

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

Catalog 2023-2024

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		~AEEN 2325 Intro to Developmnt in Archit (AEEN 1310)..... 3
ENGL 1301 Rhetoric and Composition 3		CEEN 2301 Mechanics I (PHYS 2325/2125; c.o.r. MATH 2414)..... 3
MATH 2413 Calculus I (MATH 1348) 4		ENGL 1302 Rhetoric and Composition (ENGL 1301)..... 3
PHYS 2325 University Physics I (c.o.r. MATH 2413) 3		MATH 2414 Calculus II (MATH 2413)..... 4
PHYS 2125 University Physics Lab I (c.o.r. PHYS 2325) 1		PHYS 2326 Univ. Physics II (PHYS 2325/2125; c.o.r. MATH 2414) 3
GEEN 1201 Engineering as a Career 2		PHYS 2126 University Physics Lab II (c.o.r. PHYS 2326) 1
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	16	17

SOPHOMORE YEAR		
AEEN 3316 Architectural Design (AEEN 2325) 3	AEEN 3303 Structural Analysis (CEEN 3311) 3	
AEEN 3346 Thermal Analysis (MATH 2414 & CEEN 2301) 3	HIST 1302 American History..... 3	
CEEN 3311 Strength of Materials (MATH 2414 & C or higher in CEEN 2301) 3	MATH 3320 Differential Equations (MATH 2414) 3	
AEEN 3332 Building Electrical Systems I (PHYS 2326/2126) 3	POLS 2301 Government & Politics of U.S. 3	
HIST 1301 American History 3	^ <i>Creative arts</i> 3	
	^ <i>Lang/Phil/Culture</i> 3	
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	15	18

JUNIOR YEAR		
~AEEN 3335 Environmental Systems for Buildings (AEEN 3346; c.o.r. CEEN 3392) 3	~AEEN 3304 Reinforced Concrete Design (AEEN 3303 & C or higher in CEEN 3311) 3	
~AEEN 3334 Building Electrical Systems II (AEEN 3332) 3	~AEEN 4320 Building Services Engineering (CEEN 3392, & AEEN 3335, & C or higher in AEEN 3346)..... 3	
~CEEN 3342 Geotechnical Engineering (CEEN 3311) 3	~AEEN 3130 Instrumentation Laboratory (AEEN 3335)..... 1	
~CEEN 3392 Hydraulics & Fluid Mechanics (C or higher in CEEN 2301) 3	POLS 2302 Government & Politics of Texas 3	
CHEM 1311 General Inorganic Chemistry I (MATH 1314 & H.S. chemistry or CHEM 1481) 3	Mathematics Elective ¹ 3	
CHEM 1111 Gen. Inorg. Chemistry Lab I (c.o.r. CHEM 1311) 1	^ <i>Communications</i> ² 3	
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	16	16

SENIOR YEAR		
~AEEN 4279 Senior Design Project I (AEEN 3316) 2	~AEEN 4289 Sen. Des. Project II (AEEN 4279, AEEN 4320, & either AEEN 3304 or AEEN 4316) 2	
~AEEN 4326 Construction Engineering. (c.o.r. CEEN 3317)..... 3	~CEEN 3244 Construction Materials (CEEN 3311)..... 2	
CEEN 3317 Engineering Economy (Junior standing in engineering).... 3	~CEEN 3145 Construction Materials Lab (c.o.r. CEEN 3244)..... 1	
^ <i>Social/behavioral</i> 3	STAT 4303 Statistical Methods (MATH 2414) 3	
Engineering Elective ³ 3	Engineering Elective ³ 3	
Engineering Elective ³ 3	Science Elective ⁴ 3	
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	17	14

~Courses offered once a year

Total Hours Required 129

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.

NOTES:

¹ Mathematics Elective (prerequisites vary):

Recommended MATH 3415, MATH 4341, MATH 4372, MATH 4374, or any other approved upper-level mathematics course.

