

# ARCHITECTURAL ENGINEERING, B.S.

Accredited by the Engineering Accreditation Commission of ABET (<http://www.abet.org>)

Course	Title	Semester Credit Hours
<b>Freshman Year</b>		
<b>Semester 1</b>		
AEEN 1310	Computr Graphics and Applicatn	3
ENGL 1301	Rhetoric and Composition	3
MATH 2413	Calculus I	4
PHYS 2325 & PHYS 2125	University Physics I and University Physics I Lab	4
UNIV 1201	Learning in Global Context	2
Semester Credit Hours		16
<b>Semester 2</b>		
AEEN 2325	Intro to Developmnt in Archit	3
CEEN 2301	Mechanics I	3
ENGL 1302	Rhetoric and Composition	3
MATH 2414	Calculus II	4
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4
Semester Credit Hours		17
<b>Sophomore Year</b>		
<b>Semester 1</b>		
AEEN 3316	Architectural Design	3
AEEN 3346	Thermal Analysis	3
CEEN 3311	Strength of Materials	3
EEEN 3331	Circuits and Electrmag Devices	3
HIST 1301	American History to 1877	3
Semester Credit Hours		15
<b>Semester 2</b>		
AEEN 3303	Structural Analysis	3
HIST 1302	American History since 1877	3
MATH 3320	Differential Equations	3
POLS 2301	Government and Politics of US	3
Creative Arts ( <a href="https://catalog.tamuk.edu/undergraduate/general-requirements-graduation-baccalaureate-degree/#creative">https://catalog.tamuk.edu/undergraduate/general-requirements-graduation-baccalaureate-degree/#creative</a> )		3
Lang/Phil/Culture ( <a href="https://catalog.tamuk.edu/undergraduate/general-requirements-graduation-baccalaureate-degree/#language">https://catalog.tamuk.edu/undergraduate/general-requirements-graduation-baccalaureate-degree/#language</a> )		3
Semester Credit Hours		18
<b>Junior Year</b>		
<b>Semester 1</b>		
AEEN 3335	Environmntal Sys for Buildings	3
AEEN 3337	Electrical Systems-Buildings	3
CEEN 3143	Geotechnical Eng Lab	1
CEEN 3342	Geotechnical Engineering	3
CEEN 3392	Hydraulic and Fluid Mechanics	3
CHEM 1311 & CHEM 1111	Gen Inorganic Chemistry I and Gen Inorganic Chem Lab I	4
Semester Credit Hours		17
<b>Semester 2</b>		
AEEN 3304	Reinforced Concrete Design	3
AEEN 4320	Building Services Engineering	3

POLS 2302	Government and Politics of TX	3
Mathematics Elective (p. 2)		3
Communications ( <a href="https://catalog.tamuk.edu/undergraduate/general-requirements-graduation-baccalaureate-degree/#communication">https://catalog.tamuk.edu/undergraduate/general-requirements-graduation-baccalaureate-degree/#communication</a> ) <sup>1</sup>		3
Semester Credit Hours		15
<b>Senior Year</b>		
<b>Semester 1</b>		
AEEN 4279	Senior Design Project I	2
AEEN 4326	Construction Engineering	3
CEEN 3317	Engineering Economy	3
Social/Behavioral ( <a href="https://catalog.tamuk.edu/undergraduate/general-requirements-graduation-baccalaureate-degree/#social">https://catalog.tamuk.edu/undergraduate/general-requirements-graduation-baccalaureate-degree/#social</a> )		3
Engineering Elective (p. 2)		3
Engineering Elective (p. 2)		3
Semester Credit Hours		17
<b>Semester 2</b>		
AEEN 4289	Senior Design Project II (WI)	2
CEEN 3244	Construction Materials	2
CEEN 3145	Construction Materials Lab	1
STAT 4303	Statistical Methods	3
Engineering Elective (p. 2)		3
Science Elective (p. 3)		3
Semester Credit Hours		14
Total Credit Hours Required:		129

<sup>1</sup> Strongly recommended: COMS 2374 or ENGL 2374.

## Mathematics Elective

Recommended:

Code	Title	Semester Credit Hours
MATH 3415	Calculus III	4
MATH 4341	Linear Alg and Matrix Theory	3
MATH 4372	Math for Physics and Eng I	3
MATH 4374	Numerical Analysis	3

Or any other approved upper-level mathematics course.

## Engineering Electives

Code	Title	Semester Credit Hours
AEEN 3320	Sustainable Construction & Mat	3
AEEN 3325	Design Codes and Ordinances	3
AEEN 3331	Building Construction	3
AEEN 3347	Heat Transfer in Buildings	3
AEEN 3348	Building Physics	3
AEEN 4316	Structural Steel Design (WI)	3
AEEN 4333	Real Design and Construction	3
AEEN 4336	Selected Topics	1-3
AEEN 4346	Building System Management	3
CEEN 2113	Surveying Lab	1
CEEN 2212	Surveying	2

CEEN 3389	Structural Vibration	3
CEEN 4314	Matrix Methods and Struc Analys	3
CEEN 4317	Computer Methods in Civil Engi	3
CEEN 4368	Foundation Engineering	3
ITEN 4332	Hazardous Waste and Fire Safe	3
ITEN 4353	Construction Management	3
MEEN 3348	Heat Transfer	3

## Science Elective

Code	Title	Semester Credit Hours
BIOL 1306	General Biology I	3
CHEM 1312	Gen Inorganic Chemistry II	3
GEOL 1303	Physical Geology	3
GEOL 3305	Environmental Geology	3