















2024 - 2025 Major Map

Environmental Engineering, BSE

School/College: Ira A. Fulton Schools of Engineering
ESEVEBSE

Term 1 0 - 16 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 FSE 100: Introduction to Engineering	2	C	<ul style="list-style-type: none">ASU 101 is required of all first-year students; FSE 394 is required for all new transfer students.Prep for success using the First-Year Student Guide.Join a Fulton community.Explore engineering and technical professions.
 MAT 265: Calculus for Engineers I (MATH OR MA)	3	C	
ASU 101-EVE: The ASU Experience	1		
CHM 113: General Chemistry I (SCIT OR SQ)	4		
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Social and Behavioral Sciences (SOBE)	3		
 Minimum 2.00 GPA ASU Cumulative.			
Term hours subtotal:	16		
Term 2 16 - 31 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 242: Elementary Linear Algebra	2	C	<ul style="list-style-type: none">Create a Handshake profile.Get involved with EPICS, the Generator Labs, and the Fulton Start-Up Center.
 MAT 266: Calculus for Engineers II (MATH OR MA)	3	C	
CEE 181: Technological, Social, and Sustainable Systems (SUST OR HU)	3		
CHM 116: General Chemistry II (SCIT OR SQ)	4		
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
 Minimum 2.00 GPA ASU Cumulative.			
Term hours subtotal:	15		
Term 3 31 - 47 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 267: Calculus for Engineers III (MATH OR MA)	3	C	<ul style="list-style-type: none">Prep for success using the Sophomore Guide.
 PHY 121: University Physics I: Mechanics (SCIT OR SQ)	3	C	
 PHY 122: University Physics Laboratory I (SCIT OR SQ)	1	C	
EVE 261: Introduction to Environmental Processes	3	C	
EVE 290: Statistics and Probability for Environmental Data (QTRS OR CS)	3		
Humanities, Arts and Design (HUAD)	3		
 Minimum 2.00 GPA ASU Cumulative.			
Complete Mathematics (MATH) requirement.			
Term hours subtotal:	16		
		Minimum	

Term 4 47 - 62 Credit Hours Critical course signified by ⚠	Hours	Grade	Notes
⚠ MAT 275: Modern Differential Equations (MATH OR MA)	3	C	<ul style="list-style-type: none"> Pursue an undergraduate research experience. Apply for internships. Attend career fairs and events.
EVE 214: Environmental Engineering Mechanics	3	C	
EVE 302: Environmental Engineering Fundamentals: Physical and Chemical Processes	3		
GLG 101: Introduction to Geology I (Physical) (SCIT OR SQ) OR GLG 108: Water Planet (SCIT OR SQ) OR GLG 110: Dangerous World (SCIT OR SQ & G)	3-4		
Governance and Civic Engagement (CIVI)	3		
Term hours subtotal:	15-16		
Term 5 62 - 77 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ EVE 303: Environmental Engineering Fundamentals: Microbiological Processes	3		<ul style="list-style-type: none"> Plan for success using the Junior Guide. Network at student organization competitions or professional societies.
CEE 300: Engineering Business Practice (L)	3		
CEE 384: Numerical Methods for Engineers (QTRS OR CS)	3		
EVE 304: Environmental Engineering Processes Lab	3		
EVE 314: Data Science for Environmental and Civil Engineers	3		
Term hours subtotal:	15		
Term 6 77 - 91 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ CEE 341: Fluid Mechanics for Civil Engineers	3		<ul style="list-style-type: none"> Research and prepare for graduate school. Apply for a Fulton Schools 4+1 program. Develop a professional profile online.
EVE 354: Materials in the Environment	4		
EVE 452: Environmental Investigation and Remediation Design	3		
EVE 461: Unit Operations in Drinking Water Treatment	3		
Upper Division Environmental Elective	1		
Term hours subtotal:	14		
Summer 6 91 - 92 Credit Hours	Hours	Minimum Grade	Notes
EVE 484: Internship	1	C	
Term hours subtotal:	1		
Term 7 92 - 106 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ CEE 467: Environmental Microbiology	3		<ul style="list-style-type: none"> Plan for success using the Senior Guide. Use Handshake to apply for full-time positions. Complete an in person or virtual practice interview.
★ CEE 487: Integrated Civil, Construction, and Environmental Engineering Design I (L)	2		
CEE 440: Hydrology	3		
EVE 465: Unit Operations in Wastewater Treatment	3		
Global Communities, Societies and Individuals (GCSI)	3		
Term hours subtotal:	14		
Term 8 106 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ CEE 488: Integrated Civil, Construction, and Environmental Engineering Design II (L)	2		
CEE 441: Water Resources Engineering	3		
Environmental Elective	3		
American Institutions (AMIT)	3		
Humanities, Arts and Design (HUAD)	3		
Term hours subtotal:	14		

Hide Course List(s)/Track Group(s)

Environmental Electives
ASB 326: Human Impacts on Ancient Environments (SUST OR SB & H)
ASB 370: Ethics of Eating (SUST OR L or SB)
BIO 324: Environmental Ethics (SUST OR HU)
CEE 351: Geotechnical Engineering
CEE 372: Transportation Engineering
CEE 466: Urban Water System Design
CEE 470: Sustainable Environmental Biotechnologies
CEE 485: Sustainable Civil and Environmental Systems Engineering
CHE 469: Air Quality Engineering
CHM 231: Elementary Organic Chemistry (SCIT OR SQ)
CHM 233: General Organic Chemistry I
CHM 240: Mathematical Methods in Chemistry (QTRS OR CS)
CHM 302: Environmental Chemistry
CHM 325: Analytical Chemistry
CHM 327: Instrumental Analysis
ENG 334: The American Southwest in Literature and Film (HUAD OR HU & C)
ENG 363: Transborder Mexican and Chicano/a Literature of Southwest North America (HUAD OR (L or HU) & C)
ENG 371: Rhetoric of the Environmental Movement
ENG 378: Environmental Creative Nonfiction (HUAD OR HU)
ENG 468: Environmental Literary Criticism (HUAD OR L or HU)
EVE 492: Honors Directed Study
EVE 493: Honors Thesis (L)
EVE 494: Special Topics
EVE 498: Pro-Seminar
EVE 499: Individualized Instruction
FSE 301: Entrepreneurship and Value Creation

HST 342: U.S. West 20th Century (SB & H)

HST 345: Environmental History (SUST OR L)

JUS 332: Politics of Energy Policy and Justice

JUS 444: Environment and Justice (L & C)

ERM 401: Hazardous Waste Management

EVE 411: Sustainable Energy, Materials and Technology

CHM 234: General Organic Chemistry II

- **Total Hours:** 120
- **Upper Division Hours:** 45 minimum
- **University Undergraduate Graduation Requirements**

Notes:

Mathematics Placement Assessment score determines placement in first mathematics course.

General Studies designations listed next to courses on the major map were valid for the 2024 - 2025 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.