BS in Chemical Engineering with Emphasis in Environmental

Degree Program Description

The environmental emphasis builds on the core Chemical Engineering curriculum (https://catalog.missouri.edu/collegeofengineering/chemicalengineering/bs-chemical-engineering/) to provide students an opportunity to explore courses centered around environmental engineering, wastewater treatment, and environmental regulation. A major focus of this emphasis is to prepare students for careers in policy, industry, or research. A student who completes this emphasis will also be in a position to pursue a graduate degree in programs focused on environmental science and engineering.

Major Program Requirements

Students must complete all BSChE requirements (https://catalog.missouri.edu/collegeofengineering/chemicalengineering/bs-chemical-engineering/), including the emphasis area requirements below.

Emphasis Area Requirements		
CV_ENG 3200	Fundamentals of Environmental Engineering	4
Five courses from the following list		
BIOL_EN 4150	Soil and Water Conservation Engineering	3
CHEM 4280	Environmental Chemistry *	3
CH_ENG 4220	Hazardous Waste Management	3
CH_ENG 4285	Pollution Prevention	3
CH_ENG 4311	Chemodynamics	3
CH_ENG 4312	Air Pollution Control	3
CH_ENG 4318	Energy Technology and Sustainability	3
CV_ENG 3250	Pollutant Fate and Transport	3
CV_ENG 4250	Environmental Regulatory Compliance	3
or ENV_SC 4400	Environmental Law, Policy, and Justice	
or NAT_R 4353	Natural Resource Policy/Administration	
ENV_SC 3290	Soils and the Environment	3
NU_ENG 4315	Energy Systems and Resources	3

* Satisfies the chemistry elective

Semester Plan

Below is a sample plan of study, semester by semester. A student's actual plan may vary based on course choices where options are available.

First Year			
Fall	**CR**	**Spring**	**CR**
MATH 1500	5	MATH 1700	5
CHEM 1400	3	CHEM 1410	3
CHEM 1401	1	CHEM 1411	1
CH_ENG 1000	2	PHYSCS 2750	5
ENGLSH 1000	3	CH_ENG 2225	3
Approved history/poli. sci. elective	3		
	17		**17**
Second Year			
Fall	**CR**	**Spring**	**CR**
MATH 2300	3	MATH 4100	3
CHEM 2100	3	CHEM 2110	3
PHYSCS 2760	5	CHEM 2130	2
CH_ENG 2226	3	CH_ENG 3262	3
CH_ENG 3261	3	Humanities/fine arts or social/behavioral sciences	3
	17		**14**
Third Year			
Fall	**CR**	**Spring**	**CR**
STAT 4710	3	CH_ENG 3234	3
CH_ENG 3233	3	CH_ENG 3235	3
Chemistry elective	3	CH_ENG 4370	3
CV_ENG 3200	4	Humanities/fine arts or social/behavioral sciences	3
Economics elective	3	Humanities/fine arts or social/behavioral sciences	3
	16		**15**
Fourth Year			
Fall	**CR**	**Spring**	**CR**
CH_ENG 3243W	3	CH_ENG 4220	3
CH_ENG 4311	3	CH_ENG 4318	3
CH_ENG 4363	3	CH_ENG 4980W	3
CH_ENG 4385	3	Environmental sci./eng. elective	3
CV_ENG 4250	3	Humanities/fine arts or social/behavioral sciences	3
	15		**15**

Total Credits: 126