

# QUANTUM COMPUTING, MS

UW–Madison is awaiting approval of this new academic program by the Student & Exchange Visitor Program (SEVP) before we are able to accept prospective F-1 students into this program or issue a Form I-20 for this program. International students may apply for this program but will only be considered for admission if or when the program is approved.

The MS in Quantum Computing (MSQC) is a professional master's degree designed to provide students with a thorough grounding in the discipline of quantum information and quantum computing.

This program builds upon the success of the first such program in the U.S.. The MSQC program explores the interdisciplinary nature of the field of Quantum Computing and offers the students the opportunity to develop specialized skills in Software/Computation or Hardware. The program examines relevant parts of quantum theory and measurement techniques and proceeds to in-depth training in quantum gates, qubit tune-up, algorithms, quantum error correction and decoherence. It combines classroom instruction, laboratory participation and opportunities for involvement in research projects.

The program is typically completed within five semesters but can be completed in one calendar year (three semesters) at an accelerated pace.

Students who graduate from this program will have the tools to succeed as researchers or program managers in a quantum computing or quantum technologies enterprise. They may also use the program as a springboard to PhD programs in physics or related areas. MSQC students interested in applying to the PhD at UW–Madison must adhere to all PhD admission requirements and deadlines.

The program collaborates closely with faculty across campus that are involved in the Wisconsin Quantum Institute.