

REQUIRED COURSEWORK

REQUIREMENTS

HOURS

Six hours selected from the following courses:

6

Computer Science:

309.1 Quantum Computing I
 378.1 Quantum Computing II
 358H Intro to Quantum Information Sci: Honors

Twelve hours selected from among the following supplementary courses:

12

Physics:

373 Quantum Physics I: Foundations
 362K Quantum Physics II: Atoms & Molecules
 Computer Science:
 331 or 331H Algorithms & Complexity/Honors
 358H Intro to Quantum Information Sci: Honors

Mathematics:

340L Matrices & Matrix Calculations
 or 341 Linear Algebra & Matrix Theory
 or SDS 329C Practical Linear Algebra I
 346 Applied Linear Algebra

Independent Research Project. This may be taken, for example as one of the following courses:¹

PHY 371C Individual Study in Physics
 C S 370 Undergraduate Reading & Research
 M 375C Conference Course (Computer-Assisted)

Please Note: C S 358H Introduction to Quantum Information Science: Honors may only be counted toward one of the certificate requirements. With the approval of the certificate program faculty, other appropriate courses may be counted toward the certificate requirements.

¹ The student conducts independent research on some aspect of quantum information science and completes a final report describing their work. The topic must be approved by a university faculty or research staff member and will be conducted under their supervision.

POLICIES & PROCEDURES

- Application for admission required
- Total of 18 hours required
- All coursework must be completed with a grade of C- or better
- Courses that appear in multiple approved course lists may be used to satisfy only one requirement.
- Courses under the Freshman Research Initiative (FRI) program will be open to all students, with consent of the instructor.