Atmospheric Sciences Ph.D.

Program Requirements
Catalog Department Overview # (https://catalog.uaf.edu/academic-departments/atmospheric-sciences/)

Minimum Requirements for Atmospheric Sciences Ph.D.: 45 credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM F601</td>
<td>Introduction to Atmospheric Sciences</td>
<td>3</td>
</tr>
<tr>
<td>ATM F613</td>
<td>Atmospheric Radiation</td>
<td>3</td>
</tr>
<tr>
<td>ATM F615</td>
<td>Cloud Physics</td>
<td>3</td>
</tr>
<tr>
<td>ATM F645</td>
<td>Atmospheric Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ATM F646</td>
<td>Atmospheric Dynamics II: Climate Dynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 12 additional approved credits, 6 of which should be ATM courses.

Total Credits: 45

Admission Requirements
Complete the following admission requirements:

Admission to the Department of Atmospheric Sciences generally requires a degree in a scientific discipline, one year of calculus-based physics, math through differential equations, and one semester of chemistry. Since atmospheric science is a highly interdisciplinary field, incoming students' backgrounds vary considerably. Thus, acceptance into the program is made on a case-by-case basis.

Roadmaps
Catalog Department Overview # (https://catalog.uaf.edu/academic-departments/atmospheric-sciences/)

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

- This roadmap should be used in conjunction with regular academic advising appointments. All students are encouraged to meet with their advisor or mentor each semester.
- Some courses and milestones must be completed in the semester listed to ensure timely graduation.
- Transfer credit may change the roadmap.

• Requirements, course availability and sequencing are subject to change.
• Courses with (*) are recommended.

First Year
Fall Credits Spring Credits Summer Credits
ATM F601* | 3 | ATM F615* | 3 | Submit first peer review paper to integrate thesis work.

Second Year
Fall Credits Spring Credits Summer Credits
ATM F613* | 3 | ATM F699** | 3 |
ATM F699** | 3 Program Elective | 3 |

Third Year
Fall Credits Spring Credits Summer Credits
ATM F699** | 3 | ATM F699** | 3 | Submit second and third peer review papers to integrate thesis.

Program Elective** | 3 |

Program Elective** | 3 |

Program Elective** | 3 |

Total Credits 45

Footnote Definitions

General Education Requirements Degree Requirements Program & Other Requirements
1–Communication 8–Alaska Native-themed 20–Program Requirement
2–Arts 9–Communication 21–Capstone Requirement
3–Humanities 10–Computation 22–Concentration Course
4–Social Sciences 11–Ethics 23–General Elective

Total Credits 45
Learning Outcomes

Catalog Department Overview # ([https://catalog.uaf.edu/academic-departments/atmospheric-sciences/](https://catalog.uaf.edu/academic-departments/atmospheric-sciences/))

Learning Outcomes are measurable statements that describe knowledge or skills achieved by students upon completion of the program.

Students graduating from this program will be able to:

- Function effectively in their area of expertise
- Analyze a scientific problem, identify the critical aspects and devise appropriate methods to resolve the questions that arise
- Be successful in obtaining work or progressing in their field
- Demonstrate original thinking
- Have exposure communicating orally