What can I do with a major in... Environmental Engineering

Environmental engineers design and apply technologies to resolve issues of environmental concern. They design systems that produce safe drinking water, treat wastewater so that it can be reused and/or safely returned to the environment, accommodate municipal and hazardous waste, mitigate air pollution, and protect public health. They use engineering and ecological principles to protect and enhance the natural environment, including erosion and sediment control, pollution abatement, watershed management, impaired-waters diagnostics, and wetland and ecological restoration. Environmental engineers pursue a wide range of careers in the private sector, government, and academia.

INDUSTRIES
- Chemical companies
- Community development
- Construction/building
- Consulting
- Environmental law
- Hydrology and hydraulic engineering
- Industrial hygiene
- Mining and manufacturing
- Pollution control
- Public health agencies
- Public works
- Research firms/labs
- Solid/hazardous waste management
- State and local government
- Sustainable development
- Transportation
- Urban planning and development
- Water quality/treatment

EMPLOYERS
- American Engineering Testing, Inc.
- Antea Group
- Black & Veatch
- Barr Engineering
- Brown and Caldwell
- Cargill
- Cliffs Natural Resources
- Flint Hills Resources
- Hennepin County, MN
- Landmark Environmental LLC
- Houston Engineering
- MSA Professional Services
- MN Dept of Health
- MN Dept of Transportation
- Metropolitan Council
- Rice Creek Watershed District
- Schlumberger
- Vieau Associates
- WSB & Associates
- WSP/Parsons Brinckerhoff

TECHNICAL SKILLS
- AutoCAD, Civil 3D
- ChemDraw
- Excel, Visual Basic
- LoggerPro
- Mathematica
- MATLAB
- Stochastic Analysis

CSE Career Outcomes

Average Starting Salary: $**
Post-graduation Outcomes:*  
Grad School: 26.7%
Employed: 73.3%
**cohort size too small to report data due to privacy regulations
POSSIBLE POSITIONS

- **Air quality engineer**: Inspects, analyzes, and quantifies levels of pollution and their environmental impact. Designs and assesses the effectiveness of environmental regulatory programs to manage health risks to the environment.
- **Attorney**: Uses knowledge of the law to advocate on behalf of a client. Environmental engineering students are particularly well-positioned for careers in environmental law.
- **Energy engineer**: Designs and evaluates projects and programs to reduce energy costs or improve energy efficiency during the design, building, or remodeling stages of construction.
- **Environmental analyst**: Collects, studies, and analyzes data to propose actions and policies to create less harmful and cleaner interactions with the environment.
- **Environmental engineer**: Designs and supervises systems that prevent and control pollution.
- **Environmental health research scientist**: Conducts research for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect the environment or the health of the population.
- **Environmental specialist**: Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population.
- **Hydrologist**: Studies the distribution, movement, and quality of underground and surface water. Hydrologists are involved in the design of irrigation systems, waste treatment plants, hydroelectric power plants, flood warning systems, and stream restoration.
- **Wastewater engineer**: Improves both the environment and economy by helping communities and businesses dispose of waste without polluting natural water sources.
- **Water resource engineer**: Determines areas prone to flooding, restores ecological function to streams and rivers, develops methods to handle and treat urban runoff, and redirects water by constructing hydraulic structures to benefit residents and businesses in a community.

**Some of these positions may require an advanced degree.**

GET INVOLVED

- Active Energy Club
- American Society of Civil Engineers
- Concrete Canoe Team
- CSE K-12 Outreach
- CSE Ambassadors
- Engineers Without Borders
- Minnesota Environmental Engineers, Scientists, and Enthusiasts
- National Society of Black Engineers
- Science and Engineering Student Board
- Society of Asian Scientists and Engineers
- Society of Hispanic Professional Engineers
- Society of Women Engineers
- Solar Vehicle Project
- Steel Bridge Team
- Engineers Without Borders

RESOURCES

- Air and Waste Management Association: [awma.org](http://awma.org)
- American Academy of Environmental Engineers and Scientists: [aaees.org](http://aaees.org)
- American Council of Engineering Companies: [acec.org](http://acec.org)
- American Council of Engineering Companies-MN chapter: [acecmn.org](http://acecmn.org)
- American Public Works Association: [apwa.net](http://apwa.net)
- American Solar Energy Society: [ases.org](http://ases.org)
- American Water Works Association: [awwa.org](http://awwa.org)
- Department of Civil, Environmental, and Geo Engineering: [cege.umn.edu](http://cege.umn.edu)
- Environmental Career Center: [environmentalcareer.com](http://environmentalcareer.com)
- Environmental Career Opportunities: [ecojobs.com](http://ecojobs.com)
- Federal Government Jobs: [usajobs.gov](http://usajobs.gov)
- Institute of Professional Environmental Practice: [ipep.org](http://ipep.org)
- Water Environment Federation: [wef.org](http://wef.org)

See the Major Binders available in the CSE Career Center’s Resource Center for more information about this major and career.
*Salary and Career Outcomes gathered from the 2016-2017 CSE Graduation Survey*

Post-graduation outcomes reflect the percentage of students who were employed full-time in their field or were enrolled in a graduate program. For detailed starting salary information see the CSE Career Center website.