

MASTER OF ARTS IN PHYSICS

The BA/MA program is a curricular option for those students who feel the need for the intensive research experience that an additional year of study can afford. During the additional year, the student will do additional coursework and write an MA thesis based on original research. Students interested in this possibility should consult their physics major advisors as early as possible, since it takes some planning to complete the requirements for both the BA and MA degrees. For more information, please visit Wesleyan.edu/grad/degree-programs/ba-ma.html.

The Physics Department also offers graduate work leading to the MA degree either through the BA/MA program or through termination of pursuit of a PhD.

COURSES

All degree seeking graduate students are required to register for at least one credit in each semester that they are enrolled in the university. A minimum of six credits are required for the MA. Of these, three must be in advanced coursework at the 300 level and above. The remaining credits may be earned through research and seminar courses. The student must complete at least two semesters of thesis research culminating in an MA thesis. MA credit will only be awarded for courses in which grades of B minus or higher are earned.

LANGUAGE REQUIREMENT

There is no foreign language requirement.

PROGRESS AND QUALIFYING EXAMS

Students pursuing an MA through the BA/MA program or through termination of pursuit of a PhD should form an advisory committee early in their program in consultation with their research mentor.

Each MA student is required to present an annual informal talk on his or her thesis work in a departmental seminar.

TEACHING

Although the emphasis in the program is on independent research and scholarly achievement, graduate students are expected to improve their skills in teaching and other forms of oral communication. Masters' students have the opportunity for some undergraduate teaching under direct faculty supervision.

RESEARCH

Current experimental research areas are concentrated in atomic/molecular physics and condensed matter physics. Current interests include Rydberg states in strong fields, molecular collisions, photo-ionization, laser-produced plasmas, wave transport, granular and turbulent fluid flows, single-molecule biophysics, and optoelectronics of renewable energy materials.

Current theoretical and computational research areas include nonlinear dynamics, quantum chaos, properties of nanostructures, soft condensed matter, and wave transport in complex media.

THESIS AND DEFENSE

Each candidate for the MA degree is required to write a thesis on original and significant research supervised by a member of the faculty. The work must be defended in a final oral examination administered by the advisory committee. This oral examination covers the thesis research and is open to all members of the Wesleyan community. It is expected that the candidate will submit the results of his or her work to a scholarly journal for publication.

ADDITIONAL INFORMATION

For additional information, please visit the department website at wesleyan.edu/physics/graduate (<http://wesleyan.edu/physics/graduate/>).