

# CHEMISTRY STUDIES - CSCU TRANSFER DEGREE, AA

**Program code:** CHEM-AA-TAP

**Location:** Asnuntuck, Capital, Gateway, Housatonic, Manchester, Middlesex, Naugatuck Valley, Northwestern, Norwalk, Quinebaug Valley, Three Rivers, Tunxis

## Program Description

Chemistry is the branch of science that deals with the composition, structure, properties, and reaction of matter. Chemistry is a physical science within the STEM (Science, Technology, Engineering, and Mathematics) area of study. The Chemistry Studies program integrates scientific knowledge, laboratory skills and critical thinking. This program provides a solid grounding in Chemistry, as well as Mathematics and Physics, in preparation for continued study at junior-level status at a baccalaureate institution.

## Learning Outcomes

1. Employ chemical principles by utilizing critical thinking and problem-solving skills in the solution of chemistry problems in the areas of general chemistry and organic chemistry.
2. Plan and implement data collection strategies appropriate to a particular scientific question, record and present the data clearly, and analyze the results accurately.
3. Recall and employ the proper procedures and regulations for safe handling, use, and disposal of chemicals.

Students who earn an Associate in Arts degree in Chemistry Studies can transfer their degree to either the Central Connecticut State University (CCSU), Southern Connecticut State University (SCSU) or Western Connecticut State University (WCSU). Students will be credited as meeting the General Education requirements. Students must remain in the corresponding Chemistry major program for the following bachelor's degrees:

- CCSU: Chemistry - American Chemical Society (ACS) Certified, Bachelor of Science
- CCSU: Chemistry - General Program, B.S.
- SCSU: Chemistry - ACS Certified, B.S.
- SCSU: Chemistry - non-ACS Certified, B.S.
- WCSU: Chemistry - ACS Certified, B.S.
- WCSU: Chemistry - non-ACS Certified, B.S.

Full-time students may complete this program in two years. Most courses may not be taken online, and some courses are offered during summer sessions. Students who transfer should be able to graduate in 2 years. This assumes a student follows the degree pathway plan created for the student at the time of admission to a four-year school listed above. There are laboratory fees associated with most program courses.

## Degree Requirements

Code	Title	Credits
<b>Framework Courses</b>		
ENG 1010	Composition	3
MATH 2600	Calculus I	4

Elective ARHX - Arts & Humanities Course		3-4
CHEM 1210	General Chemistry I	4
Elective SBSX - Social / Behavioral Science Course		3
Elective WRIX - Written Communication II Course		3
CHEM 1220	General Chemistry II	4
Elective HISX - Historical Knowledge Course		3
Elective ORAX - Oral Communication Course		3
CCS 1001	College and Career Success	3
<b>Pathway Courses</b>		
CHEM 2310	Organic Chemistry I	4
CHEM 2320	Organic Chemistry II	4
MATH 2610	Calculus II	4
PHYS 2201	Calculus-Based Physics I <sup>1</sup>	4
or PHYS 1201	General Physics I	
PHYS 2202	Calculus-Based Physics II <sup>1</sup>	4
or PHYS 1202	General Physics II	
<b>Unrestricted Free Electives</b>		
Students should consider beginning or completing work on foreign language requirements (at CCSU and WCSU) not already met in high school and beginning work on a minor (required at CCSU in some majors - up to 9 credits can be completed at the community college).		9
<b>Total Credits</b>		<b>62-63</b>

<sup>1</sup> Students who will transfer into an ACS certified program or WCSU's non-ACS certified program should take PHYS 2201 Calculus-Based Physics I and PHYS 2202 Calculus-Based Physics II.