

Major: Construction Engineering and Management, B.S.: 124 units
2018-2019 Academic Year

| | Fall | | Units | Spring | | Units | Comments |
|---------------|--|---|-----------|---|--|-----------|----------|
| | Courses | Requirements/Comments | | Courses | Requirements/Comments | | |
| Year 1 | CE 1101 Construction Drafting | Prereq: BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 1101L and College Level Math. | 2 | CE 1011 Surveying Engineering | Prereq: CE 1001L, CE 1101L, or CE 127; and MAT 114, MAT 1140, MAT 130, or MAT 1300; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 1011L or CE 134L. | 3 | |
| | MAT 1140 Calculus I (B4) | Prereq: C or better in MAT 1050 and MAT 1060, or appropriate score on MDTP or ALEKS placement test. | 4 | CE 1011L Surveying Engineering Laboratory | Prereq: CE 1001L, CE 1101L, or CE 127L; MAT 114, MAT 1140, MAT 130, or MAT 1300; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 1011 or CE 134. | 1 | |
| | EGR 1000 Engineering, Society, and You (E) | | 2 | MAT 1150 Calculus II (B4) | Prereq: MAT 1140, MAT 115B, MAT 1140C, AP Calc AB >=3, or AP Calc BC >=3. | 4 | |
| | GE Area A1: Oral Communication | | 3 | GE Area A2: Written Communication | | 3 | |
| | BIO 1110 Life Science (B2) | Prereq: Undergraduate standing. | 2 | PHY 1510 Introduction to Newtonian Mechanics (B1) | Prereq: C- or better in MAT 114 or MAT 1140. Coreq: PHY 1510L. | 3 | |
| | CE 1101L Construction Drafting Laboratory | Prereq: BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 1101 or CE 134. | 1 | PHY 1510L Newtonian Mechanics Laboratory (B3) | | 1 | |
| | EGR 1000L Engineering, Society, and You Laboratory (E) | | 1 | CHM 1210 General Chemistry I (B1) | Prereq: C or better in MAT 12, 105, 106, 112, 114, 115, 116, 120, 125, 130, 191, 214, 216, 224, MAT 1050, MAT 1052, MAT 1060, MAT 1140, MAT 1150, MAT 1200, MAT 1250, MAT 1300, MAT 1310, MAT 1910, MAT 2140, MAT 2240, MAT 2250, STA 120, or STA 1200; or C- or better Coreq: CHM 1210L. | 3 | |
| | | | 0 | CHM 1210L General Chemistry Laboratory I (B3) | Prereq: C or better in MAT 12, 105, 106, 112, 114, 115, 116, 120, 125, 130, 191, 214, 216, 224, MAT 1050, MAT 1052, MAT 1060, MAT 1140, MAT 1150, MAT 1200, MAT 1250, MAT 1300, MAT 1310, MAT 1910, MAT 2140, MAT 2240, MAT 2250, STA 120, or STA 1200; or C- or better Coreq: CHM 1210. | 1 | |
| | Total Units | | 15 | Total Units | | 19 | |

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| Year 2 | GE Area C2a: Philosophy and Civilization | | 3 | CE 3101 Construction Engineering | Prereq: CE 1101, CE 1001, CE 128L, or ETC 140L; and CE 1101L, CE 1001L, CE 128L or ECT 140L; and MAT 1140, Mat 114, MAT 130 or MAT 1300; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 3101L. | 2 | |
| | CE 2041 Engineering Statics | Prereq: C- or better in MAT 115, MAT 1150, MAT 130, or MAT 131; PHY 131 or PHY 1510, and PHY 1510L or PHY 131L. | 3 | CE 3101L Construction Engineering Laboratory | Prereq: CE 1101, CE 1001, CE 128L, or ETC 140L; and CE 1101L, CE 1001L, CE 128L or ECT 140L; and MAT 1140, Mat 114, MAT 130 or MAT 1300; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 3101. | 1 | |
| | MAT 2140 Calculus III | Prereq: MAT 116, MAT 214, MAT 1150, or MAT 1150C. | 4 | CE 2051 Mechanics of Materials | Prereq: C- or better in ME 214, ETT 210, CE 2041, ARO 2041, or ETM 2101. | 3 | |
| | PHY 1520 Introduction to Electromagnetism and Circuits | Prereq: C- or better in MAT 115 or MAT 1150; and C- or better in PHY 132, PHY 132B or PHY 1510. Coreq: PHY 1520L. | 3 | MAT 2240 Elementary Linear Algebra and Differential Equations | Prereq: MAT 116 or MAT 1150. | 3 | |
| | PHY 1520L Introductory Laboratory on Electromagnetism and Circuits | | 1 | GSC 3210 Engineering Geology I (B5) | Prereq: Completion of the lower division GE requirements in Area A and Area B; and Upper Division standing. Coreq: GSC 3210L. | 2 | |
| | GE Area C1: Visual and Performing Arts | | 3 | GSC 3210L Engineering Geology I Laboratory (B5) | Prereq: Completion of Lower Division GE requirements in Area A and Area B; and Upper Division standing. Coreq: GSC 3210. | 1 | |
| | | | 0 | GE Area D1: U.S. History American Ideals | | 3 | |
| | | | 0 | | | 0 | |
| | Semester Total Units | 17 | | Semester Total Units | 15 | | |

