

BS in Chemical Engineering with Emphasis in Environmental

Degree Program Description

The environmental emphasis builds on the core Chemical Engineering curriculum (<http://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 (<http://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
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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
ENV_SC 3290	Soils and the Environment	3
ENV_SC 4400	Environmental Law, Policy, and Justice	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 1320		4 CHEM 1330	4
CH_ENG 1000		2 PHYSICS 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
PHYSICS 2760		5 CHEM 2130	2
CH_ENG 2226		3 CH_ENG 3262	3
CH_ENG 3261		3 Humanities 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 4370	3
CH_ENG 3235		3 CV_ENG 3200	4
Chemistry elective		3 Humanities or social/behavioral sciences	3
Economics elective		3 Humanities or social/behavioral sciences	3
		15	16

Fourth Year			
Fall	CR	Spring	CR
CH_ENG 3243		3 CH_ENG 4220	3
CH_ENG 4312		3 CH_ENG 4980	3
CH_ENG 4363		3 Environmental sci./eng. elective	3
CH_ENG 4385		3 Environmental sci./eng. elective	3
CV_ENG 4250		3 Humanities or social/behavioral sciences	3
		15	15

Total Credits: 126