

### Environmental Engineering Sample Curriculum

	WU Course	Fall	Spring
<b>Home Institution (3-4 years)</b>			
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	
Computer Science (exposure to MATLAB recommended)	CSE 131		3
Principles of Biology I (cellular, molecular & developmental bio)	Bio 2960		4
English Composition	L59 CWP	3	
Humanities and social science electives		9	9
Additional home institution degree requirements		varies	varies
90 units or more of transferable college credit	<b>Subtotal</b>	<b>90+ to transfer</b>	
<b>First Year of Dual Degree Curriculum at WashU</b>			
Topics in Energy, Environmental and Chemical Engineering	EECE 103	1	
Process Analysis and Thermodynamics	EECE 205	4	
Green Engineering	EECE 311	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
Environmental H/SS Elective**			3
Engineering Mathematics A	ESE 318	3	
Probability and Statistics for Engineering	ESE 326	3	
Technical Writing	ENGR 310	3	
	<b>Subtotal</b>	<b>17</b>	<b>18</b>
<b>Second Year of Dual Degree Curriculum at WashU</b>			
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 Laboratory	EECE 425		3
Environmental Engineering Capstone	EECE 404		3
Natural Science Elective**			3
Engineering Professional Practice (consider Spring Break course)	EN 4501/4502/4503		3
EECE Electives		3*	6
	<b>Subtotal</b>	<b>18</b>	<b>18</b>
60 units or more must be taken at Washington Univ.	<b>Total</b>	<b>60+ for WU degree</b>	

\*Presuming 3 credits of courses taken at home institution will qualify as Environmental Engineering Electives. Upper division chemistry, mathematics, and physics courses are often acceptable. If no courses qualify, then an additional 3 credits of Environmental Engineering Electives will be required.

\*\*Credit for the Natural Science and/or Environmental H/SS electives could potentially be transferred in, depending on how well a home institution course matches the intent of these two requirements.

MEng candidates should plan on taking both degrees after the third year, which allows for spreading out the coursework. Consult with EECE faculty advisor regarding undergraduate/graduate course sequence. 84 minimum WashU residency units are required for the MEng degree.  
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