

Construction Engineering Undergraduate Curriculum (UCORE)

Fall 2018

FRESHMAN YEAR

<u>First Semester</u>	<u>Second Semester</u>
(4) Chem 105 Principles of Chem I [PSCI] ((Pre Req.) 1 yr hs Chem or Chem 101; Math 106) (3) ECONS 101 Micro Econ [SSCI] (3) History 105 [ROOTS] (3) Humanities [HUM] (4) Math 171 Calculus I [QUAN] (Math108) ¹ (17) Total Hours	(4) Biol 102 OR MBioS 101 [BSCI] (3) Creative & Prof Arts [ARTS] (4) Math 172 Calculus II (Math 171) ¹ (3) English 101 Intro Writing [WRTG] (2) CstM 102 Intro to CM (16) Total Hours

SOPHOMORE YEAR

<u>First Semester</u>	<u>Second Semester</u>
(3) Diversity [DIVR] (3) CE 211 Statics(Math 172 c//; Phys 201 c//) ¹ (2) CstM 254 Construction Graphics (4) Phys 201 Classical Phys [PSCI] (Math 171) ¹ (3) Blaw 210 Law & Legal Envir. (15) Total Hours CERTIFY¹	(3) ME 212 Dynamics (CE 211, Math 172) (3) CE 215 Mech of Materials (CE 211) (3) Stat 360 or 370 Statistics (Math 172) (3) CE 463 Engineering Admin. (1) ME 220 Materials Lab (CE 215 c//) (3) Acctg 230 Intro Accounting (16) Total Hours

JUNIOR YEAR

Writing Portfolio must complete after 60 semester credits

<u>First Semester</u>	<u>Second Semester</u>
(2) ConE 252 Const. Admin (CstM 254; Math 172) (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 (ConE 252 c//) (16) Total Hours	(3) CE 414 Struct Des Lab (CE 330; Stat 360/370 c//) (3) CstM 356 Earthwork & Equipment (2) CE 303 CE Computer Applications (4) CE 317 Geotech Engr (CE 215; CE315 c//) [M] (3) ConE 361 H/C Estimating 2 (ConE 360) (2) ConE 351 Delivery Systems (17) Total Hours

SENIOR YEAR

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

<u>First Semester</u>	<u>Second Semester</u>
(3) CE 433 Reinforced Concrete Des. (CE 414) (1) CE 466 FE Exam Review (3) CstM 460 Cost Control (3) CstM 462 Plan & Scheduling (CE 317) (3) CE 400 CE Materials (Stat 360 /370 or c//) (3) Professional Elective (16) Total Hours	(3) CE 465 Integrated C E Des [M] [CAPS] ² (1) CE 480 Ethics & Professionalism [M] (3) CstM 473 Human Factors/Mngt. (3) CstM 484 Temporary Structures (3) CstM 368 Safety & Health (3) Professional Elective (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.

¹Classes that must be completed prior to certification.

Structures/Buildings Emphasis

<u>First Semester</u>	<u>Second Semester</u>
(3) CE 433 Reinforced Concrete Des. (CE 414) (1) CE 466 FE Exam Review (3) CstM 460 Cost Control (3) CstM 462 Plan & Scheduling (CE 317) (3) CE 400 CE Materials (Stat 360 /370 or c//) (3) CE 436 Design of Timber Structures (CE 414) (16) Total Hours	(3) CE 431 Structural Steel Design (CE 414) (1) CE 480 Ethics & Professionalism [M] (3) CE 465 Integrated C E Des [M] [CAPS] ² (3) CstM 473 Human Factors/Mngt. (3) CstM 484 Temporary Structures (3) CstM 368 Safety & Health (16) Total Hours

Infrastructure/Pavement Emphasis

<u>First Semester</u>	<u>Second Semester</u>
(3) CE 433 Reinforced Concrete Des. (CE 414) (1) CE 466 FE Exam Review (3) CstM 460 Cost Control (3) CstM 462 Plan & Scheduling(CE 317) (3) CE 400 CE Materials (Stat 360 /370 or c//) (3) CE 322 Transp Engr (Stat 360/370 c//; CE 302 c//) (16) Total Hours	(3) CE 473 Pavement Design (CE 317; CE 322 c//) (1) CE 480 Ethics & Professionalism [M] (3) CE 465 Integrated C E Des [M] [CAPS] ² (3) CstM 473 Human Factors/Mngt. (3) CstM 484 Temporary Structures (3) CstM 368 Safety & Health (16) Total Hours

Foundations/Heavy Civil Emphasis

<u>First Semester</u>	<u>Second Semester</u>
(3) CE 433 Reinforced Concrete Des. (CE 414) (1) CE 466 FE Exam Review (3) CstM 460 Cost Control (3) CstM 462 Plan & Scheduling (CE 317) (3) CE 400 CE Materials (Stat 360 /370 or c//) (3) Professional Elective (16) Total Hours	(3) CE 435 Foundations (CE 317) (1) CE 480 Ethics & Professionalism [M] (3) CE 465 Integrated C E Des [M] [CAPS] ² (3) CstM 473 Human Factors/Mngt. (3) CstM 484 Temporary Structures (3) CstM 368 Safety & Health (16) Total Hours

Environmental Facilities Emphasis

<u>First Semester</u>	<u>Second Semester</u>
(3) CE 433 Reinforced Concrete Des. (CE 414) (1) CE 466 FE Exam Review (3) CstM 460 Cost Control (3) CstM 462 Plan & Scheduling(CE 317) (3) CE 400 CE Materials (Stat 360 /370 or c//) (3) CE 341 Environmental Engr (Chem 105; MBioS 101 rec) (16) Total Hours	(3) CE 442 Water/Waste (CE 341) (1) CE 480 Ethics & Professionalism [M] (3) CE 465 Integrated C E Des [M] [CAPS] ² (3) CstM 473 Human Factors/Mngt. (3) CstM 484 Temporary Structures (3) CstM 368 Safety & Health (16) Total Hours

²CE 465 must be taken in the final semester.