

ATS, Ph.D. Policies and Guidelines

Doctor of Philosophy

The doctor of philosophy degree is a research-oriented degree awarded upon the demonstration of scholarly competence. To obtain the Ph.D. 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. Admission to the Ph.D. program in Atmospheric Science is dependent upon satisfactory performance on the Preliminary Examination which is administered twice a year. Students entering UAH with an M.S. degree or previous graduate training in Atmospheric Science must pass the Preliminary Examination at an early opportunity. Students are only permitted two attempts to pass the Preliminary Examination. **Students who complete their M.S. at UAHuntsville must pick a thesis or a non thesis option; complete all requirements for a M.S. before they are formally admitted to the PhD program.**

In summary, the major requirements for the Ph.D. degree in Atmospheric Science are the following:

1. Take the core courses and pass the preliminary examination

Each student must complete the three core courses (541, 551 and 561) and ATS 651 (Atmospheric Fluid Dynamics II). Students must also take ATS 509 that is considered as a tools course and does not count towards the program of study. Students also must take the Seminar and Professional Development courses: ATS 780, 781 and 782. **See check list below.**

Each student must pass a preliminary examination covering material in the three core courses (ATS 541, 551, and 561) plus three other ATS courses as outlined in the PhD preliminary exam policies. It is anticipated that a student will take the preliminary examination during the second year of graduate study, but students with a strong background in atmospheric science may take the examination within the first year. The preliminary examination may be taken at most twice. The student must pass all 6 sections of the Preliminary Examination in order to be admitted to Ph. D. Candidacy. **See the preliminary exam policy guidelines for further details.**

After a student has passed the Preliminary Examination, a Supervisory Committee will be formed. The committee will consist of the student's academic advisor plus at least four other members, (three of the committee members must be tenure track or tenured members of the ATS faculty and the committee chair must also be tenure track/tenured faculty member) with the committee to be approved by the Graduate Deans. The committee will administer the qualifying examination and, with the consent of the Graduate Dean, give approval to all aspects of requirements 2-5. **See the qualifying exam and committee member policies for further details.**

2. Satisfy the residence requirement

According to graduate school policy, residence may be established through either (i) being enrolled as a full-time student (at least 9 graduate semester hours) either for one continuous academic year, or for Spring and Fall semesters in the same calendar year, or (ii) being enrolled in at least 6 hours of graduate course work in at least three of four consecutive semesters.

3. Complete an acceptable Program of Study – See check list below

Each Program of Study will stress breadth, depth, and research competence, as well as

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understanding of the relationship of the major area to its applications, and will be individualized to meet the student's needs and requirements of the program. Any prerequisites required for courses in the Program of Study must be fulfilled before attempting these courses. A Program of Study will consist of at least 48 semester hours of course work at the graduate level, including the core courses needed to prepare for the preliminary examination and courses required in a major area of concentration that will prepare the student to conduct original research in that area. Students can transfer up to 24 credits of **course work** from their M.S. program. Students can transfer an additional 6 credits of course work (ATS courses) that does not include thesis or special topics courses. A total of 18 hours of doctoral dissertation (ATS 799) registration is required. 50% of all course work must be from 600 level or higher courses. Students must also register for a total of at least three hours of ATS 780, 781, 782 (Seminar series and Professional Development). *These three semester hours may not be used to meet minimum degree requirements. ATS 509 is not also used to meet minimum degree requirements.*

No.	Check List	Credits
1	Has the student taken all 3 core courses (ATS 541, 551, 561)?	9
2	Has the student taken Dynamics II (ATS 651)	3
3	Has the student taken eight 600 level (or higher) ATS courses? (ATS courses only)	24
4	Has the student taken four 500 or 600 (or higher) level courses? (ATS or other department but requires approval)*	12
5	Has the student taken ATS 509?	REQUIRED
6	Has the student taken all three Professional Development courses (ATS 780, ATS 781, and ATS 782)?	REQUIRED
7	Has the taken at least 18 hours of M.S. thesis credits (ATS 799)?	18

* : *There are some courses that are not suited for the POS for the PhD program and therefore requires approval. For example, the GIS courses while useful as a tools course is not suited for the PhD. POS.*

4. Pass the Qualifying Examination

Once the Program of Study has been submitted and the Ph.D. Student Advisory Committee (SAC) has been formed, the next steps are to submit a written dissertation proposal to the SAC and then make an oral presentation. This will be followed by the Qualifying Examination, which will cover the major areas of study and the student's proposal for the dissertation topic. It will have both written and oral components and will be prepared and graded by the SAC. This examination may be taken at most twice. See qualifying exam policies or further details.

5. Complete and defend a research dissertation

Each student must complete and successfully defend a research dissertation, the results of which are publishable in a nationally recognized journal. The dissertation, which must comply with the regulations set forth in the School of Graduate Studies' Thesis and Dissertation Manual, must be approved by the student's supervisory committee, the chair of the Atmospheric Science Department, the Dean of the College of Science, and the Dean of the School of Graduate Studies. A significant portion of the dissertation must be submitted for publication in an approved peer reviewed journal. All requirements for the Ph.D. must be completed in no more than five years

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after the student has passed the qualifying examination. The atmospheric science program does not require knowledge of a foreign language, but it does require proficiency in both spoken and written English.