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

³ Engineering Electives (prerequisites vary):

AEEN 3325, AEEN 4310, AEEN 4316, AEEN 4333, AEEN 4336, AEEN 4340, AEEN 4346

CEEN 2212/2113, CEEN 3315, CEEN 3389, CEEN 4314, CEEN 4336, CEEN 4350, CEEN 4368

ITEN 4353.

⁴ Science Elective: BIOL 1306, CHEM 1312, GEOL 1303.

^ 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 Architectural Engineering must receive a grade of C or better in all engineering courses (AEEN, CEEN, ITEN, 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.

**ARCHITECTURAL 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	_____

~AEEN 2325 (AEEN 1310)	_____
CEEN 2301 (PHYS 2325/2125; c.o.r. MATH 2414)	_____
ENGL 1302 (ENGL 1301).....	_____
MATH 2414 (MATH 2413)	_____
PHYS 2326 (PHYS 2325/2125; c.o.r. MATH 2414)	_____
PHYS 2126 (c.o.r. PHYS 2326)	_____

SOPHOMORE YEAR

AEEN 3316 (AEEN 2325)	_____
AEEN 3346 (MATH 2414 & CEEN 2301).....	_____
CEEN 3311 (MATH 2414 & C or higher in CEEN 2301)	_____
AEEN 3332 (PHYS 2326/2126)	_____
HIST 1301	_____

AEEN 3303 (CEEN 3311)	_____
HIST 1302	_____
MATH 3320 (MATH 2414).....	_____
POLS 2301.....	_____
^Creative arts	_____
^Lang/Phil/Culture.....	_____

JUNIOR YEAR

~AEEN 3335 (AEEN 3346; c.o.r. CEEN 3392)	_____
~AEEN 3334 (AEEN 3332)	_____
~CEEN 3342 (CEEN 3311)	_____
~CEEN 3392 (C or higher in CEEN 2301)	_____
CHEM 1311 (MATH 1314 & H.S. Chemistry or CHEM 1481) ...	_____
CHEM 1111 (c.o.r. CHEM 1311).....	_____

~AEEN 3304 (AEEN 3303 & C or higher in CEEN 3311).....	_____
~AEEN 4320 (CEEN 3392, AEEN 3335, & C or higher in AEEN 3346).....	_____
~AEEN 3130 (AEEN 3335).....	_____
POLS 2302	_____
Mathematics Elective ¹	_____
^ Communications ²	_____

SENIOR YEAR

~AEEN 4279 (AEEN 3316).....	_____
~AEEN 4326 (c.o.r. CEEN 3317).....	_____
CEEN 3317 (Junior standing in engineering)	_____
^Social/behavioral	_____
Engineering Elective ³	_____
Engineering Elective ³	_____

~AEEN 4289 (AEEN 4279, AEEN 4320, & either AEEN 3304 or AEEN 4316).....	_____
~CEEN 3244 (CEEN 3311).....	_____
~CEEN 3145 (c.o.r. CEEN 3244).....	_____
STAT 4303 (MATH 2414)	_____
Engineering Elective ³	_____
Science Elective ⁴	_____

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³ Engineering Electives (prerequisites vary):

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CEEN 2212/2113, CEEN 3315, CEEN 3389, CEEN 4314, CEEN 4336, CEEN 4350, CEEN 4368

ITEN 4353.

⁴ Science Elective: BIOL 1306, CHEM 1312, GEOL 1303.

^ 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."

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

1) AEEN 1310 → AEEN 2325 → AEEN 3316

2) MATH 2413 & PHYS 2325/2125 → CEEN 2301 → AEEN 3346 → AEEN 3335 & CEEN 3392 → AE 4320

3) MATH 2413 & PHYS 2325/2125 → CEEN 2301 & MATH 2414 → CEEN 3311 → AEEN 3303 → AEEN 3304 (and AEEN 4316)

4) PHYS 2326/2126 → AEEN 3332 → AEEN 3334

Grades of "C" or higher are required in CEEN 2301, CEEN 3311, AEEN 3346, and AEEN 3335 to progress in the prerequisite sequence.

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

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