



# VANDERBILT

## School of Engineering

### Environmental Engineering Curriculum (2024-2025 Catalog Year) 121 hours (minimum)

#### 1. Mathematics (14 hours)

MATH 1300	Accelerated Single-Variable Calculus I (4 hours) F/S
MATH 1301	Accelerated Single-Variable Calculus II (4 hours) F/S
MATH 2300	Multivariable Calculus (3 hours) F/S
MATH 2420	Methods of Ordinary Differential Equations (3 hours) F/S

#### 2. Basic Science (18 hours)

CHEM 1601+1601L	General Chemistry I and Laboratory (4 hours) F
CHEM 1602+1602L	General Chemistry and Laboratory (4 hours) S
PHYS 1601 + 1601L	General Physics I and Laboratory (4 hours) F/S
BSCI 1510	Molecules and Cells (3 hours) F
EES 1510	The Dynamic Earth: Introduction to Geological Science (3 hours) F/S

#### 3. Computing (3 hours)

CS 1100 or 1101 or 1103	Introductory Programming (3 hours) F/S
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#### 4. Engineering Fundamentals (16 hours)

ES 1401-1403	Introduction to Engineering (3 hours) F
CE 2200	Statics (3 hours) F/S
CE 3700+3700L	Fluid Mechanics and Laboratory (4 hours) F
ME 2190	Dynamics (3 hours) F/S
CHBE 2200 or ME 2220	Chemical Engineering Thermodynamics (3 hours) S Thermodynamics (3 hours) F/S

#### 5. Environmental Engineering Core (25 hours)

CE 2120	Sustainable Design in Civil Engineering (3 hours) F
CE 3300	Risk, Reliability, and Resilience Engineering (3 hour) S
CE 3705	Water Resources Engineering (3 hours) S
ENGM 3700	Program and Project Management (3 hours) F/S
ENVE 3200+3200L	Environmental Engineering Analysis and Laboratory F
ENVE 3600	Fundamentals in Environmental Engineering F
ENVE 4605	Environmental Thermodynamics, Kinetics, and Mass Transfer S
ENVE 4950	Environmental Engineering Design I F
ENVE 4951	Environmental Engineering Design II S
ENVE 4959	Senior Engineering Design Seminar F

#### 6. Environmental Engineering Program Electives (6 hours)

#### 7. Environmental Engineering Design Electives (6 hours)

#### 8. Liberal Arts Core (18 hours)

#### 9. Global Perspective Electives (6 hours)

#### 10. Data Science Electives (6 hours)

#### 11. Technical Electives (3 hours)

#### 12. Open Electives (6 hours)

Note: [The VU Undergraduate Catalog](#) is the definitive source for all degree requirements. If there are differences between this document and the catalog, then the catalog will prevail.



# VANDERBILT School of Engineering

## Environmental Engineering Prerequisites and Corequisites (2024-2025 Catalog Year)

### 1. Mathematics (14 hours)

MATH 1300	None.
MATH 1301	MATH 1300 or MATH 1201
MATH 2300	MATH 1301 or MATH 2200
MATH 2420	MATH 2300 or MATH 2310 or MATH 2501

### 2. Basic Science (18 hours)

CHEM 1601+1601L	None.
CHEM 1602+1602L	CHEM 1601, CHEM 1601L
PHYS 1601 + 1601L	Prerequisite or Corequisite: MATH 1200 or MATH 1300
BSCI 1510	Prerequisite or Corequisite: CHEM 1601
EES 1510	None.

### 3. Computing (3 hours)

CS 1100 or 1101 or 1103	None.
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### 4. Engineering Fundamentals (16 hours)

ES 1401-1403	None.
CE 2200	Corequisites: MATH 1301; PHYS 1601
CE 3700 + 3700L	ME 2190; MATH 2420
ME 2190	CE 2200; PHYS 1601; Corequisite: MATH 2300
CHBE 2200 or	Corequisite: MATH 2300
ME 2220	PHYS 1601; MATH 2300

### 5. Environmental Engineering Core (25 hours)

CE 2120	None.
CE 3300	MATH 2300
CE 3705	CE 3700 or CHBE 3300 or ME 3224
ENGM 3700	Junior Standing
ENVE 3200+3200L	Corequisite: ENVE 3600
ENVE 3600	CHEM 1601, PHYS 1601, MATH 2420
ENVE 4605	CHEM 1602, MATH 2420, ENVE 3600
ENVE 4950	ENVE 3600
ENVE 4951	ENVE 4950
ENVE 4959	Corequisite: ENVE 4950

### 6. Environmental Engineering Program Electives (6 hours)

Check individual course listings in the VU Undergraduate Catalog for requisites.

### 7. Environmental Engineering Design Electives (6 hours)

Check individual course listings in the VU Undergraduate Catalog for requisites.

### 8. Liberal Arts Core (18 hours)

### 9. Global Perspective Electives (6 hours)

Check individual course listings in the VU Undergraduate Catalog for requisites.

### 10. Data Science Electives (6 hours)

Check individual course listings in the VU Undergraduate Catalog for requisites.

### 11. Technical Electives (3 hours)

Check individual course listings in the VU Undergraduate Catalog for requisites.

### 12. Open Electives (6 hours)

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