Civil Engineering - General Track with 128 Semester Hours

Effective: Aug 2021
Revised: Nov 2020

Freshman Year		Sophomore Year		Junior Year		Senior Year	
Fall (16)	**Spring (16)**	**Fall (16)**	**Spring (16)**	**Fall (16)**	**Spring (16)**	**Fall (16)**	**Spring (16)**
MATH 220 (4) **Calculus - 1**	**MATH 221 (4)** **Calculus - 2** Pre: MATH 220	**MATH 222 (4)** **Calculus - 3** Pre: MATH 221	**MATH 340 (4)** **Differential Eqns** Pre: MATH 221	**STAT 510 (3)** **Prob and Stat - 1** Pre: MATH 221	**CE 501 (1)** **Proj Econ Eval** Pre: Junior Standing	**CE 502 (1)** **Proj Management** Pre: Junior Standing	**CE 503 (1)** **Proj Delivery** Pre: CE 501
CHM 210 (4) **Chemistry - 1**	**CHM 230 (4)** **Chemistry - 2** Pre: CHM 210	**GEOL 100 (3)** **Earth in Action**	**ECON 110 (3)** **Macroeconomics**	**CE 537 (3)** **Intro Struct Analysis** Pre: CE 533[C]	**CE 522 (3)** **Soil Mechanics** Pre: CE 533[C] Conc: ME 571	**CE 550[#] (3)** **Water Res Engg** Pre: STAT 510[C]; PHYS 213	**CE 585 (3)** **Senior Design Proj** Pre: ENGL 415; 6 hrs of CE Design
CE 101 (1) **Intro to CE**	**PHYS 213 (5)** **Engg Physics - 1** Conc: MATH 221	**PHYS 214 (5)** **Engg Physics - 2** Pre: MATH 221; PHYS 213	**CE 533 (3)** **Mechanics of Matls** Pre: MATH 222; CE 333[C]	**CE 541 (3)** **CE Materials I** Pre: CE 534[C]	**CE 563 (3)** **Env Engg Fund** Pre: MATH 222; CHM 230[C]	**CE 528* (3)** **Foundation Engg** Pre: CE 522[C]	**CE 552* (3)** **Hydraulic Engg** Pre: ME 571[C] Conc: CE 550[C]
CE 201 (1) **CE Prob Solving I**	**CE 212 (3)** **Elem Surveying Engg**	**CE 301 (1)** **CE Prob Solving II**	**CE 534(1)** **Mech of Matls Lab** Conc: CE 533	**ME 513 (3)** **Thermodynamics - 1** Pre: MATH 222; PHYS 213	**CE 571 (3)** **Intro to Trans Engg** Pre: MATH 221; CE 212; PHYS 213	**CE 572* (3)** **Highway Engg** Pre: CE 571[C]; CE 522	**CE 565* (3)** **Water / WW Engg** Pre: CE 550; CE 563[C]; ME 571; PHYS 214
CE 202 (3) **CE Graphics**		**CE 333 (3)** **Statics** Pre: MATH 221; PHYS 213	**ME 512 (3)** **Dynamics** Pre: CE 333 Conc: MATH 340	**ME 571 (3)** **Fluid Mechanics** Pre: ME 512 Conc: ME 513	**Hum or SS (3)** K-State 8: AI or HD Tag	**CE Track Elective (3)**	**CE Track Elective (3)**
ENGL 100 (3) **Exp Writing - 1**			**COMM 105 (2)** **Public Speaking**	**DEN 325 (1)** **Engg Prof / Des Mak**	**ENGL 415 (3)** **Writ Comm for Engg** Pre: Junior Standing	**Hum or SS (3)** K-State 8: AI or HD Tag	**CE Track Elective (3)**
CE 015 (0) **CE Assembly**	**CE 015 (0)** **CE Assembly**	**CE 015 (0)** **CE Assembly**	**CE 015 (0)** **CE Assembly**	**CE 015 (0)** **CE Assembly**	**CE 015 (0)** **CE Assembly**	**CE 015 (0)** **CE Assembly**	**CE 015 (0)** **CE Assembly**

Pre = Prerequisite Course
Conc = Prerequisite or Concurrent Course
AI = Aesthetic Intrepretation and HD = Human Diversity
[C] = Grade of "C" or better is required

Program of Study
Track Electives
Basic Skill

Science / Math
Humanities / Soc Sci
CE Design Electives (2.25 GPA required for these 12 hours)

[#] BAE 560 (offered in the spring) is an acceptable atlternative to CE 550.
* CE 542 (Spring) or CE 544 (Fall) can be taken instead of CE 528, CE 552, CE 565, or CE 572

Fall Only Offering
Spring Only Offering
Available in Summer

Tracks

There are many choices that you can make as you enroll in our undergraduate civil engineering program. Among these is a choice of a concentration within Civil Engineering. Our undergraduate program offers four tracks:

General Track

This is our most popular track. It allows you to pursue a B.S. degree in civil engineering through broad exposure to all aspects of our profession. These aspects include:

- *Environmental engineering* deals with the planning, design and management of facilities and systems that protect public health and environmental quality. This includes the production and distribution of potable water, treatment and disposal of municipal and industrial wastewater, management of solid and hazardous wastes, remediation of contaminated soil and groundwater, and air pollution control.

- *Geotechnical engineering* encompasses design and construction of foundations for structures, bridges, earth embankments, retaining walls and bulkheads, pavements for highways and airports, and waste containment structures.

- *Structural engineering* deals with the design, construction and rehabilitation of a wide variety of buildings and bridges using concrete, steel and other composite materials.

- *Transportation/Materials engineering* focuses on the planning, design, materials, construction and operation of roadways, highways, railways, airports and urban mass transit systems.

- *Water resources engineering* encompasses design, construction, and management of structures and systems for flood control, and to provide water for drinking and household uses, irrigation, power production, recreation, and wildlife.