| | Fall | | Units | Spring | | Units | Comments |
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| Year 3 | CE 3401 Geotechnical Engineering | Prereq: C- or better in ME 218, ETT 220, ETM 2201, or CE 2051; and MAT 216, MAT 224, MAT 2240, MAT 131, or MAT 1310; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 2061 or ME311 or ETT 310 and CE 3401L or CE 327L. | 3 | CE 3501 Structural Analysis I | Prereq: C- or better in ME 218, ETT 220, ETM 2201, or CE 2051; C- or better in MAT 216, MAT 224, MAT 2240, MAT 131, or MAT 1310; and BSCE, BSCET, BSCEM, or MSCE Major. | 3 | <i>Graduation Writing Test must be taken before completion of 75 units.</i> |
| | CE 3401L Geotechnical Engineering Laboratory | Prereq: C- or better in ME 218, ETT 220, ETM 2201, or CE 2051; and MAT 216, MAT 224, MAT 2240, MAT 131, or MAT 1310; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: ETT 310, ME 311, or CE 2061; and CE 3401 or CE 326. | 1 | CE 3501L Structural Design Laboratory | Prereq: C- or better in ME 218, ETT 220, ETM 2201, or CE 2051; C- or better in MAT 216, MAT 224, MAT 2240, MAT 131, or MAT 1310; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 304 or CE 3501. | 1 | |
| | CE 2061 Fluid Mechanics | Prereq: C- or better in ME 214, ETT 210, CE 2041, ARO 2041, or ETM 2101. | 3 | CE 3140 Construction Estimating | Prereq: CE 3101 or ETC 202; and CE 3101 or ETC 230, and BSCE or BSCET or BSCEM or MSCE Major. | 3 | |
| | CE 3121 Building Systems | Prereq: CE 3101 or ETC 202; and CE 3101 or ETC 230, and BSCE or BSCET or BSCEM or MSCE Major. | 2 | GE Area D2: U.S. Constitution and California Government | | 3 | |
| | IME 3011 App. of Stats in Engineering | Prereq: MAT 115, MAT 116, MAT 214, MAT 215, MAT 216, MAT 224, or MAT 1150. | 2 | GE Area C2b: Literature and Language Other than English | | 3 | |
| | CE 2030 Civil Engineering Materials | Prereq: C- or better in ME 218, ETT 220, or CE 2051; CHM 121 or CHM 1210; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 221L or CE 2030L. | 2 | CE 3150 Construction Equipment and Safety | Prereq: CE 3101 or ETC 202; and CE 3101 or ETC 230, and CE 1011 and CE 1011L. | 3 | |
| | CE 2030L Civil Engineering Materials Laboratory | Prereq: C- or better in ME 218, ETT 220, or CE 2051; CHM 121L or CHM 1210L. Coreq: CE 221 or CE 2030. | 1 | | | 0 | |
| | | | 0 | | | 0 | |
| | <i>Take the Graduation Writing Test</i> | | | | | | |
| | Semester Total Units | | 14 | Semester Total Units | | 16 | |

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| | Courses | Requirements/Comments | | Courses | Requirements/Comments | | |
| Year 4 | EGR 4810 Project Design Principles and Applications (B5) | | 1 | EGR 4820 Project Design Principles and Applications (B5) | | 1 | |
| | CE 4510 Structural Design - Reinforced Concrete | Prereq: ETC 311, CE 305, or CE 3510; and BSCE, BSCET, BSCEM, or MSCE Major. | 3 | EGR 4830 Project Design Principles and Applications (B5) | | 1 | |
| | CE 4120 Construction Scheduling | Prereq: ETC 305, ETC 304, or CE 3140; and BSCE, BSCET, BSCEM, or MSCE Major. | 3 | CE 4140 Construction Project Management and Accounting | Prereq: ETC 305, ETC 304, or CE 3140; and BSCE, BSCET, BSCEM, or MSCE Major. | 3 | |
| | CE 4130 Construction Contracts | Prereq: ETC 305, ETC 304, or CE 3140; and BSCE, BSCET, BSCEM, or MSCE Major. | 3 | Major Elective | Select from Curriculum Sheet | 4 | |
| | GE Area D3: Social Sciences: Principles, Methodologies, Value Systems, and Ethics | | 3 | IME 4020 Ethical Concepts in Technology and Applied Science (B5, C3) | | 3 | |
| | | | 0 | EGR 4050 Role of Design Professionals In Society (D4) | Prereq: BSCE, BSCET, BSCEM, or MSCE Major. | 3 | |
| | | | 0 | | | 0 | |
| | | | 0 | | | 0 | |
| | <i>File an application to graduate</i> | | | | | | |
| | Semester Total Units | | 13 | Semester Total Units | | 15 | |
| Total Units | | | | | | 124 | |