



Bachelor of Science – Civil Engineering

Catalog Year: 2024 – 2025

Degree: BSCE

Major: Civil Engineering

The major map illustrates one path to completing your major, based on faculty members' advice on course sequence and a department's tentative plans for scheduling courses. This document provides general direction.

Roane State Community College

Freshman Year – Fall Semester

Course Title	Cr	✓
ENGL 1010 – Composition I	3	
MATH 1910 – Calculus I	4	
CHEM 1110 – General Chemistry I	4	
ENST 1311 – Computer Aided Design I	3	
Humanities/Fine Arts Elective	3	
Total	17	

Freshman Year – Spring Semester

Course Title	Cr	✓
ENGL 1020 – Composition II	3	
Humanities/Fine Arts Elective	3	
MATH 1920 – Calculus II	4	
COMM 2025 – Fundamentals of Communication	3	
Social & Behavioral Sciences Elective	3	
History I	3	
Total	19	

Sophomore Year – Fall Semester

Course Title	Cr	✓
ENGL 2110, 2120, 2210, 2220, 2310 or 2320 Literature	3	
MATH 2110 – Calculus III	4	
PHYS 2110 – Calculus-Based Physics I	4	
ENGR 2110 – Statics	3	
Tech Elective: CISP 1010 Computer Science Programming	4	
Total	18	

Sophomore Year – Spring Semester

Course Title	Cr	✓
PHYS 2120 – Calculus-Based Physics II	4	
MATH 2120 – Differential Equations	3	
MATH 2010 (Math elective)	3	
Social & Behavioral Sciences Elective	3	
ENGR 2120 – Dynamics	3	
History II	3	
Total	19	

Tennessee Technological University

Junior Year – Fall Semester

Course Title	Cr	✓
CEE 3710 – Engineering Econ	2	
CEE 3413 – Environmental Engineering	3	
CEE 3720 – Principles of Engr Statistics or MATH 3470 – Prob and Statistics	2 or 3	
ME 3720 – Fluid Mechanics	3	
CEE 3600 – Surveying	3	
CEE 3110 – Mechanics of Materials	3	
Total	16 or 17	

Junior Year – Spring Semester

Course Title	Cr	✓
CEE 3500 – Construction Engineering and Mgmt	3	
CEE 3610 – Transportation Engineering	3	
GEOL 3210 – Engineering Geology	3	
CEE 3420 – Hydraulics	3	
CEE 3320 – Structural Mechanics	3	
ENGR 1110 – Engineering Graphics	2	
Total	17	

Senior Year – Fall Semester

Course Title	Cr	✓
CEE 4920 – Professionalism and Ethics	1	
CEE 3120 – Mech of Materials Lab or CEE 3430 – Environmental Engineering Lab	1	
CEE Sequence	3	
CEE 4XXX Elective	3	
CEE 4XXX Elective	3	
CEE 4310 – Structural Steel Design	3	
CEE 3030 – CE Materials	3	
Total	17	

Senior Year – Spring Semester

Course Title	Cr	✓
CEE 4950 – Senior Design	3	
CEE 3040 – Geotechnical Engineering Lab or CEE 3120 – Mech of Materials Lab or CEE 3430 – Environmental Engineering Lab	1	
CEE 4XXX Elective	3	
CEE 4320 – Reinforced Concrete Design	3	
CEE Sequence	3	
CEE 4800 – Geotechnical Engineering	3	
CE 4940 – Fundamentals of CE	0	
Total	16	

128 hours minimum required for graduation

- Notes
 - Students who completed one unit of American history in high school are exempt from HIST 2010 and HIST 2020
 - Approved CEE sequences can be located at:
https://catalog.tntech.edu/preview_program.php?catoid=31&poid=3952&hl=%22bsce%22&returnto=search

Red color listed courses are taken at Roane State

Purple color listed courses are taken at TTU