

ATS, M.S. in Atmospheric Science

Master of Science

To earn a master's degree in atmospheric science, each student must satisfy all requirements of the School of Graduate Studies and of the Atmospheric Science Department. Students are must formulate an appropriate Program of Study (POS), in consultation with a faculty advisor and chair. The POS must be completed **before the end of the second semester** after the student starts the program. Two options are available.

Plan I (Thesis) – See check list below

Degree requirements under this plan include completion of at least 24 semester hours of graduate course work that must include the three core courses:

- ATS 541 Atmospheric Thermodynamics and Cloud Physics
- ATS 551 Atmospheric Fluid Dynamics I
- ATS 561 Atmospheric Radiation I

50% of these 24 hours must be from 600 level (or higher) courses. The student must also complete ATS 509 Applications of Computers in Meteorology that is considered a “tools-course”. ATS 509 does not count towards the required 24 hours. The student must also earn at least two semester hours of credit in ATS 780 and 781 (Seminar series), and six semester hours of credit in ATS 699 (Master's Thesis). The thesis must show evidence of the student's capability for research, independent thought, and analysis in atmospheric science and must be written in fluent, acceptable English.

Plan II (Non-Thesis) – See check list below

Degree requirements for the master's degree under this plan include the completion of a minimum of 33 semester hours of graduate course work including the three core courses listed above. The student must also complete ATS 509 Applications of Computers in Meteorology that is considered a “tools-course”. ATS 509 does not count towards the required 33 hours. The student must also complete at least two semester hours of credit in ATS 780 and 781 (Seminar series), and the passing of a comprehensive (written/oral) examination as administered by the student's committee. Students who pass all sections of the PhD preliminary exam are not required to take the M.S. comprehensive exam. Note that the ATS 509 does not count towards the required 33 hours. A thesis is not required. 50% of the required 33 hours must be from 600 level (or higher) courses.

Final Examination. A final comprehensive examination is required of all candidates for a master's degree; this examination may be written or oral, or both. The candidate will be examined primarily on the thesis in Plan I and on course

ATS, M.S. in Atmospheric Science

work in Plan II. The examination is conducted by a committee of at least three faculty members appointed by the department chair and approved by the Graduate Dean. For the non thesis option, students who pass all sections of the PhD preliminary exam are not required to take the M.S. comprehensive exam. For thesis students a written notice of the time and place of examination is sent to the Graduate Dean. After approval by the Graduate Dean, the Department Chair sends a copy of the written notice to the candidate and each member of the committee. The examination must be given at least one month before the date of graduation, and the results reported within two working days to the Graduate Dean. A student may take the comprehensive (oral/ written) examination only twice.

Non-thesis Oral Exam Guidelines. Three weeks before the oral exam, the advisor/chair must email 2 “lead- in” questions from each committee member from the students’ course work. This will be the starting point for the oral exam. The CM may also have other follow on questions.

Check List for M.S. Program of Study – THESIS Option

No.	Check List	Credits
1	Has the student taken all 3 core courses (ATS 541, 551, 561)?	9
2	Has the student taken four 600 level ATS courses? (ATS courses only)	12
3	Has the student taken ONE additional 500 or 600 level ATS (or from another department) course?	3
4	Has the student taken ATS 509?	REQUIRED
5	Has the student taken ATS 780 and ATS 781?	REQUIRED
6	Has the taken at least 6 hours of M.S. thesis credits (ATS 699)?	6

- In the thesis option the student must write and defend a thesis.

Check List for M.S. Program of Study – NON THESIS Option

No.	Check List	Credits
1	Has the student taken all 3 core courses (ATS 541, 551, 561)?	9
2	Has the student taken six 600 level ATS courses? These 6 courses MUST be from the ATS department	18
3	Has the student taken TWO additional 500 or 600 level ATS (or from another department) courses?	6
4	Has the student taken ATS 509?	REQUIRED
5	Has the student taken ATS 780 and ATS 781?	REQUIRED

ATS, M.S. in Atmospheric Science

- In the non thesis option the student must take a comprehensive (oral/written) exam. Students who pass all sections of the PhD preliminary exam are not required to take the non thesis M.S. comprehensive exam.

Paperwork for thesis Option

1. Program of study.
2. Notification of thesis (3 weeks before defense).

Paperwork for non thesis

1. Program of study
2. Notification of oral exam (3 weeks before exam).

IMPORTANT

- 1) Some students enter the program as M.S. students and then decide to continue towards their Ph.D. The graduate school will not know of your intentions to pursue a PhD unless you formally apply for a PhD program with appropriate fees and procedure. Consult the graduate school web site for further details.
- 2) Passing a PhD preliminary exam does not automatically transition you from a M.S. to a PhD student. You must either pick a thesis or a non thesis option and fulfill all requirements and **formally apply to the PhD program.**

(updated August 2011)