Program Map 2018-2019 College Credit Catalog

Chemistry

Degree: Associate of Science (AS) in Chemistry

SCIENCE, ENGINEERING & MATH

Program Description: Education in chemistry prepares students for career opportunities in chemical-related industries like healthcare, the food and drink industry, and environmental consultancies. Chemistry courses at ACC also contribute toward the core curriculum requirements for a bachelor's degree from a four-year institution.

The Associate of Science degree in Chemistry is intended to provide students with the first two years of college chemistry education through organic chemistry level.

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Department Website
sites.austincc.edu/chem

To receive an Associates of Science degree in Chemistry, the student must: (a) make a minimum of C in all required math and science courses and (b) have an overall GPA of 2.0 or greater.

*Use this **Program MAP** to choose courses with your advisor and track progress towards milestones and completion of program.*

Pre-Degree Requirements

Program Specific	Reading and Writing Placement *Placements based on TSI*	Mathematics Placement *Placements based on TSI*
Prerequisites for MATH 2413 – Calculus I: □ MATH 1314 – College Algebra □ MATH 1316 – Trigonometry □ MATH 2412 – Precalculus: Functions and Graphs	□ Basic Developmental Courses □ ESOL Courses □ INRW Courses	□ NCBM and MATD courses paired with MATH courses □ NCBM and MATD courses

SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

Plans can be modified to fit the needs of part-time students by adding more semesters

Semester 1	CR	Advising Notes
EDUC 1300 - Effective Learning: Strategies for College Success	3	Note: All first time Austin Community College (ACC) students with fewer than 12 SCH of successful college credit must take the EDUC 1300 course in their first semester at ACC. All other students may select either EDUC 1300 or a course from the Component Area Option section of the Core Curriculum Course List. See an advisor or a full-time faculty member in Chemistry for more information.
CHEM 1311 – General Chemistry I - Lecture	3	Prerequisite(s): High school chemistry or CHEM 1305/CHEM 1105 and MATH 1314 or equivalent academic preparation. Corequisite(s): CHEM 1111.
CHEM 1111 – General Chemistry I - Lab	1	Prerequisite(s): High school chemistry or CHEM 1305/CHEM 1105 and MATH 1314 or equivalent academic preparation. Corequisite(s): CHEM 1311.
ENGL 1301 – English Composition I	3	Prerequisite(s): TSI complete in reading and writing or exempt.
MATH 2413 – Calculus I	4	Prerequisite(s): MATH 2412 with minimum grade C; OR satisfactory scores on both the ACC Mathematics Assessment and Higher Level Placement Tests. Note: Students should first consult with a mathematics advisor to determine where they should begin their mathematics study. They may need to take one or more courses prior to taking MATH 2413.
	14	**Program Semester Hours / Meet with your advisor**
Semester 2		
CHEM 1312 – General Chemistry II - Lecture	3	Prerequisite(s): CHEM 1311/CHEM 1111 and MATH 1314 with a grade of C or better. Corequisite(s): CHEM 1112.
CHEM 1112 – General Chemistry II - Lab	1	Prerequisite(s): CHEM 1311/CHEM 1111 and MATH 1314 with a grade of C or better. Corequisite(s): CHEM 1312.
ENGL 1302 – English Composition II	3	Prerequisite(s): ENGL 1301 or equivalent with minimum grade of C.

MATH 2414 – Calculus II	4	Prerequisite(s): MATH 2413 with a C or better or the equivalent.
HIST 1301 – United States History I	3	Note: Select from HIST 1301, HIST 2301, HIST 2327, or HIST 2381. HIST 2301 and HIST 2381 may only be taken once.
	14	**Program Semester Hours / Meet with your program advisor**
Semester 3		
CHEM 2323 – Organic Chemistry I - Lecture	3	Prerequisite(s): CHEM 1312/CHEM 1112 with a grade C or better. Corequisite(s): CHEM 2123.
CHEM 2123 – Organic Chemistry I - Lab	1	Prerequisite(s): CHEM 1312/CHEM 1112 with a grade C or better. Corequisite(s): CHEM 2323.
GOVT 2305 – United States Government	3	
HIST 1302 – United States History II	3	Note: Select from HIST 1302, HIST 2301, HIST 2328, or HIST 2381. HIST 2301 and HIST 2381 may only be taken once.
ENGL 2342 – Forms of Literature I	3	Prerequisite(s): ENGL 1302 or equivalent with minimum grade of C.
SPCH 1311 – Introduction to Speech Communication	3	Note: Select any speech course from the Component Area Option section of the Core Curriculum Course List.
	16	**Program Semester Hours / Meet with your program advisor**
Semester 4		
CHEM 2325 – Organic Chemistry II -- Lecture	3	Prerequisite(s): CHEM 2323/CHEM 2123. Corequisite(s): CHEM 2125.
CHEM 2125 – Organic Chemistry II -- Lab	1	Prerequisite(s): CHEM 2323/CHEM 2123. Corequisite(s): CHEM 2325.
GOVT 2306 – Texas State and Local Government	3	
Life and Physical Sciences Restricted Elective	3-4	Note: Select a course from the Life and Physical Sciences section of the Core Curriculum Course List with one of the following prefixes: ASTR, BIOL, ENVR, or GEOL. Students should be guided by their special interests and requirements of the four-year college to which they plan to transfer.
ARTS 1301 – Art Appreciation	3	
ECON 2301 – Principles of Macroeconomics	3	**ACHIEVEMENT:** Associate of Science degree in Chemistry
	16-17	**Program Semester Hours**
Total Program Hours	**60-61**	

