

## Civil Engineering Flow Chart 2016-2017

	Semester Course Hours					Semester Course Hours	Semester Offered	Course Number	Title	Pre-Requisites
Term 1	CHM 114	FSE 100	ENG 101	MAT 265	HU/SB	16	F, S	FSE 100	Intro Civil Engineering	CEE student
	Gen Chem	Intro to CE	Fr Comp	Calc I	Elective		F, S, SU	CEE 210	Statics	FSE 100, MAT 266, PHY 121/122
							F, S, SU	CEE 212	Dynamics	CEE 210, MAT 275
							F, S, SU	CEE 213	Deformable Solids	CEE 210, MAT 275
	4	2	3	3	3		1			
Term 2	MAT 242	ENG 102	MAT 266	PHY121/122	HU/SB	15	F, S, SU	CEE 300	Engineering Business Practice	junior/senior standing, MAT 267
	Lin Alg	Fr Comp	Calc II	Physics I	Elective		F, S	CEE 321	Structural Analysis & Design	CEE 212, CEE 213, pre/co-req CEE 384
							F, S, SU	CEE 341	Fluid Mechanics	CEE 212, CEE 213, pre/co-req CEE 384
							F, S, SU	CEE 351	Geotechnical Engineering	CEE 213
	2	3	3	3+1	3					
Term 3	CEE 210	MAT 267	PHY131/132	MAT 275	ECN	16	F, S, SU	CEE 372	Transportation Engineering	CEE 213, pre/co-req IEE 380 (D)
	Statics	Calc III	Physic II	Mod Diff O	211/212		F, S, SU	CEE 384	Numerical Methods	MAT 242, MAT 275, pre/co-req MAT 267
							F, S, SU	CEE 400	Earth Systems Eng Mgt	CEE 300
							F, S	CEE 486	Integrated Civil Eng Design	last semester and department consent
	3	3	3+1	3	3					
Term 4	Basic Sci	CEE 213	CEE 212	IEE 380	HU/SB	15	F, S, SU	EEE 202	Circuits I	MAT 274 or 275, PHY 131 (D)
	Elective	Def Solids	Dynamics	Prob/Stat	Elective		F, S, SU	MAE 240	Thermofluids I	CEE 212
							F, S, SU	IEE 380	Prob Stats Eng Prob Solving	MAT 266 or MAT 271
	3	3	3	3	3					
Term 5	CEE 384	CEE 353	CEE 321	CEE 351		15	F, S, SU	MAT 242	Elementary Linear Algebra	MAT 265
	Num Meth	CE Mat	Struct Analys	Geo Eng			F, S, SU	MAT 265	Calculus for Engineers I	MAT 170 or equiv
							F, S, SU	MAT 266	Calculus for Engineers II	MAT 265
							F, S, SU	MAT 267	Calculus for Engineers III	MAT 266
	3	4	4	4			F, S, SU	MAT 275	Modern Differential Equations	MAT 266
Term 6	MAE 240 or	CEE 372	CEE 341	CEE 361		15	F, S, SU	PHY 121	Univ Physics I: Mechanics	MAT 265 , pre/co-req MAT 266
	EEE 202	Trans Eng	Fluid Mech	Env Eng			F, S, SU	PHY 122	Univ Physics Lab I	pre/co-req PHY 121
							F, S, SU	PHY 131	Univ Physics II: Elect & Mag	MAT 266, PHY 121, pre/co-req MAT 267
							F, S, SU	PHY 132	Univ Physics Lab II	pre/co-req PHY 131
	4	3	4	4						
Term 7	CEE 300	Design	Tech	Tech	Tech	15	F, S, SU	CHM 114	General Chemistry	1 year high school chemistry
	Eng Bus	Elective	Elective	Elective	Elective					
	3	3	3	3	3					
Term 8	CEE 400	Design	Tech	CEE 486		13				
	Erth Sys	Elective	Elective	Int Design						
	3	3	3	4						

TOTAL: 120

**General Studies - 15 hours (5 classes)**

HU	CEE 400
HU	
SB	ECN
SB	
UD	CEE 400
C	
G	
H	CEE 400

TECH ELECTIVES	DESIGN ELECTIVES
Structures	CEE 420, 421, 423, 432
Hydro Systems	CEE 440, 441, 466
Environmental	CEE 462, 467
Geotechnical	CEE 452
Transportation	CEE 412, 474, 475, 483
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