

Energy, Environmental, & Chemical 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 Physics I, II	Physics 117A, 118A	4	4
General Chemistry I, II	Chem 111A, 112A	3	3
General Chemistry Laboratory I, II	Chem 151, 152	2	2
Organic Chemistry I and Lab	Chem 261	4	
Computer Science (MATLAB preferred)	CSE 131		3
Principles of Biology I (cellular, molecular & developmental bio)	Bio 2960		4
English Composition	ECMP 100	3	
Humanities and social science electives		9	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 WU			
Intro to Environmental Engineering	EECE 210		3
Engineering Analysis of Chemical Systems	EECE 201	3	
Modeling and Computing in EECE	EECE 202		3
Thermodynamics I in EECE	EECE 203	3	
Thermodynamics II in EECE	EECE 204		3
Transport Phenomena I: Basics and Fluid Mechanics	EECE 301		3
Mass Transfer Operations	EECE 304		3
Engineering Mathematics A	ESE 318	3	
Engineering Mathematics B	ESE 319	3	
Probability and Statistics for Engineering	ESE 326	3	
Technical Writing	ENGR 310		3
EECE Elective		3	
	Subtotal	18	18
Second Year of Dual Degree Curriculum at WU			
Transport Phenomena II: Mass Transfer	EECE 302	3	
Transport Phenomena III: Energy Transfer Processes	EECE 303		3
Materials Science	EECE 305	3	
Chemical Process Dynamics & Control	EECE 401	3	
ChE Capstone	EECE 402		3
Chemical Reaction Engineering	EECE 403	3	
Unit Operations Laboratory	EECE 405	3	
Engineering Professional Practice	EN 4501, 4502, 4503		3
EECE Electives		3	9*
	Subtotal	18	18
60 units or more must be taken at Washington Univ.	Total	60+ for WU degree	

*18 credits in the spring semester of second year presuming 3 credits of courses taken at home institution will qualify as Chemical Engineering Electives. Upper division chemistry, mathematics, and physics courses are often acceptable. If no courses qualify, then an additional 3 credits of Chemical Engineering Electives will be required.