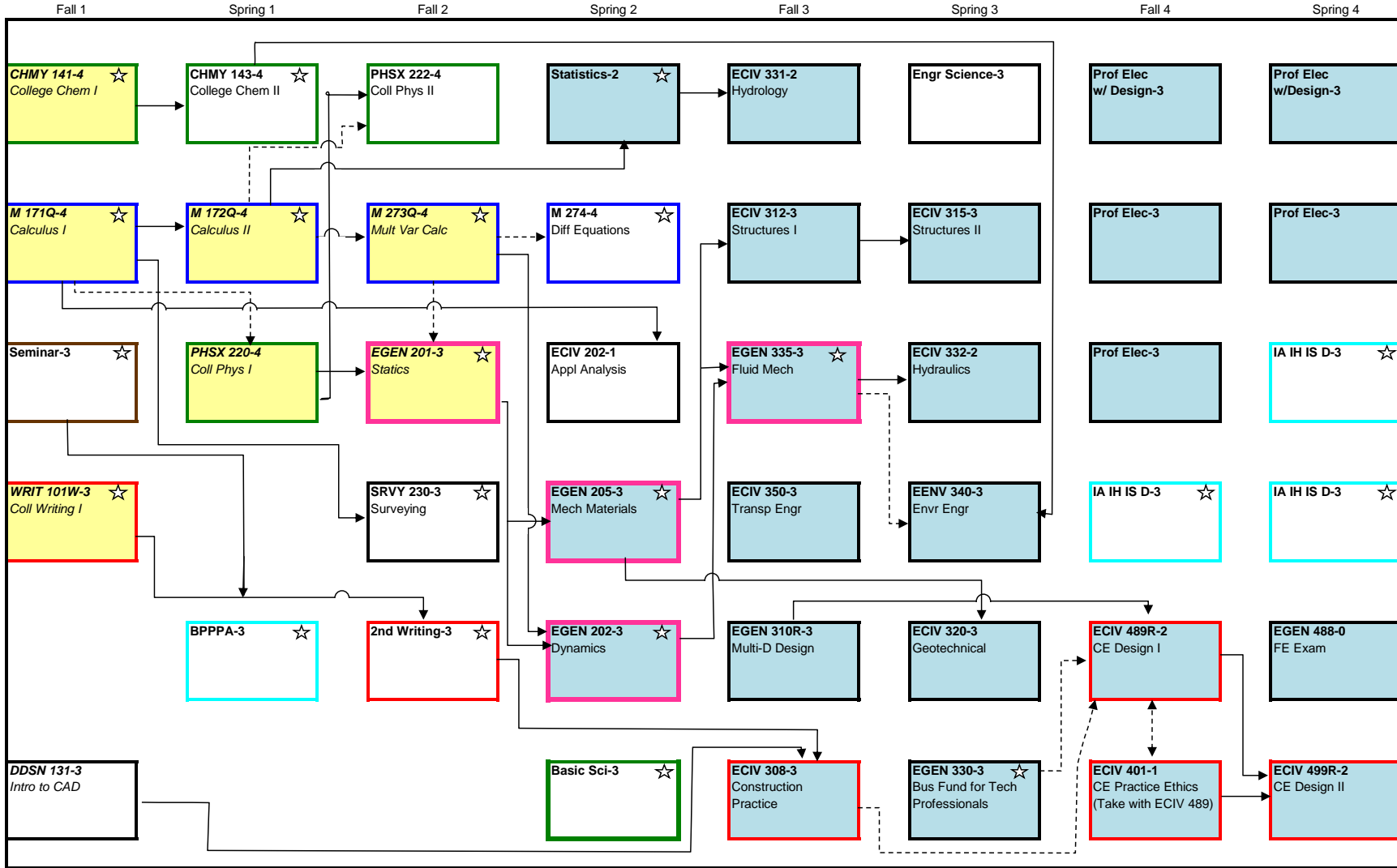


2017 - 2018 Catalog Degree: Civil Engineering

Modified: 2/2017



17-18
 Basic Science Elective: Choose One
 BIOB 160 (F,S) Princ Liv Sys (4) Prereq.: CHMY 141
 ENSC 245 (F) Soils (3)
 EARTH 101 (F, S) Earth System Science(4)
 GPHY 284 (F,S) Intro to GIS Science and Cartography (3)
 BIOM 103IN (F,S) Unseen Universe Microbes (3)

17-18
 BPPPA: Choose One
 ECNS 101IS (F,S) Economic Way of Thinking
 BGEN 242D (F,S) Intro. to International Business
 PSCI 210IS (F, S, Su) Introduction to American Government
 PSCI 214IS (F) Principles of Political Science
 PSCI 230D (F) Introduction to International Relations

17
 Seminar: US 101, CLS 101, COMX 111, HONR 201
 2nd Writing: BMGT 205, WRIT 201, WRIT 221, HONR 202
 Statistics: EGEN 350-2, STAT 332-3
 ☆ Indicates Summer Offering

