EARTH AND ENVIRONMENTAL STUDIES

Chairperson: Stefanie Brachfeld

The Department of Earth and Environmental Studies offers undergraduate and graduate degrees in Geography (http://www.montclair.edu/csam/earth-environment-studies/degree-programs/geography), Earth and Environmental Science (http://www.montclair.edu/csam/earth-environment-studies/degree-programs/earth-environmental-science), Sustainability Science (http://www.montclair.edu/csam/earth-environment-studies/degree-programs/sustainability-science), certificate programs in Water Resource Management, Geographic Information Science and Remote Sensing, and Environmental Forensics, and teaching certification in Earth and Environmental Sciences (http://www.montclair.edu/csam/earth-environment-studies/degree-programs/teacher-education-programs). In addition, we house the University's interdisciplinary PhD Program in Environmental Management (http://www.montclair.edu/csam/environmental-management-phd). Our programs emphasize strong foundations in natural, physical, and social sciences, foster critical thinking and communication skills, and incorporate cutting edge field, laboratory, and computational methods. Our degree programs incorporate research experience and we encourage students to pursue internship opportunities. Our alumni are employed (http://www.montclair.edu/csam/earth-environment-studies/alumni/employment) in federal and state government agencies, industry, municipal agencies, non-profit organizations, and educational institutions. Many of our alumni also pursue advanced study in masters and doctoral programs.

The Earth and Environmental Science degree prepare future scientists who are equipped to address complex issues including the mechanisms and effects of climate change, identifying the nature and source of contaminants in the environment, designing novel methods of removing contaminants from air, water, and soil, understanding interactions between humans and the coastal zone, developing strategies for responsible land use and water resource management, and understanding the workings of our planet from the core to the top of the atmosphere.

The Geography degree emphasizes human interactions with the physical environment, environmental law and policy, environmental economics, and environmental management. The Urban Studies concentration takes advantage of the NJ/NY metropolitan setting and the wealth of social, political, cultural, economic, and environmental interactions occurring within our area as well as integrating faculty scholarship expertise in Africa, Latin America, China, India, and Vietnam. Student in Geography gain practical skills using Geographic Information Systems software (GIS), remote sensing tools, experience with both field and laboratory techniques.

Our suite of Sustainability Science programs lead the way in New Jersey in integrating natural and physical science with social science, economics, policy, and project management to prepare sustainability professionals and managers to tackle society’s most complex and pressing environmental problems. Our Sustainability Science programs are housed in the Department of Earth and Environmental Studies, and take advantage of expertise across campus including the College of Science and Mathematics, College of Humanities and Social Science, School of Business, and the PSEG Institute for Sustainability Studies.

Undergraduate

- Earth and Environmental Science Major (B.S.) (http://catalog.montclair.edu/programs/geoscience-bs)
- Earth and Environmental Science Major (B.S.) (Combined B.S./M.A.T. with Teacher Certification in Earth Science (Preschool-Grade 12) and Teacher of Students with Disabilities) (http://catalog.montclair.edu/programs/geoscience-bs-teacher-certification-earth-science-preschool-grade-12-students-disabilities-combined-bs-mat)
- Earth and Environmental Science Major with Teacher Certification in Earth Science (Preschool-Grade 12) (B.S.) (http://catalog.montclair.edu/programs/geoscience-teacher-certification-earth-science-preschool-grade-12-bs)
- Earth and Environmental Science Minor (http://catalog.montclair.edu/programs/geoscience-minor)
- Geographic Information Science Minor (http://catalog.montclair.edu/programs/geographic-information-science-minor)
- Geography Major (B.A.) (http://catalog.montclair.edu/programs/geography-ba)
- Geography Major with Teacher Certification in Social Studies (Preschool-Grade 12) (B.A.) (http://catalog.montclair.edu/programs/geography-teacher-certification-social-studies-preschool-grade-12-ba)
- Geography Major, Environmental Studies Concentration (B.A.) (http://catalog.montclair.edu/programs/geography-environmental-studies-concentration-ba)
- Geography Major, Urban Studies Concentration (B.A.) (http://catalog.montclair.edu/programs/geography-urban-studies-concentration-ba)
- Sustainability Science Major (B.S.) (http://catalog.montclair.edu/programs/sustainability-science-bs)
- Sustainability Science Major (B.S.) (Combined B.S./M.S.) (http://catalog.montclair.edu/programs/sustainability-science-combined-bs-ms)
- Urban Studies Minor (http://catalog.montclair.edu/programs/urban-studies-minor)

Graduate

- Earth and Environmental Science (M.S.) (http://catalog.montclair.edu/programs/earth-environmental-science-ms)
- Earth Science, Instructional Certification: Teacher Certification in Earth Science - Preschool through Grade 12 (http://catalog.montclair.edu/programs/teacher-certification-earth-science-preschool-grade-12-graduate)
- Environmental Forensics Certificate Program (http://catalog.montclair.edu/programs/environmental-forensics-certificate)
- Environmental Management (Ph.D.) (http://catalog.montclair.edu/programs/environmental-management-phd)
- Geographic Information Science Certificate Program (http://catalog.montclair.edu/programs/geographic-information-science-certificate-graduate)
- Sustainability Science (M.S.) (http://catalog.montclair.edu/programs/sustainability-science-ms)
- Sustainability Science (M.S.) (Combined B.S./M.S.) (http://catalog.montclair.edu/programs/sustainability-science-applied-sustainability-concentration-ms)
• Sustainability Science, Sustainability Leadership Concentration (M.S.) (http://catalog.montclair.edu/programs/water-resource-management-certificate-graduate)