

# General Requirements for all Graduate Degrees

## **Undergraduate physics certification requirement for MS or PhD degrees in Physics.**

Certification of knowledge of undergraduate physics must normally be completed within 12 months (extension possible with recommendation of the graduate admission committee) of entering the MS program in addition to the required course work. The certification can be achieved in several ways:

1. A GRE Physics score greater than or equal to 600;  
  
or
2. THE DETERMINATION BY THE GRADUATE DIRECTOR AND GRADUATE ADVISOR, BASED ON the diagnostic exam given on entering the program combined with the student's undergraduate record, that the student understands all major elements of undergraduate physics;  
  
or
3. Successful completion with grade of B or better on all undergraduate courses that the graduate director and/or advisor recommends based on the results of (2). The student who has not succeeded in certifying their undergraduate physics knowledge in one of the above three ways could, within 12 months of starting the program, petition the Graduate Committee for an oral exam on undergraduate physics. The oral exam will be administered by a committee of six faculty members assigned by the department.
4. A candidate for a Master's or Ph.D. degree who has not had the equivalent of 6 credit hours of advanced undergraduate laboratory course work (Junior/Senior level) is required to take one of the four advanced laboratory courses offered in the Department.
  - PHSX 516 Physical Measurements I
  - PHSX 536 Electronic Circuits and Measurements
  - PHSX 616 Physical Measurements II
  - PHSX 636 Electronics Design

## **Communication Skills**

All graduate students, after their first semester, will deliver at least one oral presentation per semester. The talk should be at least 20 minutes long. For students not yet associated with a research group, the Graduate Seminar can serve as a venue. For more advanced students, the seminar of their research group would be a natural venue. The student does not need to be enrolled in the seminar to present a talk for this purpose. Off-campus venues such as collaboration meetings and physics conferences can also serve this

purpose. When giving presentations, students should fill out [this form](#) and have it signed by two witnesses, one of which must be a Physics or Astronomy faculty and other a Ph.D. doing research in the department. The completed form must be handed to the office staff. Faculty members who sign off on the talks are expected to provide constructive feedback to the student. The graduate advisor will monitor student compliance with the requirement.