# ATMOSPHERIC AND OCEANIC SCIENCES (THESIS) (M.SC.) (45 CREDITS)

**Offered by:** Atmospheric & Oceanic Sciences (Faculty of Science)
**Degree:** Master of Science
**Program credit weight:** 45

## Program Description

The M.Sc. degree requires a minimum of 45 credits, up to a maximum of 51 credits. The program includes from 9 to 27 credits of coursework (depending on the student's background).

**Note**: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

## Thesis Courses (24 credits)

Expand allContract all

| Course | Title | Credits |
|---|---|---|
| ATOC 691 | Master's Thesis Literature Review. | 3 |
| ATOC 692 | Master's Thesis Research 1. | 6 |
| ATOC 694 | Master's Thesis Progress Report and Seminar. | 3 |
| ATOC 699 | Master's Thesis. | 12 |

Although registration is not required, students registered in M.Sc. programs are expected to regularly attend one of the student seminar series (ATOC 751D1 Seminar: Atmosphere and Ocean./ATOC 751D2 Seminar: Atmosphere and Ocean. or ATOC 752D1 Atmospheric, Oceanic and Climate Dynamics./ATOC 752D2 Atmospheric, Oceanic and Climate Dynamics.) and the Department seminar series during the entire period of their enrolment in the program.

## Complementary Courses (21 credits)

Must complete or have completed the following courses or equivalent:

Expand allContract all

| Course | Title | Credits |
|---|---|---|
| ATOC 512 | Atmospheric and Oceanic Dynamics. | 3 |
| ATOC 513 | Waves and Stability. | 3 |
| ATOC 515 | Turbulence in Atmosphere and Oceans. | 3 |
| ATOC 519 | Advances in Chemistry of Atmosphere.[1] | 3 |
| ATOC 521 | Cloud Physics. | 3 |
| ATOC 525 | Atmospheric Radiation. | 3 |
| ATOC 531 | Dynamics of Current Climates. | 3 |
| ATOC 540 | Synoptic Meteorology 1. | 3 |
| ATOC 541 | Synoptic Meteorology 2. | 3 |
| ATOC 548 | Mesoscale Meteorology. | 3 |
| ATOC 568 | Ocean Physics. | 3 |
| ATOC 626 | Atmospheric/Oceanic Remote Sensing. | 3 |
| CHEM 519 | Advances in Chemistry of Atmosphere.[1] | 3 |

[1] Students may select either ATOC 519 Advances in Chemistry of Atmosphere. or CHEM 519 Advances in Chemistry of Atmosphere..

Or other courses at the 500 level or higher recommended by the Department's Graduate Program Director.

Students with a strong background in atmospheric or oceanic science, or a Diploma in Meteorology, will take at least the 7-credit minimum. Students with no previous background in atmospheric or oceanic science must take the 20-credit maximum.