Physics, M.S.

Graduate study in physics and astronomy is highly individualized. Each entering graduate student is assigned a faculty advisor, who assists in preparing a plan of study and in guiding the student’s progress. All graduate students who intend to pursue a Ph.D. in physics must pass the qualifying exam; see the Ph.D. in Physics in this section of the Catalog.

Requirements

The Master of Science program in physics requires a minimum of 30 s.h. of graduate credit. All students must earn the required 30 s.h. of graduate credit in courses numbered 4000 or above, with at least 15 s.h. in courses numbered 5000 or above. They must maintain a g.p.a. of at least 3.00.

Each student’s plan of study should provide for as much advanced work as aptitude and previous preparation permit. Up to one-third of the program of study may be taken in related scientific fields other than physics (e.g., mathematics, chemistry, astronomy, geology, engineering).

The degree is offered with thesis or critical essay. Students who choose the thesis option must write a thesis based on an original experimental or theoretical investigation that they have conducted. Students may earn a maximum of 6 s.h. in PHYS:7990 Research: Physics or PHYS:7992 Individual Critical Study.

Students who choose the critical essay option must conduct an independent study of the literature on a particular area of physics and write a critical essay on that topic. Students may earn a maximum of 4 s.h. in PHYS:7990 Research: Physics or PHYS:7992 Individual Critical Study.

The M.S. may be a terminal degree or a step toward a Ph.D. In either case, the final examination is oral, conducted by a committee of three faculty members.

Admission

Applicants must meet the admission requirements of the Graduate College; see the Manual of Rules and Regulations of the Graduate College.

Financial Support

Students qualified for graduate study are encouraged to apply for fellowships and assistantships. Contact the Department of Physics and Astronomy chair.

Career Advancement

Graduates have opportunities for employment in universities, colleges, and research laboratories in government and industry. Physics graduates have mastered skills that are readily transferable to a number of fields. They might choose to work in engineering, software development, finance, or consulting.

The Pomerantz Career Center offers multiple resources to help students find internships and jobs.