

Coastal Resilience & Remote Sensing Internship Summer 2025

The Coast and Oceans Observing Laboratory at the Coastal Studies Institute in the college of Integrated Coastal Programs at ECU is seeking a full-time Summer Research Intern to assist with research on coastal resilience. This position offers hands-on experience in Geographic Information Systems (GIS), remote sensing, and computer modeling of coastal ecosystems as part of NASA- and NSF-funded projects. The research focuses on how cyclones and people impact coastlines in the Caribbean and Pacific. The intern will work directly with Dr. David Lagomasino and his team.

Key Responsibilities:

- Analyze spatial datasets related to coastal wetlands, shoreline change, and storm impacts
- Assist with implementing coastal bathymetry models
- Collect and organize supplementary spatial data, such as roads, buildings, and impervious surfaces
- Participate in lab meetings and team discussions
- Support fieldwork and lab analysis as needed
- Contribute to reports, research updates, and a final research poster

Qualifications:

- Required:
 - Enrollment in an undergraduate program in geography, environmental science, coastal science, geospatial analysis, or a related field
 - Experience with GIS and spatial data analysis
 - Strong attention to detail and ability to work independently
 - Effective communication and organizational skills
 - Commitment to fostering an environment where all team members feel valued and respected.
- Preferred:
 - Familiarity with remote sensing, computer modeling, or programming (e.g., Python, R, or MATLAB)
 - Experience working with satellite imagery and spatial datasets
 - Interest in coastal resilience, hurricanes, or environmental change

Why Apply?

This internship offers an opportunity to develop skills in spatial data analysis, GIS, and environmental modeling while working on applied research projects in coastal science. The position is well-suited for students interested in coastal processes, remote sensing, and environmental research.

If you are motivated and detail-oriented, we encourage you to apply. Check out the lab website (www.davidlagomasino.com) for more information about COOL.

This position is based at ECU's Outer Banks Campus in the Coastal Studies Institute, located on Roanoke Island in the Outer Banks of North Carolina. This internship is paid at \$18/hour and will be approximately 40 hours of work per week.