

Civil Engineering Flow Chart (Sustainable Engineering Concentration) 13-14

Name: _____

Student ID No.: _____

| Term | Course | | | | | Hours | Semester | Hours | Offered | Number | Title | Pre-Requisites |
|--------|-----------|--------------|-------------|-------------|---------------|---------|----------|---------|----------|----------------------------------|---|--|
| | Hours | Hours | Hours | Hours | Hours | | | | | | | |
| Term 1 | CHM 114 | FSE 100 | ENG 101 | MAT 265 | HU/SB | ASU 101 | 2 | F,S | FSE 100 | Intro Civ Eng | CEE Student | |
| | Gen Chem | Intro to CE | Fr. Comp. | Calc. I | Elective | ASU Exp | 3 | F, S | CEE 181 | Tech, Society & Sust. | | |
| | | | | | | | 3 | F, S,SU | CEE 210 | Statics | CEE 100, MAT 266 (or 271), PHY 121/122 | |
| | 4 | 2 | 3 | 3 | 3 | 1 | 16 | 3 | F, S,SU | CEE 212 | Thermo Materials | CEE 210/211, MAT 275 |
| Term 2 | MAT 242 | ENG 102 | MAT 266 | PHY121/122 | CEE 181 | | 3 | F, S,SU | CEE 213 | Deformable Solids | CEE 210/211, MAT 275 | |
| | Lin Alg | Fr. Comp | Calc. II | Physics I | Tech/Soc/Sust | | 3 | F, S | CEE 300 | Engin Business Practice | CEE 213 | |
| | | | | | | | 4 | F, S | CEE 321 | Structural Anal and Design | CEE 212, CEE 213 | |
| | 2 | 3 | 3 | 3+1 | 3 | | 15 | 4 | F, S | CEE 341 | Fluid Mechanics | CEE 212, CEE 213, pre/co req CEE 384 |
| Term 3 | CEE 210 | MAT 267 | PHY131/32 | MAT 275 | ECN | | 4 | F, S,SU | CEE 351 | Geotechnical Engineering | CEE 213 | |
| | Statics | Calculus III | Physic II | Mod Diff Q | 201/211/212 | | 3 | F,S,SU | CEE 353 | Civil Engineering Materials | CEE 213 | |
| | | | | | | | 4 | F, S,SU | CEE 361 | Intro to Enviro Engineering | CEE 213, CHM 114 or CHM 116 (D), Pre/Co Req IEE 380 | |
| | 3 | 3 | 3+1 | 3 | 3 | | 16 | 4 | F, S, SU | CEE 372 | Transportation Engineering | CEE 213, Pre/Co Req IEE 380 (D) |
| Term 4 | Basic Sci | CEE 213 | CEE 212 | MAE 240 | IEE 380 | | 3 | F, S | CEE 384 | Numerical Methods | MAT 242, 267, 275 | |
| | Elective | Def Solids | Dynamics | Thermo | Prob/Stats | | 3 | F,S | CEE 400 | Earth Systems Engin Mgt | CEE 300 | |
| | | | | | | | 3 | S | CEE 485 | Sustain Civil and Environl Engin | CEE 300, MAT 242 | |
| | 3 | 3 | 3 | 4 | 3 | | 16 | 3 | F,S | CEE 486 | Integrated Civil Eng Design | Last Semester and Dept Consent |
| Term 5 | CEE 384 | CEE 353 | CEE 341 | CEE 361 | | | 4 | F,S | MAE 240 | Thermofluids I | CEE 212 | |
| | Num Meth | CE Mat | Fluid Mech | Environ Eng | | | 3 | F,S,SU | IEE 380 | Prob Stats Engr Prob Solving | MAT 266 or Mat 271 | |
| | | | | | | | 3 | F, S,SU | MAT 242 | Elem Linear Algebra | MAT 265 or MAT 270 | |
| | 3 | 3 | 4 | 4 | | | 14 | 3 | F,S,SU | MAT 265 | Calc Analyt Geom I | Grade of "C" or better in MAT 170 or equiv |
| Term 6 | CEE 300 | CEE 372 | CEE 321 | CEE 351 | | | 3 | F, S,SU | MAT 266 | Calc Analyt Geom II | MAT 265 | |
| | Eng Bus | Trans Eng | Struc Dsgn | Geo Eng | | | 3 | F, S,SU | MAT 267 | Calc Analyt Geom III | MAT 266 | |
| | | | | | | | 3 | F, S,SU | MAT 275 | Elem Diff Equns | MAT 267 | |
| | 3 | 4 | 4 | 4 | | | 15 | 3 | F, S,SU | PHY 121 | Univ Physics I: Mech | MAT 265 |
| Term 7 | CEE 400 | Design | SOS 300 | CEE 494 | Design | | 1 | F, S,SU | PHY 122 | Univ Physics I Lab | Pre or co-req PHY 121 | |
| | Erth sys | Elective | Adv Con Sus | Eng & Mat | Elective | | 3 | F, S,SU | PHY 131 | Univ Phys II: Elec Mag | PHY 121; MAT 251; co-req MAT 252 | |
| | | | | | | | 1 | S, SS | PHY 132 | Univ Physics II Lab | pre-or co-req PHY 131 | |
| | 3 | 3 | 3 | 3 | 3 | | 15 | 4 | F, S,SU | CHM 114 | General Chemistry | 1 year high school chemistry |
| Term 8 | SB | Tech | CEE485 | CEE 486 | | | | | | | | |
| | Elective | Elect | Sust CE | Int Design | | | 13 | | | | | |
| | 3 | 3 | 3 | 4 | | | | | | | | |

General Studies 15 hrs (5 classes)

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|----|---------|
| HU | CEE 400 |
| HU | CEE 181 |
| SB | ECN |
| SB | |
| UD | CEE 400 |
| C | |
| G | |
| H | CEE 400 |

TOTAL 120

DESIGN ELECTIVES

CEE 412,420, 421, 441, 452, 462, 466, 475

TECH ELECTIVES

CEE 281, 412, 420, 421, 452, 474, 475, 481, 483, BIO 320, BCH 361, CHM 302, 341, PUP 442, 485, CON 453

Recommended Basic Science: GLG 101

Recommended SB: GCU 141, 361, 362, 442

Recommended HU: CON 101, APH 100, PUP 200

Notes

F-Fall, S-Spring, SU-Summer

All pre-reqs are with a C min. unless otherwise specified

 Critical courses used for transfer students

3 (D)

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