

## **Environmental Engineering**

Praveen Edara, Chair Department of Civil & Environmental Engineering E2509 Lafferre Hall (573) 882-1900

https://engineering.missouri.edu/civil/

Environmental engineers apply engineering principles to create solutions for the protection of the natural environment. They design, build and operate systems for water and waste water treatment, remediation of contaminated sites, and develop strategies for pollution control.

## **Faculty**

Professor B. Deng\*\* P. K. Z. Hu\*\* P.E.
Associate Professor M. M. Fidalgo\*\*, K. M. Trauth\*\* P.E., F. Xiao\*\*
P.E.

Assistant Professor M. Salehi\*\*, B. Wang\*\* Adjunct Faculty E. Inniss, Professor Emeritus T. E. Clevenger,

- \* Graduate Faculty Member membership is required to teach graduatelevel courses, chair master's thesis committees, and serve on doctoral examination and dissertation committees.
- \*\* Doctoral Faculty Member membership is required to chair doctoral examination or dissertation committees. Graduate faculty membership is a prerequisite for Doctoral faculty membership.

## **Undergraduate**

 BS in Environmental Engineering (http://catalog.missouri.edu/ collegeofengineering/environmentalengineering/bs-environmentalengineering/)

Program Learning Objectives:

Students who complete the BS in Environmental Engineering will acquire knowledge in:

- (a) mathematics through differential equations, probability and statistics, calculus-based physics, chemistry (including stoichiometry, equilibrium, and kinetics), earth science, biological science, and fluid mechanics;
- (b) material and energy balances, fate and transport of substances in and between phases in the environment (air-water-soil).
- (c) the design of environmental engineering systems that includes considerations of risk, uncertainty, sustainability, life-cycle principles, and environmental impacts, and
- (d) Concepts of professional practice and project management, and the roles and responsibilities of public institutions and private organizations pertaining to environmental policy and regulations.

Students will develop practical and critical thinking skills through handson laboratory experiments and analysis and interpretation of the resulting data in more than one major environmental engineering focus area, e.g., air, water, land, environmental health, as well as through completion of the capstone project.

## Graduate

A graduate degree in Environmental Engineering in not currently offered. Students interested in advanced degrees in Environmental Engineering

will pursue MS and PhD degrees in Civil Engineering, environmental emphasis area.