The Mathematics/Atmospheric and Oceanic Sciences major is a designated capstone major. Through their preparatory coursework and completion of an individual project or thesis, students are expected to:

- acquire a fundamental knowledge of the atmospheric and oceanic sciences, and the mathematical tools that enable research to be conducted.
- identify potential research areas available for exploration that fit their interests.
- acquire experience in conceiving and executing research projects designed to evaluate hypotheses.
- propose, execute and evaluate a research project, individually or in small groups, and with the assistance and supervision of a faculty mentor.
- deliver a tangible capstone product.