PHYSICS: QUANTUM COMPUTING, M.S.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement	Detail
Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) policy (https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/)).
Overall Graduate GPA Requirement	3.00 GPA required. This program follows the Graduate School's GPA Requirement policy (https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/)).
Other Grade Requirements	n/a
Assessments and Examinations	n/a
Language Requirements	n/a

REQUIRED COURSES

Code	Title	Credits
Fall		
PHYSICS 701	Graduate Introductory Seminars	1
PHYSICS 709	Introduction to Quantum Computing	3
PHYSICS 531	Introduction to Quantum Mechanics	3
or PHYSICS 731	Quantum Mechanics	
or PHYSICS 448	Atomic and Quantum Physics	
or PHYSICS 545	Introduction to Atomic Structure	
PHYSICS elective: Any PHYSICS course numbered 300 or above.		3
PHYSICS or other elective: Any PHYSICS course numbered 300 or above; courses outside of PHYSICS must be approved by the M.S. Physics-Quantum Computing program.		3
Spring		
PHYSICS 779	Advanced Quantum Computing	3
PHYSICS 551	Solid State Physics	3
or PHYSICS 751	Advanced Solid State Physics	
or PHYSICS 449	Atomic and Quantum Physics	
PHYSICS or other elective: Any PHYSICS course numbered 300 or above; courses outside of PHYSICS must be approved by the M.S. Physics-Quantum Computing program.		6
Summer		
PHYSICS 707	Quantum Computing Laboratory	4
PHYSICS 799	Independent Study	1
Total Credits		**30**

Students in this program may not take courses outside the prescribed curriculum without faculty advisor and program director approval. Students in this program cannot enroll concurrently in other undergraduate or graduate degree programs.