

# ENVIRONMENTAL ENGINEERING, BACHELOR OF SCIENCE IN ENVIRONMENTAL ENGINEERING

Minimum Total Credit Hours: 125

Overall GPA - Combined and OU: 2.00

Major GPA - Combined and OU: 2.00

Curriculum GPA - Combined and OU: 2.00

Program Code: B390

In order to progress in your curriculum in the Gallogly College of Engineering, and as a specific graduation requirement, a grade of C or better is required in each course in the curriculum, including all prerequisite courses.

Two college-level courses in a single foreign language are required; this may be satisfied by successful completion of 2 years in a single foreign language in high school. Students who must take foreign language at the University will have an additional 6-10 hours of coursework.

Course	Title	Credit Hours
<b>Freshman</b>		
<b>First Semester</b>		
ENGL 1113	Principles of English Composition (Core I)	3
CHEM 1315	General Chemistry (Core II) <sup>1</sup>	5
HIST 1483 or HIST 1493	United States, 1492 to 1865 (Core IV) or United States, 1865 to the Present	3
MATH 1914	Differential and Integral Calculus I (Core I) <sup>2</sup>	4
CEES 1112	Introduction to Civil Engineering and Environmental Science	2
ENGR 1410	Freshman Engineering Orientation <sup>3</sup>	0
Credit Hours		17
<b>Second Semester</b>		
ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
CHEM 1415	General Chemistry (Continued) <sup>1</sup>	5
MATH 2924	Differential and Integral Calculus II <sup>2</sup>	4
PHYS 2514	General Physics for Engineering and Science Majors (Core II)	4
Credit Hours		16
<b>Sophomore</b>		
<b>First Semester</b>		
MATH 2934	Differential and Integral Calculus III <sup>2</sup>	4
PHYS 2524	General Physics for Engineering and Science Majors	4
CEES 1000	CEES Seminar <sup>4</sup>	0
CEES 2213	CADD Fundamentals	3
CEES 2113	Statics	3
CEES 2313	Water Quality Fundamentals	3
Credit Hours		17

## Second Semester

HSCI 3333	Technology and Society in World History (or approved substitute) (Core IV, West. Civ. & Culture)	3
MATH 3113	Introduction to Ordinary Differential Equations	3
CEES 1000	CEES Seminar <sup>4</sup>	0
CEES 2153	Mechanics of Materials	3
CEES 2223	Fluid Mechanics	3
CEES 2323	Environmental Transport and Fate Process	3
ENGR 2002	Professional Development	2
Credit Hours		17

## Junior

### First Semester

CHEM 3053	Organic Chemistry I: Biological Emphasis	3
CEES 1000	CEES Seminar <sup>4</sup>	0
CEES 3213	Water Resources Engineering	3
CEES 3363	Soil Mechanics	3
CEES 3361	Soil Mechanics Laboratory	1
ENGR 3401	Engineering Economics	1
Professional Elective <sup>5</sup>		3
Credit Hours		14

### Second Semester

ENGL 3153	Technical Writing	3
CEES 1000	CEES Seminar <sup>4</sup>	0
CEES 3243	Water and Wastewater Treatment Design	3
CEES 4253	Statistics and Probability	3
CEES 4943	Air Quality Management	3
Approved Elective: Social Science (Core III) <sup>6</sup>		3
ENGR 2461	Thermodynamics	1
Credit Hours		16

## Senior

### First Semester

CEES 1000	CEES Seminar <sup>4</sup>	0
CEES 4114	Aquatic Chemistry	4
CEES 4263	Hazardous and Solid Waste Management	3
CEES 4324	Environmental Biology and Ecology	4
CEES 4921	Introduction to EE Capstone	1
CEES 4951	Contemporary Topics in Professional Practice	1
Credit Hours		13

### Second Semester

ANTH 4623	Approaches to Cross-Cultural Human Problems (or approved substitute) (Core IV, Non-Western Civ.)	3
P SC 1113	American Federal Government (Core III)	3
Professional Elective <sup>5</sup>		3
Approved Elective, Artistic Forms (Core IV) <sup>6</sup>		3
CEES 1000	CEES Seminar <sup>4</sup>	0

CEES 4923	Environmental Engineering Capstone (Capstone)	3
	Credit Hours	15
	Total Credit Hours	125

<sup>1</sup> CHEM 1315 and CHEM 1415 can be substituted with CHEM 1335 (Fall only) and CHEM 1435 (Spring only), respectively.

<sup>2</sup> MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.

<sup>3</sup> Engineering transfer students may take ENGR 3410 in place of ENGR 1410.

<sup>4</sup> Students must complete a minimum of four semesters of CEES 1000.

<sup>5</sup> Professional electives can be chosen from any 3000-level or higher course in CEES. One three-hour professional elective can be taken outside CEES with advisor approval.

<sup>6</sup> To be chosen from the University-Wide General Education Approved Course List. Three of these 12 hours must be upper-division (3000-4000). See list in the Class Schedule.

Courses designated as Core I, II, III, IV or Capstone are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list.