

FTIC Students

EGS 1006C Intro to Engr Profession (1) → EGN 1007C Engr Concepts & Methods (1)

TRANSFER Students

Additional 2.0 credit hours of Restricted Technical Electives

Basic Science
(EVR 1001, GEO 1200, GEO 2370, GLY 1030, GLY 2038, MET 2104 (3))

CHS 1440 Principles of Chemistry (4)
PR: 1 year HS Chem or CHM 1032

- Other Required (General Education/AA Degree) Courses that do not have critical paths**
- GEP 1 ENC 1101 (3)
 - GEP 2 ENC 1102 (3)
 - GEP 3 SPC/COM (3)
 - GEP 4 Cultural/Historical I (3)
 - GEP 5 Cultural/Historical II (3)
 - GEP 6 Cultural/Historical Elective (3)
 - GEP 9 ANT/PSY/SYG (3)
 - GEP 10 AMH/POS (3)

MAC 2311C Calc/Anl Geom I (4)
PR: MAC 1105, MAC 1114C and MAC 1140C or passing score on Math Placement Test

PHY 2048 PHY 2048L Physics using Calc I & Lab (3/1)

EGN 3613 Engineering Econ Analy (2)

MAC 2312 Calc/Anl Geom II (4)

MAC 2313 Calc/Anl Geom III (4)

MAP 2302 Differential Equations (3)

EGN 3310 Engineering Statics (3)

PHY 2049 PHY 2049L Physics using Calc II and Lab (3/1)

EGN 3321 Engrg Anal Dynamics (3)

CGN 3405 Num Meth in CE (3)

EGN 3331C Mechanics of Materials (3)

STA 3032 Prob & Stat for Engineers (3)

CWR 3201 Engr Fluid Mechanics (3)

CGN 3700C CE Measurements (2)

ENV 3001 Environmental Engineering (3)

CGN 3501C CE Materials (3)

CCE 4003 Intro Constr Ind (3)

CEG 4011C Geotech Engineering 1 (3)

CWR 4202C Hydraulics (3)

TTE 3810 Highway Engineering (3)


CES 4100C Structural Analysis (3)
Addl PR: MAP 2302

CGN 3090 Engineering Reports & Liability (2)
CR: Lab Course

Depth Areas (complete 2 areas)	
Geotech	CEG 4012 – Geotech Engr 2 (3) PR: CEG 4011C
	CEG 4203 – Geotech Methods (3) PR: CGN 3405 & CEG 4011C
Water	CWR 4120 – Hydrology (3) PR: CWR 3201 and STA 3032
	CWR 4124 – Hydrogeology (3) PR: CEG 4011C and CWR 4202C
Transport	TTE 4274 – Trans Engr Systems (3) PR: TTE 3810
	TTE 4300 – Trans Analytics (3) PR: TTE 3810
Structures	CES 4605 – Steel Structures (3) PR: CES 4100C
	CES 4702 – Concrete Structures (3) PR: CES 4100C
Mechanics	EGN 3343 – Thermodynamics (3) PR: EGN 3310 & MAC 2313
	CES 4205 – Structural Mechanics (3) PR: EGN 3331C & CGN 3405

Depth Area Electives (complete 2)

Complete any 2 courses from the remaining areas above or choose from: CCE 4034 (PR: TTE 3810); CCE 4004 (PR: CEG 4011C and CES 4100C); ENV 4531 (PR: ENV 3001 and CWR 3201); ENV 4561 (PR: ENV 4531). Both courses do not have to be the same area.

 Courses which are pre-requisites must be completed with a grade of "C" (2.0) or better

KEY:
 Prerequisite → Corequisite - - - - - Required to clear "Pending" □

CIVIL ENGINEERING

2024-2025 CATALOG
REQUIRED COURSEWORK

All students must complete the Fundamentals of Engineering Exam. More info www.ncees.org

Design Course (complete 1)

- CES 4743C – Structural Design (3)
PR: CES 4605, CES 4702 and CGN 3090
- CWR 4812C – Water Resources Design (3)
PR: CWR 4120 and CGN 3090
- CEG 4801C – Geotechnical Design (3)
PR: CEG 4012 and CGN 3090
- TTE 4601C – Urban Systems Design (3)
PR: TTE 4274 and CGN 3090

Technical Electives (3-5 credit hours) from approved technical elective list on the CECE Advising web course

CGN 4808C CE Capstone Design (3)
By department override only
PR: Design Course