

Name:

Key:

Done
In Progress
Possible based on prerequisites

2017-2018 Environmental Engineering Curriculum

*This chart was prepared by Freshman Engineering using the 2017-2018 catalog. It is designed to assist in advising and course selection; refer to the student's catalog requirement year for official requirements and to the student's degree audit for official progress.*

Prerequisites	FEP		Math	1103	Fundamentals of Algebra	Prerequisite: Entrance requirements.	3	
	FEP		Math	1120	College Algebra	Prerequisite: By placement examination.	5	
	FEP		Math	1140	College Algebra	Prerequisite: By placement examination.	3	
	FEP		Math	1160	Trigonometry	Prerequisite: Math 1120 or 1140 with a grade of "C" or better; or by placement exam.	2	
	FEP		Chem	1100	Introduction to Laboratory Safety & Hazardous Materials		1	

Semester 1	FEP		Fr Eng	1100	Study & Careers in Engineering		1	
	FEP		Chem	1310	General Chemistry I	Prerequisite: Entrance requirements.	4	
	FEP		Chem	1319	General Chemistry Laboratory	Prerequisite: Preceded or accompanied by both Chem 1310 and Chem 1100.	1	
	FEP		Math	1214	Calculus for Engineers I	Prerequisites: A grade of "C" or better in both Math 1160 and one of Math 1120 or Math 1140; or by placement exam.	4	
	FEP	<i>Hum/Soc Sci Requirement-English</i>	English	1120	Exposition and Argumentation		3	
	FEP	<i>Hum/Soc Sci Elective - History</i>	History/Pol Sci	one of these	1. History 1200 Modern Western Civilization 2. History 1300 American History to 1877 3. History 1310 American History Since 1877 4. Pol Sci 1200 American Government		3	

Semester 2	FEP		Mech Eng	1720	Introduction to Engineering Design		3	
	FEP		Math	1215	Calculus for Engineers II	Prerequisites: Math 1160 and either Math 1208 or Math 1214 both with a grade of "C" or better; or by placement exam.	4	
	FEP		Physics	1135	Engineering Physics I	Prerequisite: Math 1208 or 1214.	4	
	FEP	<i>Hum/Soc Sci Elective - Econ</i>	Econ	one of these	1. Econ 1100 Principles of Microeconomics 2. Econ 1200 Principles of Macroeconomics		3	
	FEP	<i>Hum/Soc Sci Elective - Humanities</i>	various	one of these	Course chosen from Requirements for Humanities and Social Sciences Courses for Engineering Degrees at ugs.mst.edu.	Prerequisites vary.	3	

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Semester 3			Civ Eng	2200	Statics	Prerequisites: Physics 1135 or Physics 1111 with a grade of "C" or better; Math 1215 or Math 1221 with a grade of "C" or better; preceded or accompanied by Math 2222.	3	
			Math	2222	Calculus with Analytic Geometry III	Prerequisites: Math 1215 or Math 1221 with a grade of "C" or better.	4	
			Env Eng	2601	Fundamentals of Environmental Engineering and Science	Prerequisites: Chem 1310, Chem 1301, or Chem 1351; Math 1214, Math 1212, or Math 1208. (Co-listed with Civ Eng 2601).	3	
		<i>Chemistry Elective</i>	various	one of these	1. Chem 1320 General Chemistry II 2. Geology 3410 Introduction to Geochemistry	1. Prerequisites: Chem 1310 with a grade of "C" or better and Chem 1319. 2. Prerequisite: Chem 1310.	3	
			BioSci	1113	General Biology	Prerequisite: Entrance requirements.	3	

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Semester 4			Civ Eng	2210	Mechanics of Materials	Prerequisite: Civ Eng 2200 with grade of "C" or better.	3	
			Civ Eng	2211	Materials Testing	Prerequisite: Preceded or accompanied by Civ Eng 2210.	1	
			Mech Eng	2350	Engineering Mechanics - Dynamics	Prerequisites: A grade of "C" or better in each of Civ Eng 2200 and Math 2222	2	
			Chem Eng	2100	Chemical Engineering Material & Energy Balances	Prerequisites: Chem 1320 or Geology 3410; Math 1215 or Math 1221; preceded or accompanied by Physics 1135.	3	
			Env Eng	2602	Biological Fundamentals of Environmental Engineering	Prerequisites: Bio Sci 1113 and preceded or accompanied by Civ/Env Eng 2601. (Co-listed with Civ Eng 2602).	3	
			Physics	2135	Engineering Physics II	Prerequisites: Physics 1135 or Physics 1111, Math 1221 or Math 1215.	4	

