

# ENVIRONMENTAL SCIENCE, BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE

Minimum Total Credit Hours: 121

Overall GPA - Combined and OU: 2.00

Major GPA - Combined and OU: 2.00

Curriculum GPA - Combined and OU: 2.00

Program Code: B405

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
MATH 1823	Calculus and Analytic Geometry I (Core I) <sup>2</sup>	3
HIST 1483 or HIST 1493	United States, 1492 to 1865 (Core IV) or United States, 1865 to the Present	3
CEES 1112	Introduction to Civil Engineering and Environmental Science	2
ENGR 1410	Freshman Engineering Orientation <sup>3</sup>	0
Credit Hours		16
<b>Second Semester</b>		
BIOL 1134 or PBIO 1114	Introductory Biology: Evolution, Ecology and Diversity or General Botany	4
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 2423	Calculus and Analytic Geometry II <sup>2</sup>	3
Credit Hours		15
<b>Sophomore</b>		
<b>First Semester</b>		
CHEM 3053	Organic Chemistry I: Biological Emphasis	3
PHYS 2514 or PHYS 2414	General Physics for Engineering and Science Majors or General Physics for Life Science Oriented Majors	4
CEES 2313	Water Quality Fundamentals	3
CEES 1000	CEES Seminar <sup>4</sup>	0
CEES 2213	CADD Fundamentals	3

BIOL 3403 or PBIO 3453	Principles of Ecology or Principles of Plant Ecology	3
Credit Hours		16

## Second Semester

CHEM 3153	Organic Chemistry II: Biological Emphasis	3
MBIO 2815	Introduction to Microbiology	5
PHYS 2524 or PHYS 2424	General Physics for Engineering and Science Majors or General Physics for Life Science Oriented Majors	4
CEES 2323	Environmental Transport and Fate Process	3
CEES 1000	CEES Seminar <sup>4</sup>	0
ENGR 2002	Professional Development	2
Credit Hours		17

## Junior

### First Semester

Approved Elective: Artistic Forms (Core IV) <sup>5</sup>		3
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
Credit Hours		14

### Second Semester

ANTH 4623	Approaches to Cross-Cultural Human Problems (or approved substitute) (Core IV, Non-Western Civ.)	3
ENGL 3153	Technical Writing	3
GEOG 4293	Hydrologic Science	3
CEES 1000	CEES Seminar <sup>4</sup>	0
CEES 4253	Statistics and Probability	3
CEES 4943	Air Quality Management	3
Credit Hours		15

## Senior

### First Semester

HSCI 3333	Technology and Society in World History (or approved substitute) (Core IV, West. Civ. & Culture)	3
P SC 1113	American Federal Government (Core III)	3
CEES 1000	CEES Seminar <sup>4</sup>	0
CEES 4911	Introduction to ES Capstone	1
CEES Professional Elective <sup>6</sup>		3
CEES Track Elective <sup>7</sup>		3
Credit Hours		13

### Second Semester

CEES 4913	Environmental Science Capstone (Capstone)	3
CEES 1000	CEES Seminar <sup>4</sup>	0
CEES Track Elective <sup>7</sup>		3
CEES Track Elective <sup>7</sup>		3
CEES Professional Elective <sup>6</sup>		3
Approved Elective: Social Science (Core III) <sup>5</sup>		3
Credit Hours		15

Total Credit Hours 121

- <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 1914, MATH 2924, and MATH 2934 sequence can be substituted for MATH 1823, MATH 2423, MATH 2433, and MATH 2443.
- <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> 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.
- <sup>6</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>7</sup> See Student Handbook for the list of Track electives.

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.

The Environmental Science electives will be selected from Civil Engineering and Environmental Science courses with the approval of the advisor.