

M.S. in Physics

The department offers a program of courses and research leading to the MS degree in Physics. Two routes are available. Plan 1 requires 30 semester hours of credit: 24 hours of coursework plus a six-hour thesis (PHYS 5398 and PHYS 5399). Plan 2 requires the favorable recommendation of the Physics Department Graduate Studies Committee and 36 hours of coursework including the successful completion of a research problem (PHYS 5391) with a written report submitted to the department.

Applicants whose degrees are from non-English speaking institutions are required to demonstrate English proficiency. Please consult the Graduate School (<https://www.utep.edu/graduate/future-students/applicant-timelines.html>) website for required scores.

Students must have their course program approved by the graduate advisor each semester. The student chooses, in consultation with the graduate advisor, a chairperson of the research committee and at least two additional committee members who will supervise the thesis or research problem. One member of this committee must be from outside the Physics Department. These choices should be made and approved by the department Graduate Advisor and by the Graduate School before the student has completed two semesters of graduate work.

The candidate for the MS degree in Physics can have no more than two grades of C for courses used to fulfill the requirements of the degree and must pass a final examination, which will include an oral defense of the thesis or research problem.

Degree Plan

Required Credits: 30

Code	Title	Hours
MS in Physics (All courses require a grade of C or better)		
Required Courses:		
PHYS 5321	Mechanics	3
PHYS 5325	Mathematical Physics	3
PHYS 5341	Electrodynamics	3
PHYS 5361	Quantum Mechanics	3
Thesis/Project Option:		
Select one of the options		12-18
Physics Electives:		
Select six hours from the following Graduate Physics courses (p. 1)		6
Total Hours		30-36

Thesis Option

Code	Title	Hours
PHYS 5365	Advanced Statistical Mechanics	3
PHYS 5371	Solid State Physics	3
PHYS 5398	Thesis	3
PHYS 5399	Thesis	3
Total Hours		12

Project Option

Code	Title	Hours
PHYS 5391	Research Problems in Physics	3
Select fifteen hours from the following Graduate Physics courses (p. 1)		15
Total Hours		18

Graduate Physics

Code	Title	Hours
PHYS 5195	Graduate Seminar	1
PHYS 5196	Graduate Research in Physics	1
PHYS 5365	Advanced Statistical Mechanics	3
PHYS 5371	Solid State Physics	3
PHYS 5391	Research Problems in Physics	3

PHYS 5393	Special Topics in Physics	3
PHYS 5396	Graduate Research in Physics	3
PHYS 5398	Thesis	3
PHYS 5399	Thesis	3
PHYS 5696	Graduate Research in Physics	6