



Bioproducts and Biosystems Engineering with a specialization in Environmental and Ecological Engineering

About

A Bioproducts and Biosystems Engineering (BBE) degree with a specialization in environmental and ecological engineering integrates engineering principles with the foundations of biology and ecology. Graduates are prepared to design, develop, and implement sustainable solutions for the mutual benefit of both natural systems and systems significantly affected by human activities. Graduates have experience with applications in hydrology and hydrological analysis, water, air, soil quality, land-use management, ecosystem services, ecological restoration, and waste management.

Degree

Students graduate from our program with a bachelor of bioproducts and biosystems engineering from the University of Minnesota's College of Science and Engineering.



Career Opportunities

BBE graduates specializing in environmental and ecological engineering pursue a wide range of exciting careers addressing water resources and water quality, air quality and pollution control, soil conservation and the sustainable use of natural resources. Projects include erosion and sediment control, bioreactor use and design, environmental bioremediation, pollution mitigation, and watershed management.

Coursework

- Ecological Engineering Principles
- Environmental Engineering
- Watershed Engineering
- Assessment and Diagnostics of Impaired Waters
- Air Pollution and Air Quality
- Ground Water Mechanics
- Process Control and Instrumentation
- Sustainable Waste Management Engineering

Positions

- Environmental Engineer
- Ecological Engineer
- Biosystems Engineer
- Water Resources Engineer
- Engineering Consultant
- Project Manager
- Resource Conservation Engineer
- Project Engineer

Companies That Employ Our Graduates

- Antea Group
- Arcadis
- Barr Engineering
- MN Board of Water and Soil Resources
- MN Department of Natural Resources
- MN Department of Transportation
- MN Pollution Control Agency
- Short Elliott Hendrickson (SEH), Inc.
- SRF Consulting Group
- Stantec Consulting Services
- Watershed Districts