College: MCECS  
Department: Environmental Engineering  
Degree: B.S.  

Introduction  
The BSENVE program provides training for engineers to preserve the natural environment – an especially important part of our culture in Portland and in the state of Oregon. Oregon prides itself on its environmental commitments and efforts toward living sustainably. This degree focuses on the fundamentals of environmental and water resources engineering with recommended tracks in geo-environmental, surface water hydrology and remote sensing, surface and groundwater water quality, groundwater hydrology, or air quality. Many of the required courses in the program are interdisciplinary drawing from the Departments of Chemistry, Mathematics and Statistics, Environmental Science and Management, Physics, Geology and Biology.

The BSENVE curriculum at Portland State University is accredited by the Engineering Accreditation Commission of ABET. This national organization sets standards for curricular content, quality of faculty, and adequacy of facilities.

Undergraduate Program Learning Outcomes  
BSENVE Program Outcomes  
Program outcomes are goals that describe our expectations as BSENVE students graduate. Graduates of the Environmental Engineering program will have the skills and abilities to prepare them to begin professional practice or to succeed in graduate studies. Graduates will have:

A. An ability to apply principles of mathematics, science, and engineering to the analysis and design of environmental engineering projects.

B. An ability to design and conduct experiments, as well as to analyze and interpret data.

C. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.

D. An ability to participate in projects that cross disciplines and to function on multi-disciplinary teams.

E. An ability to identify, formulate, and solve engineering problems.

F. An understanding of the professional and ethical responsibility of engineers in a broad societal context.

G. An ability to communicate effectively.

H. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.

I. A recognition of the need for, and an ability to engage in continuing professional development and life-long learning.

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J. A knowledge of relevant contemporary issues.

K. An ability to use the modern techniques, skills, and engineering tools necessary for engineering practice.

L. An awareness of the need for professional registration in career development.