

# QUANTUM INFORMATION TECHNOLOGY UNDERGRADUATE CERTIFICATE

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or ELEC 4681 Quantum Technology Systems

**Total Hours** 12

To learn more about the Student Learning Outcomes for this program, please visit our website (<https://clas.ucdenver.edu/physics/academics/program-learning-goals/>).

## Introduction

The goal of this certificate is to better prepare students and working professionals to enter into the quantum information technology workforce and for those wanting to learn more about quantum computing and quantum technologies.

## Program Delivery

- This certificate is an on-campus program.

## Declaring This Certificate

- Students should meet with the Physics department advisor Michael "Bodhi" Rogers ([michael.rogers@ucdenver.edu](mailto:michael.rogers@ucdenver.edu))

These program requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their Physics advisor to confirm the best plans of study before finalizing them.

## General Requirements

Students must satisfy all requirements as outlined below and by the department offering the certificate.

- Click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/academic-policies-procedures/>) for information about Academic Policies

## Certificate Requirements

- Students must complete a minimum of 12 credit hours.
- Students must earn a minimum grade of C- (1.7) in all course applied to the certificate and must achieve a minimum cumulative certificate GPA of 1.7. All graded attempts in required and elective courses are calculated in the certificate GPA. Courses taken using P+/P/F or S/U grading cannot apply to certificate requirements.
- Students must complete all coursework with CU Denver faculty.
- All prerequisites for program courses must be met.
- All requirements must be met within a five-year period

Code	Title	Hours
<b>Complete the following courses:</b>		
PHYS 4678 or ELEC 4678	Quantum Computing	3
PHYS 4679 or ELEC 4679	Quantum Computing Algorithms	3
PHYS 4680 or ELEC 4680	Quantum Computing Technology	3
PHYS 4681	Quantum Technology Systems	3