Minor in Water Sustainability

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Assuring safe and sustainable water supplies is one of the world's most pressing challenges. Understanding the design and implementation of water systems and related infrastructure requires diverse knowledge within the water resources field but that knowledge also crosses into numerous engineering disciplines. Students who are pursuing careers in the mining industry, energy industry, manufacturing industry, chemical processing industry, and public policy sector can bolster their credentials with this minor. The Water Sustainability minor has been developed to expose students to the relevant subfields of water and environmental systems, including water chemistry, fluid mechanics, water resources and hydrology, fate and transport of chemicals in the environment, site remediation, and onsite water reclamation and reuse.

Students are encouraged to explore other courses relevant to this minor and propose their own plan of study that would support the Water Sustainability minor. For preapproval on potential course substitutions to fulfill this minor, please contact the undergraduate program manager for Civil/Environmental Engineering.

Six courses (18 credits) are required for this minor.

Required Courses		**12.0**
CEEN301	FUNDAMENTALS OF ENVIRONMENTAL ENGINEERING: WATER	
CEEN310	FLUID MECHANICS FOR CIVIL AND ENVIRONMENTAL ENGINEERING [1]	
CEEN381	HYDROLOGY AND WATER RESOURCES ENGINEERING	
CEEN470	WATER AND WASTEWATER TREATMENT PROCESSES	
Electives (See List)		**6.0**
Total Semester Hrs		**18.0**

Elective List: Select two of the following six courses:

CEEN472	ONSITE WATER RECLAMATION AND REUSE
CEEN475	HAZARDOUS SITE REMEDIATION ENGINEERING
CEEN478	WATER TREATMENT DESIGN AND ANALYSIS
CEEN480	CHEMICAL FATE AND TRANSPORT IN THE ENVIRONMENT
CEEN482	HYDROLOGY AND WATER RESOURCES LABORATORY

Civil Engineering and Environmental Engineering majors may not pursue this minor, as there is too much overlap between degree requirements and the minor. The combined (BS/MS) degree program may be a suitable option for Civil or Environmental majors that wish to focus in Sustainable Water Engineering.

[1] Students who have completed a different variation of a fluid mechanics are encouraged to pursue a course substitution request so that the completed course can be double-counted for the minor.

Primary Contact

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https://cee.mines.edu/