



TENNESSEE STATE UNIVERSITY

Department of Civil and Architectural Engineering

Architectural Engineering Program Curriculum

Effective Fall 2025

Fall				Spring			
Freshman Year							
ENGL	1010	Freshman English I	3	ENGL	1020	Freshman English II	3
MATH	1910	Calculus I	4	MATH	1920	Calculus II	4
CHEM	1110	General Chemistry I	3	PHYS	2110	Calculus based Physics I	3
CHEM	1111	General Chemistry I Lab	1	PHYS	2111	Calculus based Physics I Lab	1
ENGR	1020	Freshman Engineering Seminar	1	AREN	1111	<u>Architectural Graphics</u>	2
ENGR	1151	Computer Engr Graphics	1	COMM	2200	Speech	3
UNIV	1000	Orientation	1				
			14				16
Sophomore Year							
MATH	2110	Calculus III	4	MATH	3120	Ordinary Differential Equation	3
ENGR	2240	Engineering Programming	3	ENGR	2000	Circuits	3
ENGR	2110	Engineering Mechanics I	3	ENGR	2001	Circuits Lab	1
PHYS	2120	Calculus based Physics II	3	ENGR	2120	Engineering Mechanics II	3
PHYS	2121	Calculus based Physics II Lab	1	ENGR	2010	Thermodynamics	3
HIST	2010	American History I	3	ENGR	2130	Mechanics of Materials	3
			17	ENGR	2131	Mechanics of Materials Lab	1
							17
Junior Year							
AREN	2300	<u>Bldg Materials & Construction</u>	3	MEEN	4200	<u>Heating & Air Conditioning</u>	3
AREN	3410	Bldg Structural Analysis	3	AREN	3440	<u>Steel Design</u>	3
CVEN	3100	Fluid Mechanics	3	AREN	3021	<u>Architectural Design II</u>	3
AREN	2011	<u>Architectural Design I</u>	3	AREN		Technical Elective(1)	3
ENGR	3400	Numerical Analysis	3	HIST	2020	American History II	3
AREN	4430	<u>Lighting/Power Systems</u>	3	AREN	2310	Arch. History (Hum. Elect)	3
			18				18
Senior Year							
CVEN	3400	<u>Structural Testing</u>	1	ENGR	4510	Capstone Design Project II	1
ENGR	4500	Capstone Design Project I	1	AREN	4470	<u>Construction Management</u>	3
ENGR	4900	Prof Development Seminar	1	ENGR	4201	Engineer in Training Lab	0
ENGR	2200	Probability & Statistics	3	ENGL		English Literature (Hum. Elect)	3
AREN	3420	<u>Reinforced Concrete Design</u>	3			Social Science Elective	3
AREN		Technical Elective(1)	3			Humanities Elective	3
		Social Science Elective	3				
			15				13

ALL STUDENTS ARE REQUIRED TO PASS OR TO BE WAIVED ENGINEERING ENTRANCE EXAMINATION PRIOR TO ENROLLING IN ENGINEERING UPPER (300-400) LEVEL COURSES

SOCIAL SCIENCE and HUMANITIES ELECTIVES MUST BE CHOSEN FROM AN APPROVED LIST COURSES

(1) TECHNICAL ELECTIVES MUST BE CHOSEN BASED ON THE OPTION (MECHANICAL OR STRUCTURAL) SELECTED:

MECHANICAL: AREN 4220: ADVANCED MECHANICAL SYSTEMS AREN 4450: ENERGY CONSERVATION + OTHERS

STRUCTURAL: AREN 4440: FOUNDATION ENGINEERING AREN 3460: WOOD & MASONRY DESIGN + OTHERS

ITALIC AND UNDERLINE COURSE ONLY BE OFFERED ONCE PER YEAR IN SPECIFIED FALL OR SPRING SEMESTER

TOTAL REQUIRED CREDIT HOURS FOR DEGREE IS

128