Construction Engineering Undergraduate Curriculum (UCORE)
Fall 2016

FRESHMAN YEAR

First Semester

(4) Chem 105 Principles of Chem I [PSCI]
((Pre Req.) 1 yr hs Chem or Chem 101; Math 106)
(3) History 105 [ROOTS]
(3) English 101 Intro Writing [WRTG]
(4) Math 171 Calculus I [QUAN] (Math108)[1]
(3) ECONS 101 Micro Econ [SSCI]

(17) Total Hours

Second Semester

(4) Biol 102 **OR** MBioS 101 [BSCI]
(3) Creative & Prof Arts [ARTS]
(4) Math 172 Calculus II (Math 171)[1]
(3) Humanities [HUM]
(2) CstM 102 Intro to CM

(16) Total Hours

SOPHOMORE YEAR

First Semester

(3) Diversity [DIVR]
(3) CE 211 Statics(Math 172 c//; Phys 201 c//)[1]
(2) CstM 254 Construction Graphics (certified Major)
(4) Phys 201 Classical Phys [PSCI] (Math 171)[1]
(3) Blaw 210 Law & Legal Envir.

(15) Total Hours

CERTIFY[1]

Second Semester

(3) ME 212 Dynamics (CE 211, Math 172)
(3) CE 215 Mech of Materials (CE 211)
(3) Math/Stat 360 or 370 Statistics (Math 172)
(4) ConE 252 Const. Admin.
(1) ME 220 Materials Lab (CE 215 c//)
(3) Acctg 230 Intro Accounting

(17) Total Hours

JUNIOR YEAR

Writing Portfolio must complete after 60 semester credits

First Semester

(3) CstM 356 Sub-Structures
(2) CE 302 Intro to Surveying (Math 171)
(3) CE 315 Fluid Mechanics (ME 212)
(3) Com 400 Technical Communication [COMM]
(3) CE 330 Structural Engineering (CE 215)
(3) ConE 360 H/C Estimating 1

(17) Total Hours

Second Semester

(3) CE 433 Reinforced Concrete Des. (CE 330)
(3) CstM 357 Safety
(2) CE 303 CE Computer Applications
(4) CE 317 Geotech Engr (CE 215; CE315 c//) [M]
(3) ConE 361 H/C Estimating 2

(15) Total Hours

SENIOR YEAR

All students required to take Fundamentals of Engineering Exam and fulfill the Experiential Requirement prior to graduation.

First Semester

(3) CE 463 Engineering Administration
(1) CE 466 FE Exam Review
(3) CstM 460 Cost Control
(3) CstM 462 Plan & Scheduling
(3) CE 400 CE Materials (Engl 402; Math/Stat 360 /370 or c//)
(3) Professional Elective

(16) Total Hours

Second Semester

(3) CE 465 Integrated C E Des [M] [CAPS][2]
(1) CE 480 Ethics & Professionalism [M]
(3) CstM 473 Human Factors/Mngt.
(3) CstM 451 Delivery Systems
(6) Professional Electives

(16) Total Hours

The alternate senior year schedules shown on the next page are suggested for those students interested in studying with a Structures/Buildings, Infrastructure/Pavement, Foundations/Heavy Civil, or Environmental Facilities emphasis. They would substitute for the senior year above.

[1]Classes that must be completed prior to certification.

Structures/Buildings Emphasis

First Semester	*Second Semester*
(3) CE 463 Engineering Administration	**(3)** CE 431 Structural Steel Design (CE 330)
(1) CE 466 FE Exam Review	**(1)** CE 480 Ethics & Professionalism [M]
(3) CstM 460 Cost Control	**(3)** CE 465 Integrated C E Des [M] [CAPS][2]
(3) CstM 462 Plan & Scheduling	**(3)** CstM 473 Human Factors/Mngt.
(3) CE 400 CE Materials (Engl 402; Math/Stat 360 /370 or c//)	**(3)** CstM 451 Delivery Systems
(3) CE 436 Design of Timber Structures (CE 330)	**(3)** Professional Elective
(16) Total Hours	**(16)** Total Hours

Infrastructure/Pavement Emphasis

First Semester	*Second Semester*
(3) CE 463 Engineering Administration	**(3)** CE 473 Pavement Design (CE 317; CE 322 c//)
(1) CE 466 FE Exam Review	**(1)** CE 480 Ethics & Professionalism [M]
(3) CstM 460 Cost Control	**(3)** CE 465 Integrated C E Des [M] [CAPS][2]
(3) CstM 462 Plan & Scheduling	**(3)** CstM 473 Human Factors/Mngt.
(3) CE 400 CE Materials (Engl 402; Math/Stat 360 /370 or c//)	**(3)** CstM 451 Delivery Systems
(3) CE 322 Transp Engr (Math/Stat 360/370 c//; CE 302 c//)	**(3)** Professional Elective
(16) Total Hours	**(16)** Total Hours

Foundations/Heavy Civil Emphasis

First Semester	*Second Semester*
(3) CE 463 Engineering Administration	**(3)** CE 435 Foundations (CE 317)
(1) CE 466 FE Exam Review	**(1)** CE 480 Ethics & Professionalism [M]
(3) CstM 460 Cost Control	**(3)** CE 465 Integrated C E Des [M] [CAPS][2]
(3) CstM 462 Plan & Scheduling	**(3)** CstM 473 Human Factors/Mngt.
(3) CE 400 CE Materials (Engl 402; Math/Stat 360 /370 or c//)	**(3)** CstM 451 Delivery Systems
(3) Professional Elective	**(3)** Professional Elective
(16) Total Hours	**(16)** Total Hours

Environmental Facilities Emphasis

First Semester	*Second Semester*
(3) CE 463 Engineering Administration	**(3)** CE 442 Water/Waste (CE 341)
(1) CE 466 FE Exam Review	**(1)** CE 480 Ethics & Professionalism [M]
(3) CstM 460 Cost Control	**(3)** CE 465 Integrated C E Des [M] [CAPS][2]
(3) CstM 462 Plan & Scheduling	**(3)** CstM 473 Human Factors/Mngt.
(3) CE 400 CE Materials (Engl 402; Math/Stat 360 /370 or c//)	**(3)** CstM 451 Delivery Systems
(3) CE 341 Environmental Engr (Chem 105; MBioS 101 rec)	**(3)** Professional Elective
(16) Total Hours	**(16)** Total Hours

[2]CE 465 must be taken in the final semester.