eng Bus	Design Elective	Tech Elective	Tech Elective	Tech Elective		4	F, S, SU	CHM 114	General Chemistry	1 year high school chemistry	
												15
Term 8	CEE 400 Erth Sys	Design Elective	Tech Elective	CEE 486 Int Design								
												13
<b>General Studies - 15 hours (5 classes)</b>												
HU												
HU												
SB		ECN										
SB												
UD		CEE 400										
C												
G												
H		CEE 400										

**TOTAL: 120**

<b>TECH ELECTIVES</b>		<b>DESIGN ELECTIVES</b>
Structures	CEE 420, 421, 423, 432	420 or 421
Hydro Systems	CEE 440, 441, 466	441 or 466
Environmental	CEE 462, 467	462
Geotechnical	CEE 452	452
Transportation	CEE 412, 474, 475, 483	412, 475
Other	CEE 281 470, 481, 485, 494, CON 493,453	
<b>Recommended Basic Science:</b>	GLG 101	
<b>Recommended SB:</b>	COM 100, 110, 320, GCU 141, 361, 421, 442	
<b>Recommended HU:</b>	CEE 181, CON 101, APH 100, PUP 100, 200	

**Notes**  
 F-Fall, S-Spring, SU-Summer  
 All pre-reqs require a "C" minimum, unless otherwise specified  
 Technical and design electives can be replaced by independent study CEE 499 or 500-  
 level courses for seniors with a GPA of 3.0 or better and an approved petition