

DATA SCIENCE AND CHEMISTRY GRADUATE CERTIFICATE

CHEM 5640	Artificial Intelligence in Chemistry and Biochemistry	3
CHEM 5580	Molecular Informatics	3
CHEM 5845	Molecular Modeling and Drug Design	3
CHEM 5510	Computational Chemistry	3
Total Hours		13

Introduction

Please click here (<https://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-liberal-arts-sciences/chemistry/>) to see Chemistry Department information.

This certificate will equip students and professionals with the skills to extract insights from chemical data, develop models, and solve complex problems, making them highly valuable in areas like drug discovery, material designs, and environmental chemistry.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Students should meet with the certificate advisor, Dr. Woonghee Lee (woonghee.lee@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 Chemistry MS advisor to confirm the best plans of study before finalizing them.

Graduate Education Policies and Procedures apply to this program.

Certificate Requirements

1. Students must complete a minimum of 13 credit hours from the approved courses.
2. Students must earn a minimum grade of B- (2.7) in all courses taken at CU Denver and must achieve a minimum cumulative certificate GPA of 3.0. Courses taken using P+/P/F or S/U grading cannot apply to certificate requirements.
3. Students must complete all credits for the certificate with CU Denver faculty.

Program Restrictions, Allowances and Recommendations

1. All courses must be taken within ten years of receipt of the Data Science and Chemistry Graduate Certificate.
2. Prerequisite courses do not have to be completed at CU Denver. Required courses must be completed in residency at CU Denver. Any residency exemptions need to be approved in writing by the Data Science and Chemistry advisor prior to the course(s) being taken at another institution.

Note: Some of the following courses may have prerequisites that *must* be met. Please see course descriptions.

Code	Title	Hours
<i>Complete the following list of courses:</i>		
CHEM 5630	Programming for Data Analysis in the Physical Sciences	1