

ENVIRONMENTAL CONSERVATION: ENVIRONMENTAL OBSERVATION AND INFORMATICS, MS

This is a named option in the Environmental Conservation MS. (<http://guide.wisc.edu/graduate/environmental-studies/environmental-conservation-ms/#text>)

The Environmental Observation and Informatics (EOI) named option integrates cross-cutting Earth observation, technologies, and big data analytics in one unique, 15-month, 32-credit program that combines hands-on, in-person training with distance learning. Our goal is to transform students' technical expertise into integrative synthesis and leadership in environmental observation and interpretation to advance organizational response to environmental change at local, regional, and global scales. At UW–Madison, we push the limits of remote sensing and geospatial analysis to encompass the skills that are increasingly in demand by industry, non-governmental organizations, government agencies, and academia.

The EOI named option is designed for early- to mid-career professionals worldwide who wish to advance to positions of project or program manager, senior analyst, or similar rank. Individuals from diverse professional or educational backgrounds are encouraged to apply. EOI has been built to help individuals develop the expertise that the market demands, focusing specifically on three pillars:

1. Remote sensing and integrated technology: Learn to select and apply the most appropriate and powerful platforms and technologies – including LiDAR, unmanned aerial vehicle (UAV) systems, cloud and social media, and crowd-sourced data – to address today's most pressing environmental challenges.
2. Modeling and analysis: Construct scenarios of environmental phenomena to better understand natural processes and human actions, predict and project future outcomes, and conduct robust statistical analyses with distributed data to identify trends and inform management and policy decisions.
3. Innovative leadership: Drive strategic thinking to design and manage the use of observation technologies to advance policy, program direction, and executive decisions.