M.A. in Coastal Zone Management Program Overview

Nova Southeastern University
M.S. in Coastal Zone Management 2016

The Master's of Science in Coastal Zone Management is offered both in-house and by distance education (courses accessible via the world wide web). The online MS degree is designed for people "at a distance" from the Halmos College of Natural Sciences and Oceanography, or those who wish to take advantage of the flexible delivery system. Students may complete the degree entirely online, or take a blend of distance and on-site courses (including field courses) with the Halmos College of Natural Sciences and Oceanography.

The Coastal Zone Management degree program focuses on contemporary problems and conflicts arising from increased use of coastal areas and emphasizes the evaluation of alternative policy management solutions. It is intended for employees of government and industry seeking career enhancement, as well as for recent college graduates seeking careers in planning and management with government agencies, industries, and other activities depending on or affecting the coastal zone or its resources. The program can also be of value for enhancement of careers in education.

Learning Outcomes

Expected learning outcomes are:

- Effective communication skills,
- A full understanding of the scientific method,
- A generalized knowledge in ecological, geological, chemical and biological concepts as they relate to the environment.
- A generalized knowledge of the natural and human-driven problems currently, and anticipated to, impact the marine environment.
- In-depth knowledge of a specific aspect of their major.

Delivery System

On campus graduate classes typically meet one evening per week in a three hour session. Exceptions are field courses which may entail several days of intensive study. On-line courses meet periodically at the convenience of faculty and students.

Degree Tracks

There are two tracks for completing an M.S. degree.

Capstone (45 credits)

All entering M.S. students are accepted under the Capstone degree track.

Curriculum Breakdown:

- 5 core courses (15 credits)
- 8 elective courses (24 credits)
- 2 semesters of capstone (6 credits)
Defining a Capstone:

A capstone paper is a scholarly manuscript, based upon a comprehensive literature search, review, and synthesis of the chosen topic. It is similar to a thesis, inasmuch as data need to be acquired and analyzed within the framework of a scholarly article with the exception that these data can be acquired from the literature. Carrying out a Capstone paper takes place with guidance from a major professor.

Starting a Capstone:

Prior to beginning a Capstone and registering for Capstone credits, the student must write a proposal which must be approved by the student's major professor, committee, and the Chair of the Department of Marine and Environmental Sciences.

Thesis (40 credits)

Curriculum Breakdown:

- 5 core courses (15 credits)
- 5 elective courses (15 credits)
- 3 semesters of thesis (10 credits)

Defining a Thesis:

A thesis is an original contribution to knowledge resulting from the systematic study of a significant problem or issue.

Starting a Thesis:

To be allowed entry into the Thesis track the student must secure agreement from a faculty member to be the student's major professor. There must be adequate funding to carry out the proposed research. Prior to beginning thesis research and registering for thesis credits, the student must write a proposal which must be approved by the student's major professor, committee, and the Chair of the Department of Marine and Environmental Sciences. The Thesis is typically a longer duration track and number of credit hours than the Capstone track.

For further details, students are referred to section 3.8 of this catalog and to the online guidelines for the capstone or thesis track found on the Halmos College of Natural Sciences and Oceanography Student Information page

M.S. Credit Hour Requirements

The Capstone track requires a minimum of 45 credits. Once a student starts registering for capstone course credits, they cannot stop registering for credits until the capstone is completed and defended. It is expected the Capstone can be completed within two terms or less. The completed Capstone is presented in an open defense that includes the student's advisory committee.

The Thesis track requires a minimum of 40 credits. The number of thesis research credits above the minimum is dependent upon the length of time needed to complete the thesis research, which may be
more than the typical minimum three terms. The final thesis is formally defended in an open defense that includes the student's advisory committee.

**Elective Courses**

Students in a single degree are allowed to take up to two elective courses outside their degree orientation and have them count towards their final credit count.

For both the Capstone and Thesis, once the proposal has been accepted, enrollment in the chosen track must continue until completion of the degree.

**Joint M.S. Degrees**

Also offered are Joint M.S. Degrees

- M.S. in Marine Biology/Coastal Zone Management
- M.S. in Marine Biology/Marine Environmental Sciences
- M.S. in Coastal Zone Management/Marine Environmental Sciences

The joint specialization M.S. degrees require a minimum of 57 course credits (19 courses) or 51 course credits (17 courses) (for Capstone or Thesis respectively) including nine credits minimum thesis research or the six credits minimum for the capstone. For the joint programs, students take approximately equal numbers of courses within each of the two specialties. The final thesis or capstone is formally defended in an open defense that includes the student's committee.

**Curriculum**

**Core Courses - 15 Credit Hours**

- OCOR 5601 Concepts of Physical Oceanography
- OCOR 5602 Marine Ecosystems
- OCOR 5603 Biostatistics
- OCOR 5604 Marine Geology
- OCOR 5605 Marine Chemistry

**Coastal Zone Management Electives - 24 Credit Hours (Capstone Track) or 15 Credit Hours (Thesis Track)**

- CZMT 0672 Biology of Sharks and Rays I: Form and Function (3 credit hours)
- CZMT 0673 Biology of Sharks and Rays II: Ecology and Evolution (3 credit hours)
- CZMT 0780 Coastal Policy (3 credit hours)
- CZMT 5700 Ecosystems Applications (3 credit hours)
- CZMT 0100 Effective Environmental Communication (3 credit hours)
- CZMT 4001 Geospatial Field Methods (3 credit hours)
- CZMT 0639 GIS and Environmental Remote Sensing (3 credit hours)
- CZMT 0778 Invasive Species (3 credit hours)
- CZMT 0685 Marine Biodiversity (3 credit hours)
- CZMT 6365 Marine Fisheries (3 credit hours)
- CZMT 0300 Marine Flora and Fauna (3 credit hours)
- CZMT 0781 Marine Larval Ecology (3 credit hours)
- CZMT 6341 Marine Mammalogy (3 credit hours)
- CZMT 0603 Ocean and Coastal Law (3 credit hours)
- CZMT 0735 Oil Pollution (3 credit hours)
- CZMT 0776 Professional Development (3 credit hours)
- CZMT 0715 Scientific Method and Experimental Design (3 credit hours)
- CZMT 9904 Techniques in Invertebrate Identification (3 credit hours)
- CZMT 0690 Tropical Marine Fish Ecology (3 credit hours)
- CZMT 4100 U.S. Living Marine Resource Policy (3 credit hours)