

Construction Engineering Undergraduate Curriculum (UCORE) Fall 2018

FRESHMAN YEAR

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

SOPHOMORE YEAR

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

JUNIOR YEAR

Writing Portfolio must complete after 60 semester credits

<u>First Semester</u>	<u>Second Semester</u>
<p>(2) ConE 252 Const. Admin (CstM 254; Math 172)</p> <p>(2) CE 302 Intro to Surveying (Math 171)</p> <p>(3) CE 315 Fluid Mechanics (ME 212)</p> <p>(3) Com 400 Technical Communication [COMM]</p> <p>(3) CE 330 Structural Engineering (CE 215)</p> <p>(3) ConE 360 H/C Estimating 1 (ConE 252 c//)</p> <p>(16) Total Hours</p>	<p>(3) CE 414 Struct Des Lab (CE 330; Stat 360/370 c//)</p> <p>(3) CstM 356 Earthwork & Equipment</p> <p>(2) CE 303 CE Computer Applications</p> <p>(4) CE 317 Geotech Engr (CE 215; CE315 c//) [M]</p> <p>(3) ConE 361 H/C Estimating 2 (ConE 360)</p> <p>(2) ConE 351 Delivery Systems (ConE 252)</p> <p>(17) Total Hours</p>

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>
<p>(3) CE 433 Reinforced Concrete Des. (CE 414)</p> <p>(1) CE 466 FE Exam Review</p> <p>(3) CstM 460 Cost Control</p> <p>(3) CstM 462 Plan & Scheduling (CE 317)</p> <p>(3) CE 400 CE Materials (ME 220; Stat 360 /370c//)</p> <p>(3) Professional Elective</p> <p>(16) Total Hours</p>	<p>(3) CE 465 Integrated C E Des [M] [CAPS]²</p> <p>(1) CE 480 Ethics & Professionalism [M]</p> <p>(3) CstM 473 Human Factors/Mngt.</p> <p>(3) CstM 484 Temporary Structures</p> <p>(3) CstM 368 Safety & Health</p> <p>(3) Professional Elective</p> <p>(16) Total Hours</p>

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 (ME 220; Stat 360 /370c//) (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 (ME 220; Stat 360 /370c//) (3) CE 322 Transp Engr (Stat 360/370 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 (ME 220; Stat 360 /370c//) (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 (ME 220; Stat 360 /370c//) (3) CE 341 Environmental Engr (Chem 105) (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.