

Physics 4610-2, 4620-2 and 4630-2: Physics Honors

Physics and Engineering Physics majors may graduate with a Departmental Honors designation on their diploma.

In A&S an honors designation is only achievable by the completion of an original piece of work. A senior thesis must be submitted, with typical lengths anywhere from 20 to 100 pages. An oral defense of the thesis also must be given to a committee of three faculty members. Typically the presentations last for 40 minutes.

In Engineering Physics an honors designation can be achieved by a high grade point average (greater than 3.8) or by writing an honors thesis and following the guidelines for A&S honors. It is possible to receive double honors in Engineering by having a high GPA and by writing and defending a thesis.

The thesis will be directed by a faculty member from physics or any of the associated departments, including APS, CASA, JILA or even a local research lab such as NIST or NREL. The departmental Honors Chair will determine if an outside thesis advisor is an acceptable choice. The physics department honors chair can play a helpful role in directing students towards potential advisors.

The first order determination for graduation with honors is based upon the GPA:

GPA > 3.8 Summa Cum Laude

GPA > 3.5 Magna Cum Laude

GPA > 3.3 Cum Laude

However, a GPA of 4.0 with no honors thesis will not earn an honors designation, nor will a 4.0 GPA with a very poor quality thesis earn a designation. An especially high quality thesis will often bump a student up from one designation to another - for instance a student with a 3.4 and a very strong thesis may earn a Magna or possibly even a summa designation. It is for this reason that we open enrollment in PHYS 4610/4620/4630 to students with a GPA > 3.0.

There will be once a week hour-long honors meetings which all enrolled students

are required to attend. The students will rotate through giving 20 minute oral presentations of their research to their peers.

It is expected that Honors students will spend between 6-10 hours per week working on their Honors research.

To graduate with an honors designation students should enroll in at least one semester of honors, although two or three are more usual.

The Physics Honors sequence Phys4610, Phys4620, and Phys4630 are controlled enrollment courses. You will need to contact the Honors Chair if you are interested in enrolling.