



Structures/Geotechnical/Construction Electives*

- CCE 4001 Heavy Construction
- CES 4702 Concrete Design**
- CEG 4012 Geotechnical Engineering II**
- CEG 4126 Fundamentals of Pavement Design
- CES 3580 Hurricane Engineering and Global Sustainability (GL) (FALL ONLY)
- CES 4605 Steel Design
- CES 4711 Intro to Prestressed Concrete Structures
- CGN 4011 Comp. Techniques & Visualization for CE
- CGN 4510 Sustainable Building Engineering
- CGN 4930 Spec. Topics: Numerical Methods

Transportation Electives*

- CEG 4126 Fundamentals of Pavement Design
- CGN 4321 GIS Applications in Civil and Env. Eng.
- TTE 4102 Urban Transportation Planning
- TTE 4202 Traffic Engineering
- TTE 4203 Highway Capacity Analysis
- TTE 4804 Geometric Design of Highways**

Environmental and Water Resources Electives*

- CGN 4321 GIS Applications in Civil and Env. Eng.
- CWR 4204 Hydraulic Engineering**
- CWR 4530 Modeling Appl. In Water Resources Eng.
- EGN 4070 Engineering for Global Sustainability and Environmental Protection (GL) (SPRING ONLY)
- ENV 4024 Bioremediation Engineering
- ENV 4101 Fundamentals of Air Pollution Engineering
- ENV 4330 Hazardous Waste Assessment & Remediation
- ENV 4351 Solid and Hazardous Waste Management
- ENV 4401 Water Supply Engineering
- ENV 4513 Chemistry for Environmental Engineers
- ENV 4551 Wastewater Treatment Engineering**
- ENV 4560 Reactor Design
- ENV 4930 Special Topics: Indoor Air Quality

Legend

←...→ = Coreqs

*If 3 electives are taken in 1 area, student will receive a certificate.
 Electives in red indicate **DESIGN ELECTIVES & 2 are required

(GL) indicates Global Learning course. Students are required to take 2 GL courses, and at least 1 must be discipline-specific.

GL Foundations _____	GRW-1 _____	FLENT/FLEX _____	Civics Literacy _____
GL Discipline _____	GRW-2 _____	Summer Req. _____	Design Electives (6) _____

Academic Progression Standards - Students who do not pass common prereqs after 2 attempts will be advised to change their major into an area where they can be successful. Drops after the add/drop period, which result in a DR grade, are considered an attempt in the course and count as an unsuccessful enrollment.

PREQUISITES/COREQUISITES

All courses must be passed with a C or better

MAC 2311/MAC 2281 Calculus I (4)

Prereqs: MAC 1147 OR MAC 1140 & MAC 1114

MAC 2312/MAC 2282 Calculus II (4)

Prereq: MAC 2311 or MAC 2281

MAC 2313/ MAC 2283 Multivariable Calculus (4)

Prereq: MAC 2312 or MAC 2282

MAP 2302 (3)

Prereq: MAC 2312 or MAC 2282

PHY 2048 Physics with Calculus I (4)

Prereq: MAC 2311 or MAC 2281

Coreq: PHY 2048L

PHY 2048L Physics with Calculus I Lab (1)

Coreq: PHY 2048

PHY 2049 Physics with Calculus II (4)

Prereqs: PHY 2048 & MAC 2312 or MAC 2282

CHM 1045 General Chemistry I (3)

Coreq: CHM 1045L

CHM 1045L General Chemistry I Lab (1)

Coreq: CHM 1045

CGN 2420 Computer Tools (3)

Prereqs: MAC 2312 or MAC 2282, PHY 2048

EGN 1110C Engineering Drawing (3)

No Prereqs

EGS 2030 Ethics & Legal Issues (1)

No Prereqs

EGN 3311 Statics (3)

Prereqs: MAC 2312 or MAC 2282 & PHY 2048

Coreq: MAC 2313 or MAC 2283

EGN 3321 Dynamics (3)

Prereq: EGN 3311

EGM 3520 Mechanics of Materials (3)

Prereqs: CGN 2420, MAC 2283 or MAC 2313, &

EGN 3311

Coreq: EGM 3520L, MAP 2302,

EGM 3520L Mechanics of Materials Lab (1)

Prereqs: MAC 2282 or MAC 2312, EGN 3311

Coreq: EGM 3520

ENV 3001 Environmental Engineering (3)

Prereqs: MAC 2283 or MAC 2313, CHM 1045,

CHM 1045L

Coreq: ENV 3001L

ENV 3001L Environmental Engineering Lab (1)

Prereqs: MAC 2312 or MAC 2282, & CGN 2420

Coreq: ENV 3001L

SUR 2101C Surveying (3)

