This program is designed to furnish the student with the background necessary to carry out independent and original scientific research. To earn the Ph.D., the student must complete a course work requirement, pass the Candidacy Examinations, and prepare and defend a dissertation. Doctoral students are required to complete the M.S. course requirements. In addition, doctoral students are required to attend the weekly department seminar series.

A student seeking a Ph.D. degree will be assigned to a faculty advisor whose interests parallel those of the student. The academic advisor will establish and chair an advising committee which will oversee the student's degree program.

Students may wish to take a number of the core courses in order to prepare for the Qualifying Examination. In addition, there is a Minor course requirement of six semester hours of ancillary courses taken beyond the bachelor's degree in a related scientific area at the 600-level or above. These credits must have a unified or coherent theme. Students may petition the Department for a waiver of a portion of these requirements based on credits earned at another institution at the graduate level.

**Advancement to Candidacy:** In addition to the course requirements, students must pass the Candidacy Examinations, which are divided into two parts - The Qualifying Examination and the Specialty Examination. During the Specialty Examination, the student must present and defend a dissertation prospectus to the examination committee. Following successful defense, the student advances to candidacy.

Full-time students are expected to complete the Qualifying Examination by the end of the second year of graduate study and be admitted to candidacy by the end of the third year. Students must be admitted to candidacy within three years after admission to the doctoral program and at least six months before the date on which the degree will be conferred.

**Post-Candidacy:** Ability to perform independent research must be demonstrated by a written dissertation. The dissertation should be an original contribution to knowledge and demonstrate the ability to present the subject matter in a scholarly style. Upon completion of the dissertation the candidate is required to present the research results at an Atmospheric and Oceanic Science Department seminar and to defend the material to the satisfaction of a Final Examining Committee appointed by the Dean for Graduate Studies.

The candidate must present an open seminar on his/her past research followed by a closed oral exam by the Examination Committee of at least three faculty plus the Graduate Director, and the Admissions Committee Chair. Two or more negative votes constitutes failure. The final decision will be subject to review by the committee of the whole.

The student must complete the entire program for the degree, including the dissertation and final examination, during a four-year period after admission to candidacy.