Master of Environmental Management
Master of Forestry
VIRTUAL OFFICE HOURS
Duke’ Nicholas School of the Environment

- Broad and flexible curriculum
- Dedicated career center
- Alumni network
- Commitment to diversity
- Study from the forest to the sea
- Faculty and student research
- Opportunities for collaboration
- Life in Durham and Beaufort
- Immediate impact
Broad and Flexible Curriculum

• **Master of Environmental Management**
  - Business & Environment
  - Coastal Environmental Management
  - Ecosystem Science & Conservation
  - Ecotoxicology & Environmental Health
  - Energy & Environment
  - Environmental Economics & Policy
  - Water Resources Management

• **Master of Forestry**

• **Duke Environmental Leadership Master of Environmental Management (online)**

Certificate Options:
- Geospatial Analysis
- Community-Based Environmental Mgmt.
- Climate Change Science & Applications
Opportunities for Collaboration
Coastal Environmental Management
Master of Environmental Management
What is the CEM Program?

VISION

With a dual emphasis on science and policy, students gain knowledge to lead and work collaboratively toward sustainable solutions in coastal and ocean policy & management, research and conservation.

OBJECTIVES: We strive to give students

- A scientifically rigorous understanding of coastal environments and processes at the global, national and local scales
- A deep understanding of the human behaviors and policies that affect, and are affected by, coastal environments and processes.
- Opportunities to understand and participate in the policymaking process
- The knowledge and skills to apply quantitative and analytical methods of resource analysis
- The communication and teamwork skills needed to thrive in professional work environments
MSC Faculty Research

- Marine Conservation Ecology
- Ocean Governance & Community-Based Conservation
- Marine Geospatial Analysis & Ocean Planning
- High Seas governance & management
- Fisheries
- Coastal & Wetland Ecology
- Deep Seas
- Microbial Oceanography & Ecology
- Oceanography
Dual campus CEM Program

(1st Year)
Duke University
main campus

(2nd Year)
Duke University
Marine Lab
Broad and Flexible Curriculum

- Marine Ecology
- Marine Social Science and Policy
- Management of Protected Species and Critical Habitats
- Marine Spatial Planning & Coastal Zone Management
- Marine Geospatial Analysis & Remote Sensing (also certificate)
- Community Based Management (also certificate)
- Fisheries and Aquaculture
- Ocean Health
- *And others that students design*
Beaufort-Based Courses

Required (2nd Year)

- Marine Policy
- CEM Seminar

Other Courses

- Social Impact Analysis
- Marine Ecology
- Marine Climate Change
- Biological Oceanography
- Coastal Watershed Science & Policy
- Advanced GIS (teleconference)
- Bioacoustics
- Marine Mammals
- International Conservation & Development
- Marine Fisheries Policy
- Theory & Methods for Policy Analysis

CEM focused course

+ Spring Travel Courses
Additional Certificate Programs Available to CEMs

Certificate in Geospatial Analysis

https://nicholas.duke.edu/academics/certificate-programs/geospatial-analysis-certificate-program

Certificate in Community Based Management

https://sites.nicholas.duke.edu/communitycertificate/
Employment Examples
Outcomes and elements to success for a professional Masters Program

• Have faculty who actively work in the fields of ocean sciences, coastal management, and marine conservation and who engage in issues that are relevant to the target agencies that hire master’s level professionals
• Make a commitment to provide students with meaningful internships and research experiences
• Provide direct support for job placement and career development
• Develop a strong pool of active alumni who can help mentor and assist new graduates with opportunities in the field
The Duke Professional Master of Environmental Management: An Exemplary Program Responsive to Workforce Needs

By Patrick Halpin and Andy Reed

The Duke Professional Master of Environmental Management: An Exemplary Program Responsive to Workforce Needs

The CEM curriculum includes courses in quantitative training, marine science, policy, economics, communications, and analytical tools. coursework is designed to give students a scientifically rigorous understanding of physical and biological processes along coastal and ocean environments. Students also develop professional skills and learn how to use analytical tools to assess how human activities affect—and are affected by—the ocean environment. The hands-on sequence in unique because students spend their first year at Duke University Marine Laboratory (DUMAL) in Beaufort, North Carolina. The laboratory provides an ideal setting for the study of coastal and marine science in the marine environment, and allows our students to interact directly with coastal scientists and policymakers. Students also enjoy small class sizes, a close faculty-student ratio, and access to world-class marine research facilities.

During their second year at DUMAL, students complete a capstone individual or group project that takes courses specific to the coastal and marine environment. These courses include marine conservation biology, fisheries management, marine protected area management, coastal zone and community-based management, water quality management and coastal processes, and other topics.

In their practical capstone work, students explore specific problems that are areas of concentration, often working with client organizations. Projects can take many forms, from traditional research projects to publishing peer-reviewed papers to shore world efforts resulting in the production of policy with papers, training materials, coastal management plans, communications strategies, or even citizen science mobile apps. A central tenet of our approach is to allow students to explore and use new and innovative methods in their projects.

To better prepare these new professionals for careers in coastal management, we encourage our students to pursue internships during the summer between their first and second years. These opportunities may take a variety of forms, but the goal is to expose students to organizations and activities in their areas of interest and outside of the academic setting. These internships provide direct work experience and important networking opportunities.

In addition to the important role that faculty and alumni play in identifying new fields of study and emerging opportunities, the Nicholas School operates a dedicated Career and Professional Development program that recognizes the different needs of individual students while maintaining high standards for the quality of both formal course work and technical skill development.

Key elements that we recommend to others as essential for a successful professional program (that are typically missing in traditional MS programs) are:

- More faculty who actively work in the fields of ocean sciences, coastal management, and marine conservation and who engage in issues that are relevant to the larger agencies that hire master’s level professionals.
- More curriculum to provide students with meaningful internships and research opportunities.
- Provide direct support for job placement and career development.
- Develop a strong pool of active alumni who can help mentor and assist new graduates with opportunities in the field.

The Future Geographer: Professional education in the field of coastal and marine management is very unique but requires the maintenance of responsive programs that educate future leaders in the field. Successful programs will also need to provide opportunities for professionals to continue their education and skills development, especially important, graduates of these programs will need to continue to demonstrate their value in their professional roles, achievements, and accomplishments. This is the mission of success in professional education.

Authors:

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The Duke Professional Master of Environmental Management: An Exemplary Program Responsive to Workforce Needs

Oceanography, 2016
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CEM Faculty Co-Chairs

PATRICK N. HALPIN
Professor of Marine Geospatial Ecology
Durham campus

GRANT MURRAY
Associate Professor of Marine Policy
Beaufort campus

Our program prepares future leaders in the conservation and management of marine ecosystems, including the human communities that form an integral part of these systems.