

## **Master of Science (M.S.) Degree Requirements**

The Department of Planetary Sciences does not admit students directly into a Master of Science (M.S.) program. The M.S. program is available to students in the Ph.D. program when a student decides not to pursue the Ph.D., fails the Ph.D. Oral Comprehensive Examination after a second attempt, or wishes to earn an M.S. in addition to the Ph.D.

### **Entering the M.S. Program**

To enter the M.S. program, the student (who had already been enrolled in the Ph.D. program) must petition the Graduate Admissions and Advising Committee (GAAC) and the LPL director to initiate an M.S. degree program. With the approval of both the GAAC and the LPL director, the student is eligible to work toward the M.S. degree. At this time, the student must identify an M.S. thesis advisor and an M.S. committee, file a [Change of Program form](#) and a [Master's/Specialist Plan of Study](#).

### **Program of Study**

The program of study must be approved by the student's M.S. committee and must conform to Department of Planetary Sciences (PTYS) and University of Arizona Graduate College rules as described below. Students are guided through their program of study by their Thesis Advisor, who chairs their M.S. Committee. In addition, the GAAC is available to assist students at any stage in their graduate career.

### **M.S. Committee**

The M.S. committee consists of three or more members, and is chaired by the student's M.S. thesis advisor. Other members of the committee can be from the PTYS/LPL faculty, other University of Arizona departments, or scientists from outside institutions, if approved by the GAAC and the [University of Arizona Graduate College](#). The student and their academic advisor recommend members of the M.S. committee. These recommendations are reviewed by the GAAC and must be approved by the PTYS department head.

### **Time Limits**

The M.S. must be completed within 5 years of enrollment in the PTYS graduate program, unless an exception is granted by the GAAC and the Graduate College.

### **Coursework**

- A minimum of 30 hours of graduate credit hours with a GPA of 3.0 or higher.
- The 30 credit hours must include at least 15 credit hours in PTYS courses.
- Two to four credit hours of PTYS 910 thesis credits.
- The 15 PTYS credit hours must include one each from of the following groups
  - PTYS505A, PTYS505B, PTYS517
  - PTYS 510A, PTYS 510B
  - PTYS512, PTYS554

- Students must maintain a GPA of 3.0 or better in the PTYS courses to be considered in good academic standing. Failure to maintain this standing results in dismissal from the M.S. program.

## **M.S. Thesis**

- The thesis must describe results from an original investigation. The results must of high enough quality to merit publication in the peer-reviewed literature.
- Reprints (copies of either published papers or manuscripts submitted for publication) may be included as appendices in theses or dissertations, with the permission of the student's committee. Because the thesis or dissertation must represent an integrated body of original scholarly work, the portions of the reprint that are relevant must be summarized within the body of the thesis or dissertation. Also, if the student is not the sole author of the work, the student's contribution to the work must be explained. Further details regarding Graduate College requirements are given in the [\*University of Arizona Manual for Electronic Submission of Theses and Dissertations\*](#). In particular, written permission must be obtained for the use of any copyrighted material.
- Reprints of published papers or preprints of manuscripts submitted for publication may be included as chapters in theses or dissertations if the student is the first or sole author and if the student's committee consents. Because the thesis or dissertation must represent an integrated body of original scholarly work, the relevance of the work to the thesis must be explained in the Introduction or elsewhere within the thesis. Reprints or preprints of papers on which the student is an author, but not the first author, may only be included as appendices, although the work that the student contributed may be included within the body of the thesis or dissertation. Written permission must be obtained for the use of any copyrighted material.
- The thesis must conform to the rules described in the [\*University of Arizona Manual for Electronic Submission of Theses and Dissertations\*](#).
- Two copies of the thesis must be deposited with the Planetary Sciences library.

## **M.S. Defense Examination**

All M.S. students must pass a M.S. Defense Examination. This examination consists of two parts: (1) a public presentation during which the candidate describes the results of their research and responds satisfactorily to questions from the audience, and (2) a closed examination, where the members of the M.S. Committee question the student to determine if the thesis satisfies the faculty's standards for intellectual and scholarly achievement. The entire proceedings may not exceed three hours. Members of the committee must be present for the entire examination.

- The University of Arizona Graduate College requirements for the M.S. Final Oral Defense Examination are available online: <http://grad.arizona.edu/academics/program-requirements>.
- All other requirements of the M.S. program must be completed prior to the M.S. Defense Examination.
- The duration of the public presentation is at the discretion of the M.S. Committee, but generally lasts 30 to 45 minutes.
- The M.S. Committee may accept the thesis as is, accept the thesis subject to modifications, or reject the thesis. In this last case, the student is dismissed from the program. A second exam may be permitted, in accordance with Graduate College regulations, if the Committee agrees that this is appropriate.
- Acceptance or rejection of the thesis is decided by majority vote of the committee.

## **Notes**

- There is no Teaching Assistant requirement for the M.S. degree.
- There is no Journal Club requirement for the M.S. degree.
- There is no minor requirement for the M.S. degree.
- There is no Oral Comprehensive Exam required for the M.S. degree.

**Approved by the PTYS/LPL Faculty on April 25, 2008.**