

Environmental Engineering Sample Curriculum

	WU Course	Fall	Spring
Home Institution (3-4 years)			
Calculus II, III	Math 132, 233	3	3
Differential Equations	Math 217	3	
General Chemistry I, II	Chem 111A, 112A	3	3
General Chemistry Laboratory I, II	Chem 151, 152	2	2
General Physics I, II	Physics 191, 192	3	3
General Physics Lab I, II	Physics 191L, 192L	1	1
Organic Chemistry I and Lab	Chem 261	4	
Intro Computer Science (+ MATLAB experience recommended)	CSE 131		3
Principles of Biology I (cellular, molecular & developmental bio)	Bio 2960		4
English Composition	CWP 100	3	
Humanities and social science electives*		6	9
Additional home institution degree requirements		varies	varies
90 units or more of transferable college credit	Subtotal	90+ to transfer	
First Year of Dual Degree Curriculum at WashU			
Topics in Energy, Environmental and Chemical Engineering	EECE 103	1	
Process Analysis and Thermodynamics	EECE 205	4	
Green Engineering	EECE 311	3	
Engineering Mathematics A	ESE 318	3	
Probability and Statistics for Engineering	ESE 326	3	
Technical Writing	ENGR 310	3	
Computational Modeling in EECE	EECE 202		3
Thermodynamics II in EECE	EECE 204		3
Transport Phenomena I: Basics and Fluid Mechanics	EECE 301		3
Introduction to Environmental Engineering	EECE 210		3
Physical and Chemical Processes for Water Treatment	EECE 533		3
Natural Science Elective**			3
	Subtotal	17	18
Second Year of Dual Degree Curriculum at WashU			
Environmental Fate and Transport	EECE 309	3	
Environmental Organic Chemistry or Aquatic Chemistry	EECE 531 or 505	3	
Air Quality Engineering with Lab	EECE 314	4	
Environmental Biotechnology	EECE 407	3	
Process Design, Economics, and Simulation	EECE 409	2	
Environmental Engineering Electives***		3	9
Environmental Engineering Laboratory	EECE 425		3
Environmental Engineering Capstone	EECE 404		3
Engineering Professional Practice (consider ENGR 450F)	ENGR 4501, 4502, 4503		3
	Subtotal	18	18
60 units or more must be taken at Washington Univ.	Total	60+ for WU degree	

*One of the humanities/social science courses should focus on an issue such as environmental justice or environmental policy; otherwise, a suitable course can be taken at WashU to satisfy the EnvE major requirement for 3 units of an Environmental Humanities/Social Science Elective.

**Credit for the Natural Science Elective could be transferred in; potentially eligible course topics include ecology, geochemistry, hydrology, and soil science.

***Up to 3 units of upper division chemistry, mathematics, and physics courses are often accepted as transfer credit for the Environmental Engineering Electives. At least 9 Environmental Engineering Electives units must be taken in the EECE department.