CIVIL ENGINEERING
PREREQUISITE FLOW CHART

Year 1

Fall

- CH 301 (B) — Principles of Chemistry I — M 408C
- C E 301 (B) — Civil Engineering Systems
- M E 210 (B) — Engineering Design Graphics — M 408C
- M 408C (B) — Differential and Integral Calculus — score of 80 on ALEKS
- Fine Arts/ Humanities (O) — from approved list — can be taken pass/fail

Spring

- CH 302 (B) — Principles of Chemistry II — *CH 301 — M 408C
- E M 306 (B) — Statics — M 408D — PHY 303K
- M 408D (B) — Sequence, Series & Multivariable Calculus — *M 408C
- RHE 306 (B) — Rhetoric & Writing — fall = even, spring = odd
- PHY 303K (B) — Engineering Physics I — *M 408C — PHY 103M
- PHY 103M (B) — Engineering Physics I Lab — PHY 303K

Year 2

Fall

- E M 311M (O) — Dynamics — *E M 306 — *M 408D — *PHY 303K
- C E 311K (B) — Introduction to Computer Methods — C E 301 — M 408D
- E M 319 (B) — Mechanics of Solids — *E M 306 — *M 408D — *PHY 303K
- GOV 310L (O) — American Government — 12 credit hours
- PHY 303L (B) — Engineering Physics II — *PHY 303K — PHY 103N — *PHY 103M — *M 408D
- PHY 103N (B) — Engineering Physics II Lab — PHY 303L

Spring

- C E 311S (B) — Prob and Stats for Civil Engineers — M 408D
- C E 319F (B) — Elementary Mechanics of Fluids — E M 306
- C E 314K (B) — Prop and Behavior of Engr Materials — CH 301 — E M 319
- M 427K (O) — Advanced Calculus for Applications I — *M 408D
- E 316K (O) — Masterworks of Literature — RHE 306

Year 3

Fall

- M E 320 (O) — Applied Thermodynamics — CH 301 — M 408D — PHY 303K
- C E 329 (M) — Structural Analysis — E M 319 — C E 311K
- C E 321 (M) — Transportation Systems — C E 311S
- ARE 323K (M) — Project Mgmt and Economics — M 408D
- American History (O) — from approved list

Spring

- C E 333T (M) — Engineering Communication — admission to full major sequence — RHE 306
- C E 341 (M) — Intro to Environmental Engr — CH 301 — CH 302
- C E 356 (M) — Elements of Hydraulic Engr — C E 319F
- C E 357 (M) — Geotechnical Engineering — E M 319 — C E 319F
- Science Elective (O) — from approved list — varies

Year 4

Fall

- American History (O) — from approved list
- Level I Elective (M) — from approved list — varies
- Level I Elective (M) — from approved list — varies
- Level I Elective (M) — from approved list — varies
- Math / Science / Engr Science Elective (O) — from approved list — varies

Spring

- C E 171P (M) — Engineering Professionalism — Level II
- Level I Elective (M) — from approved list — varies
- Level I Elective (M) — from approved list — varies
- Level II Elective (M) — from approved list — varies
- Social Science (O) — from approved list — can be taken pass/fail
- American Government (O) — from approved list — 24 credit hours — GOV 310L

KEY

COURSE # — Course Title

PRE-REQ / CO-REQ / * C- REQ

- B = Basic Sequence
- M = Major Sequence
- O = Other Required
- M = Base Level

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CIVIL ENGINEERING
LEVEL I & LEVEL II ELECTIVES BY AREAS OF SPECIALIZATION

STRUCTURAL ENGINEERING

C E 331 — Reinforced Concrete Design
- Pre-req: C E 314K
- Pre-req: C E 329

C E 335 — Elements of Steel Design
- Pre-req: C E 314K
- Pre-req: C E 329

C E 363 — Advanced Structural Analysis
- Pre-req: C E 329

ARE 362L (S) — Structural Design in Wood
- Pre-req: C E 329

ARE 345K (F) — Masonry Engineering
- Pre-req: C E 329
- Co-req: C E 331

C E 362M (S) — Adv Reinforced Concrete Design
- Pre-req: C E 331

C E 362N (F) — Advanced Steel Design
- Pre-req: C E 335

CONSTRUCTION MATERIALS ENGINEERING

C E 351 (S) — Concrete Materials
- Pre-req: C E 314K

C E 366K (F) — Design of Bituminous Mixtures
- admission to full major sequence

ENVIRONMENTAL ENGINEERING

C E 342 — Water/Wastewater Treatment Engr
- Pre-req: C E 341
- Co-req: C E 319F

C E 370K (S) — Environmental Sampling & Analysis
- Pre-req: C E 341

C E 369L (F) — Air Pollution Engineering
- Pre-req: C E 341
- Pre-req: M E 320

C E 346 (Su) — Solid Waste Engr & Mgmt
- Pre-req: C E 341

C E 364 (S) — Design of Wastewater & Water Trtmnt Facilities
- Pre-req: C E 356
- Co-req: C E 342

GEOTECHNICAL ENGINEERING

C E 375 (S) — Earth Slopes & Retaining Structrs
- Pre-req: C E 357

C E 360K (F) — Foundation Engineering
- Pre-req: C E 357

TRANSPORTATION ENGINEERING

C E 367T — Traffic Engineering
- Pre-req: C E 321

C E 367P — Pavement Design & Performance
- Pre-req: C E 321
- Pre-req: C E 357
- Pre-req: C E 366K

C E 377K (S) — Design of Ground-Based Transportation
- Pre-req: C E 321

CONST ENGR & PROJECT MANAGEMENT

ARE 358 — Cost Estimating in Bldg Construction
- ARE 335 or consent of instructor

ARE 366 — Contracts, Liabilities & Ethics
- admission to full major sequence

WATER RESOURCES ENGINEERING

C E 358 (F) — Introductory Ocean Engineering
- Pre-req: C E 319F

C E 374L (S) — Groundwater Hydraulics
- Pre-req: C E 356

C E 374K (S) — Hydrology
- Pre-req: C E 311S
- Pre-req: C E 356

C E 365K (F) — Hydraulic Engineering Design
- Pre-req: C E 356

KEY

COURSE # — Course Title

PRE-REQ | CO-REQ

F = FALL ONLY

S = SPRING ONLY

Su = SUMMER ONLY

= Level II Elective

NOTE: semester offered subject to change

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