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Semester 5			Env Eng	3615	Water and Wastewater Engineering	Prerequisites: Civ Eng 2601. (Co-listed with Civ Eng 3615).	3	
			Env Eng	3603	Chemical Fundamentals of Environmental Engineering	Prerequisites: Chem 1320 or Geology 3410; Physics 1135, Math 2222.	3	
			Civ Eng	3330	Engineering Fluid Mechanics	Prerequisites: Mech Eng 2350 or Mech Eng 2340, and MATH 3304, each with a grade of "C" or better.	3	
			Math	3304	Elementary Differential Equations	Prerequisite: Math 2222 with a grade of "C" or better.	3	
			Geo Eng	1150	Physical & Environmental Geology	Prerequisite: Entrance requirements. (Co-listed with Geology 1110).	3	

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Semester 6			Env Eng	5619	Environmental Engineering Design	Prerequisite: Civ Eng 3615 or Env Eng 3615. (Co-listed with Civ Eng 5619).	3	
			Stat	3113	Applied Engineering Statistics	Prerequisite: Math 1215 or 1221 with a grade of "C" or better.	3	
			Chem Eng	2110	Chemical Engineering Thermodynamics I	Prerequisites: Preceded by Math 2222; Preceded or accompanied by Chem Eng 2100.	3	
		<i>Technical Elective</i>	various	one of these	A grade of 'C' or better may be required in ENV ENG technical and depth elective prerequisite courses. Refer to the Missouri S&T undergraduate catalog for this prerequisite information. Select technical electives from approved list. A maximum total of 6 credit hours of independent study (ENV ENG 5000 or ENV ENG 4099) can be used as depth or technical electives in the B.S. environmental engineering curriculum.	Prerequisites vary.	3	
		<i>Hum/Soc Sci Elective - Communications</i>	various	one of these	1. Civ Eng 2003 Engineering Communications 2. English 1160 Writing and Research 3. English 3560 Technical Writing 4. SP&M S 1185 Principles of Speech	1. (Co-listed with Arch Eng 2003). 2. Prerequisite: English 1120. 3. Prerequisites: English 1120 and second-semester junior standing. 4. Prerequisite: Entrance requirements.	3	

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Semester 7		Civ Eng	4448	Fundamentals of Contracts and Construction Engineering	Prerequisite: Senior Standing. (Co-listed with Arch Eng 4448).	3		
		Env Eng	4010	Senior Seminar: Engineering in a Global Society	Prerequisite: Senior standing. (Co-listed with Civ Eng and Arch Eng 4010).	1		
		Civ Eng	3334	Water Resources Engineering	Prerequisites: Civ Eng 3330 and Stat 3113 with grades of "C" or better.	4		
		<i>Air Pollution Elective</i>	various	one of these	Choose 3 of the following: Env Eng 5640, Env Eng 5630, Env Eng 5650, Env Eng 5670, Env Eng 5605, Env Eng 5660, Env Eng 5662 or Geo Eng 5331. One class may not be used to fulfill both the air pollution requirement and a depth elective.	Prerequisites vary.	3	
		<i>Hum/Soc Sci Elective - History</i>	History	one of these	1. History 2510 History of Technology 2. History 2530 History of Science	1. Prerequisite: History 1100 or 1200 or 1300 or 1310. 2. Prerequisite: History 1100 or 1200 or 1300 or 1310.	3	
		<i>Depth Elective</i>	various	one of these	Choose 3 of the following: Env Eng 5640, Env Eng 5630, Env Eng 5650, Env Eng 5670, Env Eng 5605, Env Eng 5660, Env Eng 5662 or Geo Eng 5331. One class may not be used to fulfill both the air pollution requirement and a depth elective.	Prerequisites vary.	3	

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Semester 8		Env Eng	4097	Senior Design Project	Prerequisite: Civ Eng 4448 or Arch Eng 4448. (Co-listed with Arch Eng 4097 and Civ Eng 4097).	3		
		<i>Depth Elective</i>	various	one of these	Choose 3 of the following: Env Eng 5640, Env Eng 5630, Env Eng 5650, Env Eng 5670, Env Eng 5605, Env Eng 5660, Env Eng 5662 or Geo Eng 5331. One class may not be used to fulfill both the air pollution requirement and a depth elective.	Prerequisites vary.	3	
		<i>Depth Elective</i>	various	one of these	Choose 3 of the following: Env Eng 5640, Env Eng 5630, Env Eng 5650, Env Eng 5670, Env Eng 5605, Env Eng 5660, Env Eng 5662 or Geo Eng 5331. One class may not be used to fulfill both the air pollution requirement and a depth elective.	Prerequisites vary.	3	
		<i>Technical Elective</i>	various	one of these	Technical elective chosen from approved list and approved by the student's advisor. A maximum total of 6 credit hours of independent study (Env Eng 5000 or Env Eng 4099 ) can be used as depth or technical electives.	Prerequisites vary.	3	
			Env Eng	4609	Research in Environmental Engineering	Prerequisite: Senior Standing	1	
		<i>Hum/Soc Sci Elective</i>	various	one of these	Course chosen from Requirements for Humanities and Social Sciences Courses for Engineering Degrees at ugs.mst.edu.	Prerequisites vary.	3	

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Total = 128