Atmospheric Science, MS

- To obtain the M.S. degree in Atmospheric Science, each student must satisfy all requirements of the School of Graduate Studies, as well as those of the Atmospheric Science Program.
- Students must formulate an appropriate Program of Study (POS), in consultation with a faculty advisor and chair, before the end of the second semester.
- Students must maintain a cumulative GPA of at least 3.000.

Option 1 - Thesis

Minimum degree requirements under this plan include completion of at least 24 credit hours of graduate course work and at least six credit hours of thesis research. At least 50 percent of the required 24 semester hours must be from 600 level (or higher) courses. Students are also required to take six credit hours of supporting courses. The supporting courses do not count toward the minimum degree requirements.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>AES 541</td>
<td>ATMOSPHERIC THERMODYNAMICS &amp; CLOUD PHYSICS</td>
<td>3</td>
</tr>
<tr>
<td>AES 551</td>
<td>ATMOSPHERIC FLUID DYNAMICS I</td>
<td>3</td>
</tr>
<tr>
<td>AES 561</td>
<td>ATMOSPHERIC RADIATION I</td>
<td>3</td>
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Elective Courses

Select 12 semester hours from 600 level (or higher) courses 12
Select 3 semester hours from 500 or 600 level courses and may be outside of AES only with advisor's approval 3

Required Supporting Courses

AES 509 SCIENTIFIC PROGRAMMING FOR EARTH & ATMOSPHERIC SCIENTISTS 3
AES 780 SEMINAR 1
AES 781 STUDENT SEMINAR 1
AES 782 PROFESSIONAL DEVELOPMENT 1

Thesis Credits

AES 699 MASTER'S THESIS 1-6

Total Semester Hours 31-36

1 Students must earn a B or above in core courses.
2 Students who have earned a B or better in the undergraduate equivalent AES 509, AES 541, AES 551, AES 561 at UAH do not have to re-take the course at the graduate level. However, their Program of Study must include alternative semester hours at the appropriate level approved by their advisor and chair of the department.

Additional Information

In Option 1, the student must write and defend a 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. During the second semester, the student, with the guidance of their advisor, should form a supervisory committee. Student must submit a five-page thesis proposal to be approved by the advisor and committee by the end of the third full semester.

Option 2 - Non-Thesis

Minimum degree requirements under this plan include completion of at least 33 credit hours of graduate course work. At least 50 percent of the required 33 semester hours must be from 600 level (or higher) courses. In addition, all M.S. students are required to take six credit hours of supporting courses. The supporting courses do not count toward the minimum degree requirements.

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<tr>
<td>AES 541</td>
<td>ATMOSPHERIC THERMODYNAMICS &amp; CLOUD PHYSICS</td>
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<td>ATMOSPHERIC RADIATION I</td>
<td>3</td>
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</tbody>
</table>

Elective Courses

Select 18 semester hours from 600 level (or higher) courses 18
Select 6 semester hours from 500 or 600 level courses and may be outside of AES only with advisor's approval

**Required Supporting Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AES 509</td>
<td>SCIENTIFIC PROGRAMMING FOR EARTH &amp; ATMOSPHERIC SCIENTISTS</td>
<td>3</td>
</tr>
<tr>
<td>AES 780</td>
<td>SEMINAR</td>
<td>1</td>
</tr>
<tr>
<td>AES 781</td>
<td>STUDENT SEMINAR</td>
<td>1</td>
</tr>
<tr>
<td>AES 782</td>
<td>PROFESSIONAL DEVELOPMENT</td>
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</tbody>
</table>

**Total Semester Hours**

39

1. Students must earn a B or above in core courses.
2. Students who have earned a B or better in the undergraduate equivalent AES 509, AES 541, AES 551, AES 561 at UAH do not have to re-take the course at the graduate level. However, their Program of Study must include alternative semester hours at the appropriate level approved by their advisor and chair of the department.

**Comprehensive Examination/Thesis Defense**

A final comprehensive examination is required of all candidates for a master’s degree; this examination may be written or oral, or both. In accordance with the Graduate School Dates & Deadlines, a written notice of the time and place of the examination/defense must be sent to the Graduate Dean. After approval by the Graduate Dean, the Department Chair sends a copy of the written Notification of Oral Examination/Defense to the candidate and each member of the committee. A student may take the Comprehensive Examination only twice.

- **Thesis** candidates will be examined *primarily* on the thesis by a committee of at least three faculty members appointed by the Department Chair and approved by the Graduate Dean.

- **Non-Thesis** candidates will be examined on course work. Three weeks before the exam, the advisor/chair will email two “lead-in” questions about the student’s course work from each committee member. This will be the starting point for the oral exam. The committee members may also question further during the exam. Students who pass all sections of the Ph.D. Preliminary Exam are not required to take the M.S. Comprehensive Exam.

**M.S. Supervisory Committee**

The committee must consist of a minimum of three members and be approved by the Department Chair. Two of the three members, including the Committee Chair, must be full-time, tenured or tenure-earning faculty members in the department. The other member may be nominated to the Affiliate Graduate Faculty or be a current faculty member from another UAH department.

**Paperwork**

- Students must formulate an appropriate POS, in consultation with a faculty advisor and chair, before the end of the second semester.

- Application for graduate degree according to the Graduate School Dates & Deadlines.

- Notification of Oral Examination/Defense according to the Graduate School Dates & Deadlines.