Prereq: EGN 1110C

CWR 3201 Fluid Mechanics (3)

Prereqs: MAC 2312, MAP 2302, EGN 3321

Coreq: CWR 3201L

CWR 3201 Fluid Mechanics Lab (1)

Prereqs: MAP 2302, EGN 3321

Coreq: CWR 3201

CES 3100 Structural Analysis (3)

Prereqs: EGM 3520, EGM 3520L

EGN 3613 Engineering Economy (3)

No Prereqs

STA 3033 Probability & Statistics (3)

Prereq: MAC 2312

ESI 3215 Evaluation of Engineering Data (3)

Prereq: MAC 2312

CEG 4011 Geotechnical Engineering (3)

Prereqs: GLY 1010, GLY 1010L, CWR 3201,

CWR 3201L, EGM 3520, EGM 3520L

Coreq: CEG 4011L

CEG 4011L Geotechnical Engineering Lab (3)

Prereqs: CWR 3201, CWR 3201L, EGM 3520,

EGM 3520L

Coreq: CEG 4011

CES 4702 Reinforced Concrete Design (3)

Prereq: CES 3100

CWR 3540 Water Resources (3)

Prereqs: CWR 3201, CWR 3201L, STA 3033

or ESI 3215

TTE 4201 Transportation & Traffic (3)

Prereqs: EGN 3321, SUR 2101C, STA 3033 or

ESI 3215

CCE 4031 Project Planning for CE (3)

Prereq: CES 3100

Coreq: CEG 4011

CGN 4802 CE Senior Design Project (3)

Prereqs: CEG 4011, CEG 4011L, TTE 4201,

CES 3100

CGN 4980 CE Seminar to pass FE Exam (1)

Prereqs: EGN 3613, ENV 3001, CES 3100,

EGS 2030

Coreqs: CEG 4011, TTE 4201, CWR 3540

ELECTIVES

CCE 4001 Heavy Construction (3)

Prereqs: CES 4702, CEG 4011

CEG 4012 Geotechnical Engineering II (4)

Prereqs: CEG 4011, CEG 4011L

CEG 4126 Fundamentals of Pavement Design (3)

Prereqs: TTE 4201, CEG 4011, CEG 4011L

CES 3580 Hurricane Engineering (3)

Prereq: PHY 2048

CES 4605 Steel Design (3)

Prereq: CES 3100

CES 4711 Intro to Prestressed Concrete

Prereq: CES 4702

CGN 4011 Comp. Tech. & Visualization. for CE

Prereq: CGN 2420, CES 3100

CGN 4510 Sustainable Building Engineering (3)

Prereqs: CWR 3201, CWR 3201L

CGN 4930 Spec. Topics: Intro to Const. Mgmt (3)

Coreqs: CES 4702, CEG 4011

CGN 4930 Spec. Topics: Numerical Methods (3)

Prereq: Depends on Topic

CGN 4321 GIS Application in Civil & Env Eng (3)

Prereqs: TTE 4201 or ENV 3001 or CWR3540

TTE 4102 Urban Transportation Planning (3)

Prereq: TTE 4201

TTE 4202 Traffic Engineering (3)

Prereq: TTE 4201

TTE 4203 Highway Capacity Analysis (3)

Prereq: TTE 4201

TTE 4804 Geometric Design of Highways (3)

Prereq: TTE 4201

CWR 4204 Hydraulic Engineering (3)

Prereq: CWR 3201

CWR 4530 Modeling Appl. In Water Res Eng. (3)

Prereq: CWR 3201

Coreq: CWR 3540

EGN 4070 Eng. For Global Sustainability (3)

Prereqs: ENV 3001 or PHY 2049 & CHM1045

ENV 4024 Bioremediation (3)

Prereqs: ENV 3001, ENV 3001L

ENV 4101 Fundamentals of Air Pollution Eng. (3)

Prereqs: CWR 3201, CWR 3201L, ENV 3001,

ENV 3001L

ENV 4330 Hazardous Waste Assessment (3)

Prereqs: CHM 1045, CHM 1045L

ENV 4351 Solid & Hazardous Waste Mgmt (3)

Prereqs: CHM 1045, CHM 1045L

ENV 4401 Water Supply Engineering (3)

Prereqs: CWR 3201, CWR 3201L, ENV 3001,

ENV 3001L

ENV 4513 Chemistry for Env. Engineers (3)

Prereqs: CHM 1045, CHM 1045L

ENV 4551 Wastewater Treatment Engineering (3)

Prereqs: CWR 3201, CWR 3201L, ENV 3001,

ENV 3001L

ENV 4560 Reactor Design (3)

Prereqs: ENV 3001

ENV 4930 Special Topics (3)

Prereqs: Depends on the topic