

**REQUIREMENTS FOR THE DEGREE OF
BACHELOR OF SCIENCE IN CIVIL ENGINEERING**

Accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>

NOTICE: IN CASE OF DISAGREEMENT THIS ADVISING SHEET DOES NOT SUPERSEDE TAMUK CATALOG REQUIREMENTS CURRICULUM

FALL SEMESTER	FRESHMAN YEAR	SPRING SEMESTER	
AEEN 1310 Computer Graphics and Applications	3	ENGL 1302 Rhetoric and Composition (ENGL 1301).....	3
ENGL 1301 Rhetoric and Composition	3	HIST 1301 American History.....	3
MATH 2413 Calculus I (MATH 1348).....	4	MATH 2414 Calculus II (MATH 2413).....	4
PHYS 2325 University Physics I (c.o.r. MATH 2413)	3	PHYS 2326 Univ. Physics II (PHYS 2325/2125; c.o.r. MATH 2414)	3
PHYS 2125 University Physics Lab I (c.o.r. PHYS 2325)	1	PHYS 2126 University Physics Lab II (c.o.r. PHYS 2326)	1
GEEN 1201 Engineering as a Career	2	^ <i>Creative arts</i>	3
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	16		17
SOPHOMORE YEAR			
~CEEN 2113 Surveying Lab (c.o.r. CEEN 2212)	1	CEEN 3311 Strength of Materials (MATH 2414 & C or higher in CEEN 2301).....	3
~CEEN 2212 Surveying (AEEN 1310; c.o.r. MATH 2413).....	2	MATH 3320 Differential Equations (MATH 2414)	3
CEEN 2301 Mechanics I (PHYS 2325/2125; c.o.r. MATH 2414).....	3	MEEN 2302 Dynamics (C or higher in CEEN 2301)	3
CHEM 1311 General Inorganic Chemistry I (MATH 1314 & H.S. chemistry or CHEM 1481).....	3	Computer Elective ¹	3
CHEM 1111 Gen. Inorg. Chemistry Lab I (c.o.r. CHEM 1311)	1	^ <i>Communications</i> ²	3
HIST 1302 American History	3	^ <i>Language/Philosophy/Culture</i>	3
POLS 2301 Government & Politics of U.S.....	3		----
	----		18
	16		
JUNIOR YEAR			
~CEEN 3143 Geotechnical Engineering Lab (c.o.r. CEEN 3342) ...	1	~CEEN 3145 Construction Materials Lab (c.o.r. CEEN 3244)	1
CEEN 3303 Structural Analysis (CEEN 3311)	3	~CEEN 3167 Hydraulics & Fluid Mechanics Lab (CEEN 3392)....	1
~CEEN 3342 Geotechnical Engineering (CEEN 3311)	3	~CEEN 3244 Construction Materials (CEEN 3311).....	2
~CEEN 3392 Hydraulics & Fluid Mechanics (C or higher in CEEN 2301)	3	~CEEN 3304 Reinforced Concrete Design (CEEN 3303 & C or higher in CEEN 3311).....	3
STAT 4303 Statistical Methods (MATH 2414).....	3	~CEEN 3365 Environmental Engineering (CHEM 1311/1111; CEEN 3392).....	3
Science Elective ³	3	Math and Science Elective ⁵	3
	----	Special Elective ⁴	3
	16		----
			16
SENIOR YEAR			
CEEN 3317 Engineering Economy (Junior standing in engineering)...	3	~CEEN 4289 Design in Civil Eng. II (CEEN 4279 and either CEEN 3304 or CEEN 4316)	2
~CEEN 4279 Design in Civil Engineering I (c.o.r. CEEN 3342, CEEN 3143, & CEEN 4362)	2	~CEEN 4359 Prin. of Transportation Eng (c.o.r. CEEN 2212/2113 & senior standing in engineering).....	3
~CEEN 4316 Structural Steel Design (CEEN 3303)	3	Engineering Elective ⁶	3
~CEEN 4362 Hydrology (CEEN 3392 and c.o.r. STAT 4303).....	3	Engineering Elective ⁶	3
POLS 2302 Government & Politics of Texas	3	^ <i>Social/behavioral</i>	3
CEEN 4350 Professional Preparation (c.o.r. CEEN 4279).....	3		----
	----		14
	17		

~ Courses offered once a year

Total Hours Required 130

Prerequisite courses are listed in parentheses.

c.o.r. = "credit or registration in." Courses listed as c.o.r. may be completed as a prerequisite or taken concurrently.

NOTES:

¹ Computer Elective: MEEN 1320, CSEN 2304, or CEEN 3315. (Note: CEEN 3315 can be applied to degree only once.)

² Strongly recommended: COMS 2374 or ENGL 2374. (Both have ENGL 1302 as prerequisite.)

³ Science Elective: BIOL 1306 or GEOL 1303.

⁴ Special Elective: AEEN 3346 or EEEN 3331.

⁵ Math and Science Elective (prerequisites vary):

CHEM 1312 or any approved upper-level biology, chemistry, or physics course.

MATH 3415, MATH 4341, MATH 4372, MATH 4374.

⁶ Engineering Electives (prerequisites vary):

AEEN 3325 or 4310

CEEN 3315, 3389, 4314, 4326, 4336, 4340, 4364, 4367, 4368, or 4369. (Note: CEEN 3315 can be applied to degree only once.)

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in TAMUK undergraduate Catalog. Students may take the class of their choice listed within the Core Curriculum "Components."

