

The Environmental Science major is highly interdisciplinary, with emphasis in biology and chemistry and coursework in computing sciences, environmental policy, and mathematics. Students complete the introductory course and the Capstone Experience in Environmental Studies. Courses and research opportunities in the program empower students with the ability to apply appropriate scientific, technological, and critical thinking skills to solve modern environmental problems.

Major Requirements

EVS 100 Topics in Environmental Studies or

EVS 101 Introduction to Environmental Studies

EVS 400 Research Methods

BIO 111 Evolution & Biological Diversity

BIO 121 Cell & Molecular Biology

BIO 131 Organismal Biology

CHM 160 Organic Chemistry I

CHM 260 Inorganic Chemistry

MTH 151 Calculus

BIO/MTH 245 Applied Statistics for the Life Sciences

BIO 219 Field Biology

One course each from Environmental Economics, Policy, and Ethics; Computing Science; Natural History & Taxonomy; and Ecological Synthesis

And one additional elective from the disciplinary electives: BIO 201, BIO 215, CHM 270, EVS 300, or PHY 101/107

The Capstone Experience in Environmental Studies requires EVS 400 Research Methods in Environmental Studies and then one of three options:

- approved 160-hr internship;
- upper-level research course in an EVS-affiliated department;
- or EVS 500/501 Independent Study



Program Website

washjeff.edu/environmental-science

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Beyond the Classroom

Students have many opportunities for research, internships, conferences, and networking beyond the classroom that give them an advantage to prepare for life after W&J.

Research and Internships

- Faculty-led and independent research on topics such as coal mine reclamation, emerald ash borer, heavy metal uptake in plants, biochar ecology, and carbon sequestration
- Mazingira Fund supports environmentally related internships
- Articulated internships, e.g., Matador Wildlife Management Area, Southwest PA Environmental Health Project, Center for Energy Policy & Management, and Division of Sustainability and Resilience, City of Pittsburgh

Careers

- · Environmental consultant / lawyer
- · Conservation / wildlife / marine biologist
- Doctor / veterinarian / health professional
- Ecologist / botanist / entomologist
- Environmental policy analyst
- Environmental chemist / scientist
- Energy / water resources specialist

Alumni Achievements

- Environmental educator
- Park ranger
- Sustainable urban design

