

MS IN PHYSICS

For a degree of M.S. a student must complete at least 30 hours of graduate credit with specific stipulations as mentioned in the catalog. The degree has two options: (i) with a thesis and (ii) without a thesis. The thesis option involves at least 6 credits of research conducted under supervision of a thesis advisor. A thesis written and defended by the student in front of a committee of faculty members is necessary for this option to be completed. In addition to the required coursework, in the non-thesis option, a student must prepare a project report based either on literature research or independent research or a combination thereof, conducted under the supervision of the student's project advisor or co-advisors. The report should be prepared in accordance with the format specified by the advisory committee and the student should present an oral defense of the project results.

Requirements for the Master's Degree

M.S. in Physics Thesis Option

For the master of science or master of science and education, a student must complete 30 hours of graduate credit that includes the following:

1. PHYS 6140 and an additional 15 hours of graduate course credit in physics, with six of the 15 hours numbered above 6000. Credit in PHYS 5900, PHYS 6010 and/or PHYS 6020 will not count toward either degree.
2. The student must present a satisfactory thesis based on directed research, for no more than eight credit hours.
3. The remaining hours within the 30 total may be chosen from graduate courses approved by the student's committee. In some cases students working toward the Ph.D. may earn the M.S. degree without formal presentation of the M.S. thesis if they have passed the Ph.D. qualifying examination, satisfied the course requirements for the M.S., and completed a research project under the supervision of a research adviser. Students meeting these requirements may petition the department to grant the M.S. without formal presentation of a thesis.

M.S. in Physics with Intensive Coursework Option (non-thesis)

For the coursework intensive M.S. in Physics the student must complete at least 30 hours of graduate credit including the following:

1. At least 24 hours of graduate course credit in physics, with at least 12 of the 24 hours numbered above 6000 (no degree credit for PHYS 5900, PHYS 6010, or PHYS 6020). No more than 6 hours of graduate research course credit may count towards the 24 hours.
2. In addition to the required coursework, a student must prepare a project report based either on literature research or independent research or a combination thereof, conducted under the supervision of the student's project advisor or co-advisors. The report should be prepared in accordance with the format specified by the advisory committee and the student should present an oral defense of the project results.

3. The remaining hours to complete the 30 total required hours may be chosen from any courses approved for graduate credit with the approval of the student's advisory committee.

M.S. in Physics with Materials Science Option

A master of science degree in physics with a materials science option is available. For this degree, a student must complete 30 hours of graduate credit, including the following:

1. PHYS 6140, PHYS 6540, PHYS 6550 and an additional 12 hours of graduate course credit in physics with six of the 12 hours numbered above 6000 (no degree credit for PHYS 5900, PHYS 6010 or PHYS 6020).
2. The student must present a satisfactory thesis based on directed research, for no more than eight credit hours.
3. The remaining hours within the 30 total may be chosen from any graduate courses approved by the student's committee.

4. M.S. in Physics with Intensive Coursework Option

For the coursework intensive M.S. in Physics the student must complete at least 30 hours of graduate credit including the following: At least 24 hours of graduate course credit in physics, with at least 12 of the 24 hours numbered above 6000 (no degree credit for PHYS 5900, PHYS 6010, or PHYS 6020). No more than 6 hours of graduate research course credit may count towards the 24 hours. In addition to the required coursework, a student must prepare a project report based either on literature or independent research or a combination thereof, conducted under the supervision of the student's project advisor or co-advisors. The report should be prepared in accordance with the format specified by the advisory committee and the student should present an oral defense of the project results.

The remaining hours to complete the 30 total required hours may be chosen from any courses approved for graduate credit with the approval of the student's advisory committee.