CHEMISTRY, BS - ACS CERTIFIED

Introduction
Please click here (http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/college-liberal-arts-sciences/chemistry/) to see Chemistry Department information.

The Chemistry Department offers two options for a chemistry degree: a BS Chemistry or a BS Chemistry ACS Certified. Students interested in the chemistry major should consult regularly with the chemistry major advisor, Dr. Marta K. Maron (marta.maron@ucdenver.edu). The Advisor can help you select the track that best fits your future goals. A complete description of the chemistry major programs may be obtained in the Department of Chemistry office (Science 3071) or Department website.

Qualified majors are strongly urged to participate in directed research with a research faculty member and in the departmental honors program. We also strongly encourage chemistry majors to participate in the College by serving as graders, learning assistants, and/or teaching assistants. Contact the chemistry major advisor for more information and/or questions.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society (ACS) for the professional training of chemists. The ACS certification requires students following the BS program of study to complete courses in the five sub-disciplines of chemistry: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry and physical chemistry. In addition, students take an in-depth (second semester) course in four of the five sub-disciplines and are required to complete 400 hours of laboratory work post General Chemistry Laboratories. Laboratory work has to encompass four of the five sub-disciplines. General Chemistry I and II with laboratories are considered introductory courses and are prerequisites to foundation courses. No chemistry course with a grade of less than C (2.0) can be applied toward ACS certification. Students should check with the undergraduate chemistry major Advisor for details.

These degree 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 major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery
This is an on-campus program.

Declaring This Major
- Click here (http://catalog.ucdenver.edu/cu-denver/undergraduate/records-registration/registration/declare-change-major-minor/) to go to information about declaring a major.

General Requirements
To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements (http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation/graduation-requirements/)
- CU Denver Core Curriculum (http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation-undergraduate-core-requirements/)
- College of Liberal Arts & Sciences Graduation Requirements (http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/college-liberal-arts-sciences/graduationrequirementstext)
- Click here (http://catalog.ucdenver.edu/cu-denver/undergraduate/academic-policies-procedures/) for information about Academic Policies

Program Requirements
1. Students must complete a total of 72 credit hours, including a minimum of 50 CHEM credit hours.
2. Students must complete a minimum of 16 upper division level (3000-level and above) CHEM credit hours.
3. Students must earn a minimum grade of C (2.0) in all courses that apply to the major and must achieve a minimum cumulative major GPA of 2.0. All graded attempts in required and elective courses are calculated in the major GPA. Courses taken using pass/fail grading cannot apply to major requirements.
4. Students must complete a minimum of 14 CHEM credit hours with CU Denver faculty, including CHEM 4128 Instrumental Analysis Laboratory, CHEM 4518 Physical Chemistry Laboratory: Reaction Analysis or CHEM 4538 Physical Chemistry Laboratory: Molecular Structure.

Program Restrictions, Allowances and Recommendations
1. A student who has declared a chemistry major at CU Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. No more than 3 additional hours of such pre-approved transfer credits will be allowed.
2. All courses applied to the chemistry major need to be taken within ten years of the graduation date with the exception of General Chemistry I Lecture CHEM 2031 General Chemistry I or CHEM 2081 Honors General Chemistry I and Laboratory CHEM 2038 General Chemistry Laboratory I or CHEM 2088 Honors General Chemistry I Laboratory and General Chemistry II Lecture CHEM 2061 General Chemistry II or CHEM 2091 Honors General Chemistry II Lecture and Laboratory CHEM 2068 General Chemistry Laboratory II or CHEM 2098 Honors General Chemistry II Laboratory. In the event that the student would like to apply for expired credit for Organic I Lecture CHEM 3481 Majors Organic Chemistry I, the student will need to test at the 50th percentile on the ACS Standardized Exam for Organic Chemistry I.
3. PHYS 2321 Intro Experimental Phys Lab I and PHYS 2341 Intro Experimental Phys Lab II are specifically designed for students in non-Physics majors and can be paired with either PHYS 2010 College Physics I and PHYS 2020 College Physics II or PHYS 2311 General Physics I: Calculus-Based and PHYS 2331 General Physics II: Calculus-Based lectures. Students pursuing a second major in Physics should complete PHYS 2311 General Physics I: Calculus-Based and PHYS 2331 General Physics II: Calculus-Based and
PHYS 2351 Applied Physics Lab I and PHYS 2361 Applied Physics Lab II.

4. Students may double major in Biochemistry and Chemistry. Students can apply the requirements for both majors, if the respective courses are a major requirement for both the Chemistry and Biochemistry major. Students must select unique Chemistry or Biochemistry elective courses to satisfy elective course credit requirements for both majors. A course cannot fulfill more than two requirement/elective areas in a student’s degree.