Please always check online at **catalog.austincc.edu** or meet with your academic or program advisor to ensure that you are viewing the latest and most accurate information.

Career & Transfer Resources

ACC's Career & Transfer websites provide detailed, guided information on career exploration and transfer.
www.austincc.edu/career
www.austincc.edu/transfer

For further information regarding this specific program, please see the Career & Transfer Resources supplement provided in the next section of this Program Map.

Program Map

Chemistry

Degree: Associate of Science (AS) in Chemistry Career & Transfer Resources Updated 11/26/18

Transfer Information

The Associate of Science in Chemistry provides a transfer pathway to a 4-year institution where students can earn a bachelor's degree. Students are strongly encouraged to select a transfer destination by the time they have completed 24 semester credit hours.

Common majors students pursue at a 4-year institution include: Chemistry, Biochemistry, Environmental Chemistry

Transfer Guides: *The universities listed here do not constitute an ACC endorsement. Transfer course evaluations and determination of what courses will count toward a bachelor's degree are made by the receiving transfer institution.*

The University of Texas at Austin: https://admissions.utexas.edu/apply/transfer-resources/acc-transfer-guides
Texas State University: https://www.admissions.txstate.edu/future-students/transfer/tpg
Texas A&M University: https://admissions.tamu.edu/transfer/majors
St. Edward's University: https://www.stedwards.edu/undergraduate/chemistry
Huston-Tillotson University: http://htu.edu/academics/colleges/cas/dept-of-natural-sciences-mathematics/chemistry
Texas Tech University: https://catalog.ttu.edu/content.php?catoid=9&navoid=996
The University of Texas at San Antonio: https://www.utsa.edu/advise/1617_transfer/acc.html
Southwestern University: http://www.southwestern.edu/departments/chemistry/majoring/

Reverse Transfer: If you transfer to a four-year institution prior to graduating from ACC, you can still earn your associate degree through reverse transfer. More information on the reverse transfer process and requirements can be found at www.austincc.edu/students/transfer-services/reverse-transfer.

Additional Transfer Resources: ACC's transfer website provides information on additional colleges & universities: http://www.austincc.edu/transferguides. Students are encouraged to consult with a faculty advisor, area of study advisor, and/or their chosen transfer institution to ensure courses taken at ACC will apply toward their bachelor's degree program.

Career Information

Common Job Titles

Chemists (includes Air Quality Chemist, Analytical Chemist, Chemical Laboratory Scientist, Chemist, Forensic Chemist, Forensic Scientist, Quality Control Chemist (QC Chemist), Chemical Technician (includes Chemical Analyst, Chemical Technician, Formulation Technician, Laboratory Analyst (Lab Analyst), Laboratory Technician (Lab Tech), Research Technician, Water Quality Technician), Medical or Chemical Laboratory Technician, Chemical Engineers, Natural Sciences Managers, Chemistry Teachers, Forensic Science Technicians, Geological and Petroleum Technicians, Materials Scientists
Many career opportunities in this field require completion of a bachelor's degree or higher.

Regional Labor Market Information

Chemist: New workers generally start around $36,459. Normal pay for Chemists is $51,297 per year, while highly experienced workers can earn as much as $90,174. Over the last year, 35 companies have posted 241 jobs for Chemists. There are currently 537 Chemists that are employed in Austin-Round Rock, TX.
Source: https://austincc.emsicc.com/careers/chemist

Medical or chemical laboratory technician: New workers generally start around $26,837. Normal pay for Medical and Clinical Laboratory Technicians is $40,926 per year, while highly experienced workers can earn as much as $61,608. Over the last year, 37 companies have posted 175 jobs for Medical and Clinical Laboratory Technicians.
(Source: https://austincc.emsicc.com/careers/medical-and-clinical-laboratory-technician/wages)

Career and labor market research tools (see Quick Reference Guide at http://www.austincc.edu/career):
EMSI: https://austincc.emsicc.com/, Bureau of Labor Statistics: http://www.bls.gov/ooh/, O*NET: https://www.onetonline.org/

Career Resources: ACC's career services website provides information on career exploration and employment at http://www.austincc.edu/career. Students are encouraged to consult with their area of study advisor for additional career assistance. The above information is provided as a guide and reference tool for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an ACC program. The common job titles listed are representative titles and are provided for career research. These are not the only occupations possible in this area of study.