Students majoring in Civil Engineering must receive a grade of C or better in all engineering courses (AEEN, CEEN, EEEN, CSEN, etc.). Each student is responsible for knowing the academic regulations in the Catalog. Unfamiliarity with the regulations does not constitute a valid reason for failure to fulfill them.

CIVIL ENGINEERING
DEGREE PLAN TRACKING SHEET

Catalog 2023-2024

Student Name: _____ K#: _____ Advisor: _____

FALL SEMESTER

FRESHMAN YEAR

SPRING SEMESTER

AEEN 1310	_____
ENGL 1301	_____
MATH 2413 (MATH 1348).....	_____
PHYS 2325 (c.o.r. MATH 2413).....	_____
PHYS 2125 (c.o.r. PHYS 2325).....	_____
GEEN 1201	_____

ENGL 1302 (ENGL 1301).....	_____
HIST 1301	_____
MATH 2414 (MATH 2413).....	_____
PHYS 2326 (PHYS 2325/2125; c.o.r. MATH 2414)	_____
PHYS 2126 (c.o.r. PHYS 2326)	_____
^Creative arts	_____

SOPHOMORE YEAR

~CEEN 2113 (c.o.r. CEEN 2212).....	_____
~CEEN 2212 (AEEN 1310; c.o.r. MATH 2413)	_____
CEEN 2301 (PHYS 2325/2125; c.o.r. MATH 2414).....	_____
CHEM 1311 (MATH 1314 & H.S. Chemistry or CHEM 1481)...	_____
CHEM 1111 (c.o.r. CHEM 1311).....	_____
HIST 1302	_____
POLS 2301.....	_____

CEEN 3311 (MATH 2414 & C or higher in CEEN 2301)	_____
MATH 3320 (MATH 2414).....	_____
MEEN 2302 (C or higher in CEEN 2301).....	_____
Computer Elective ¹	_____
^Communications ²	_____
^Language/Philosophy/Culture.....	_____

JUNIOR YEAR

~CEEN 3143 (c.o.r. CEEN 3342).....	_____
CEEN 3303 (CEEN 3311)	_____
~CEEN 3342 (CEEN 3311)	_____
~CEEN 3392 (C or higher in CEEN 2301).....	_____
STAT 4303 (MATH 2414).....	_____
Science Elective ³	_____

~CEEN 3145 (c.o.r. CEEN 3244).....	_____
~CEEN 3167 (CEEN 3392).....	_____
~CEEN 3244 (CEEN 3311).....	_____
~CEEN 3304 (CEEN 3303 & C or higher in CEEN 3311)	_____
~CEEN 3365 (CHEM 1311/1111; CEEN 3392).....	_____
Math and Science Elective ⁵	_____
Special Elective ⁴	_____

SENIOR YEAR

CEEN 3317 (Junior standing in engineering)	_____
~CEEN 4279 (c.o.r. CEEN 3342, CEEN 3143, & CEEN4362)..	_____
~CEEN 4316 (CEEN 3303).....	_____
~CEEN 4362 (CEEN 3392 & c.o.r. STAT 4303).....	_____
POLS 2302	_____
CEEN 4350 (c.o.r. CEEN 4279)	_____

~CEEN 4289 (CEEN 4279 and either CEEN 3304 or CEEN 4316).....	_____
~CEEN 4359 (c.o.r. CEEN 2212/2113 & senior standing in engineering)	_____
Engineering Elective ⁶	_____
Engineering Elective ⁶	_____
^Social/behavioral	_____

~ Courses offered once a year

Prerequisite and co-requisite courses are listed in parentheses.

c.o.r. = "credit or registration in." Courses listed as c.o.r. may be completed as a prerequisite or taken concurrently.

Total Hours Required 130

NOTES:

¹ Computer Elective: MEEN 1320, CSEN 2304, or CEEN 3315. (Note: CEEN 3315 can be applied to degree only once.)

² Strongly recommended: COMS 2374 or ENGL 2374. (Both have ENGL 1302 as prerequisite.)

³ Science Elective: BIOL 1306 or GEOL 1303.

⁴ Special Elective: AEEN 3346 or EEEN 3331.

⁵ Math and Science Elective (prerequisites vary):

CHEM 1312 or any approved upper-level biology, chemistry, or physics course.

MATH 3415, MATH 4341, MATH 4372, MATH 4374.

⁶ Engineering Electives (prerequisites vary):

AEEN 3325 or 4310

CEEN 3315, 3389, 4314, 4326, 4336, 4340, 4364, 4367, 4368, or 4369. (Note: CEEN 3315 can be applied to degree only once.)

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All students must complete the following two major sequences of prerequisites (which impact preparedness for the senior design sequence):

1) MATH 2413 & PHYS 2325/2125 → CEEN 2301 → CEEN 3311 → CEEN 3303 → CEEN 3304 and CEEN 4316

2) MATH 2413 & PHYS 2325/2125 → CEEN 2301 → CEEN 3392 & STAT 4303 → CEEN 3365 and CEEN 4362

Grades of "C" or higher are required in CEEN 2301 and CEEN 3311 to advance in the prerequisite sequence.

Students majoring in Civil Engineering must receive a grade of C or better in all engineering courses (AEEN, CEEN, EEEN, CSEN, etc.).

Candidates for the B.S. CEEN must also maintain a grade point average of 2.25 or higher in engineering and math/science course work.