17-18
 Engineering Science Elective: Choose One
 EMAT 251 (F,S) Matr Struc & Prop (3) Pre CHMY 141, Co M 171
 EELE 250 (F,S) Circuits (4) PreReq M 172
 EGEN 324 (F,S) Applied Thermodynamics (3) PreReq M 273

Student _____ ID - _____ Prerequisite → Corequisite - - - - -

2017-18 Civil Engineering Professional Electives (Total of 15 cr-hrs required)

| | Rubric | Number | Cr Hrs | Title | Offered | Prerequisite |
|------------------------|--------|--------|---|---|--|--|
| At least two of these. | ECIV | 414 | 3 | Steel Design | F odd | ECIV 315 Structures II |
| | ECIV | 415 | 3 | Design of Masonry Structures | S even | ECIV 315 Structures II |
| | ECIV | 416 | 3 | Design of Wood and Timber Structures | S odd | ECIV 315 Structures II |
| | ECIV | 484 | 3 | Reinforced Concrete Design | F even | ECIV 315 Structures II |
| | ECIV | 420 | 3 | Earth and Foundation Engineering | S | ECIV 320 Geotechnical Engineering |
| | ECIV | 425 | 3 | Geotechnical Structures | F | ECIV 320 Geotechnical Engineering |
| | ECIV | 431 | 3 | Open Channel Hydraulics | F | ECIV 332 Hydraulics |
| | ECIV | 435 | 3 | Closed Conduit Hydraulics | S | ECIV 332 Hydraulics |
| | ECIV | 451 | 3 | Highway Pavements | S even | ECIV 350, ECIV 320 |
| | ECIV | 452 | 3 | Traffic Engineering and ITS | F odd | ECIV 350, EGEN 350 |
| | ECIV | 454 | 3 | Transportation Planning | S odd | ECIV 350, EGEN 350 |
| | ECIV | 456 | 3 | Highway Geometric Design | F | ECIV 350, SRVY 230 |
| | ECIV | 461 | 3 | Cold Regions Infrastructure Engineering | S | ECIV 320 & EGEN 335 Co-Req: ECIV 308 |
| | EENV | 432 | 3 | Advanced Engineering Hydrology | S | ECIV 332 Hydraulics |
| | EENV | 434 | 3 | Groundwater Supply and Remediation | S | EGEN 335 Fluid Mechanics |
| | EENV | 441 | 3 | Natural Treatment Systems | F | EENV 340 Introduction to Environmental Engineering |
| | EENV | 443 | 3 | Air Pollution Control | F even | EENV 340 Introduction to Environmental Engineering |
| | EENV | 445 | 3 | Hazardous Waste Treatment | F odd | EENV 340 Introduction to Environmental Engineering |
| EENV | 447 | 3 | Hazardous Waste Management | S | EGEN 335 Fluid Mechanics | |
| SRVY | 474 | 3 | Project Design in Surveying | S odd | SRVY 230 Surveying | |
| ECIV | 307 | 3 | Constr Estimating and Bidding | F,S | ECIV 202, ECIV 308 | |
| ECIV | 309 | 3 | Building Information Modeling in Construction | F | ECIV 308 Constr Practice (Co-Req) | |
| ECIV | 311 | 3 | Construction Project Documentation | F | ECIV 308 | |
| ECIV | 404 | 3 | Heavy Const Equip and Methods | F,S | See Catalog | |
| ECIV | 405 | 3 | Const Proj Planning Scheduling | F,S | ECIV 307 | |
| ECIV | 406 | 3 | Sustainability in Construction | S | ECIV 308 | |
| ECIV | 455 | 3 | Data Acquisition & Analysis | S even | Knowledge of linear algebra, calculus & statistics | |
| EENV | 440 | 3 | Water Chemistry for Environmental Engineers | F | EENV 340 Introduction to Environmental Engineering | |
| EGEN | 435 | 3 | Fluid Dynamics | S | EGEN 335 Fluid Mechanics | |
| EGEN | 415 | 3 | Advanced Mechanics of Solids | F | EGEN 205 Mechanics of Materials | |
| SRVY | 355 | 3 | Surveying Calculations | S even | SRVY 230 Surveying | |
| SRVY | 361 | 3 | Intro to Legal Principles in Surveying | F even | SRVY 230 Surveying | |
| SRVY | 362 | 3 | Public Land Survey Systems | F odd | SRVY 230 Surveying | |
| SRVY | 375 | 3 | Analyt Photo/Remote Sensing | F odd | M 171 Calculus | |
| ECIV | 490 | 1-4 | Undergraduate Research | F,S,Su | | |
| ECIV | 492 | 1-4 | Independent Study | F,S,Su | | |
| ECIV | 498 | 2 max | Career Internship | Su | | |
| Max 3 cr total. | | | | | | A petitioned course. |
| | | | | | | A course from a completed minor. |
| | | | | | | A course from a prior/concurrent BS/BA degree. |
| | | | | | | A course from a completed Honors program. |