

# Construction Engineering Flow Chart 2015-2016

Term	Course Hours	Course Hours	Course Hours	Course Hours	Course Hours	Course Hours	Semester 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 ASU Exp	2
							3
							3
							3
	4	2	3	3	3	1	16
Term 2	MAT 242 Lin Alg	ENG 102 Fr Comp	MAT 266 Calc II	PHY121/122 Physics I	CON 101 Con & Culture		2
							3
							3
							4
	2	3	3	3+1	3		15
Term 3	CNE 210 Statics	MAT 267 Calc III	PHY131/132 Physics II	MAT 275 Mod Diff O	ECN 211/212/201		3
							4
							3
							3
	3	3	3+1	3	3		16
Term 4	CNE 243 Hvy Con Equip	CNE 213 Def Solids	CNE 212 Dynamics	Basic Science	CNE 271 Con Safety		1
							4
							3
							3
	3	3	3	3	3		15
Term 5	IEE 380 Prob/Stats	MAE 240 or EEE 202	CNE 353 CE Mat	CNE 321 Struct Analys	HU/SB Elective		3
							3
							3
							3
	3	4	3	4	3		17
Term 6	CNE 351 Geo Eng	CNE 241 Surveying	CNE 383 Con Est	CNE 400 Elective			4
							4
							3
							3
	4	3	4	3			14
Summer	CNE 484 Internship						3
							3
							3
							3
	1						1
Term 7	CNE 453 Proj Mgt I	Design Elect 420/421/452	Tech Elective	CNE 495 Plan/Sched			3
							1
							3
							1
	3	3	4	3			13
Term 8	Design Elect 420/421/452	CNE 496 Contract Admin	CNE 455 Proj Mgt II	CNE 486 Int Design			4
	3	3	3	4			13

Semester	Course	Semester	Course	Title	Pre-Requisites
Offered	Number	Offered	Number		
F, S	FSE 100	F, S	CON 101	Intro Civil Engineering Construction & Culture	CNE student none
F, S, SU	CNE 210	F, S, SU	CNE 212	Statics	FSE 100, MAT 266, PHY 121/122
F, S, SU	CNE 213	F, S, SU	CNE 213	Dynamics	CNE 210, MAT 275
F, S, SU	CNE 241	F, S, SU	CNE 241	Deformable Solids	CNE 210, MAT 275
F, S	CNE 243	F, S	CNE 243	Surveying	MAT 270
F, S	CNE 271	F, S	CNE 271	Hvy Con Equip, Meth, Materials	none
F, S	CNE 321	F, S	CNE 321	Construction Safety	CNE student
F, S, SU	CNE 351	F, S, SU	CNE 351	Structural Analysis & Design	CNE 212, CNE 213
F, S, SU	CNE 353	F, S, SU	CNE 353	Geotechnical Engineering	CNE 213
F, S	CNE 383	F, S	CNE 383	Civil Engineering Materials	CNE 213
F, S	CNE 400	F, S	CNE 400	Construction Estimating	CNE 243
F, S	CNE 453	F, S	CNE 453	Earth Systems Eng Mgt	CNE student
F, S	CNE 455	F, S	CNE 455	Project Management I	CNE 271, CNE 383, pre/co-req CNE 495
SU	CNE 484	SU	CNE 484	Project Management II	CNE 453, pre/co-req CNE 495
F, S, SU	CNE 486	F, S, SU	CNE 486	Internship	CNE 271
F, S	CNE 495	F, S	CNE 495	Integrated Civil Eng Design	last semester and department consent
F, S	CNE 496	F, S	CNE 496	Planning & Scheduling	CNE 383, CNE 389
F, S	CNE 496	F, S	CNE 496	Contract Administration	CNE 453

**DESIGN ELECTIVES**

F	CEE 420	Steel Structures	CNE 321
S	CEE 421	Concrete Structures	CNE 321
F, S	CEE 452	Foundations	CNE 351
F, S, SU	EEE 202	Circuits I	MAT 275, PHY 131
F, S, SU	MAE 240	Thermofluids I	CNE 212
F, S, SU	IEE 380	Prob Stats Engr Prob Solving	MAT 266
F, S, SU	MAT 242	Elementary Linear Algebra	MAT 265
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
F, S, SU	MAT 275	Modern Differential Equations	MAT 267
F, S, SU	PHY 121	Univ Physics I: Mechanics	MAT 265 , pre/co-req MAT 266
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

13  
TOTAL: 120

**Recommended Basic Science:** GI G 101, CON 106  
**Technical Electives**  
 CON 310, CON 345, CEE 372 (4 hours)  
 CEE 281, 412, 420, 421, 423, 440, 441, 452, 462, 466, 467, 474, 475, 483 (3 hours)  
 CON 345, 405, 445, 448, 457, 494 Sustainable Construction (3 hours)  
 CON 296 Internship, CEE 494 Concrete Canoe, CEE 494 Steel Bridge (1 hour)

**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

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

HU	CNE 400
HU	CON 101
SB	ECN
SB	
UD	CNE 400
C	
G	CON 101
H	CNE 400