

# St. Charles Community College — Missouri S&T

## Chemistry BS

Transfer Guide Effective as of Fall 2024

### St. Charles Community College

### Missouri S&T

#### Communication Skills

Take all courses.

|                       |  |   |                                 |  |   |
|-----------------------|--|---|---------------------------------|--|---|
| ENG 101               | English Composition I                          | 3 | ENGLISH 1120                    | Exposition and Argumentation                 | 3 |
| ENG 102 or<br>ENG 115 | English Composition II or<br>Technical Writing | 3 | ENGLISH 1160 or<br>ENGLISH 3560 | Writing and Research or<br>Technical Writing | 3 |
| <b>Total Hours</b>    |  |   | <b>Total Hours</b>              |  |   |
| 6                     |  |   | 9                               |  |   |

#### Mathematics and Science

Take all courses.

|                    |                                      |   |                    |   |   |
|--------------------|--------------------------------------|---|--------------------|---|---|
| MAT 180            | Calculus and Analytic Geometry I     | 5 | MATH 1214          | Calculus I                                    | 4 |
| MAT 230            | Calculus and Analytic Geometry II    | 5 | MATH 1215          | Calculus II                                   | 4 |
| MAT 240            | Calculus and Analytical Geometry III | 5 | MATH 2222          | Calculus III                                  | 4 |
| CHM 115            | General Chemistry I                  | 5 | CHEM 1310, 1319    | General Chemistry I and Lab                   | 5 |
| CHM 116            | General Chemistry II                 | 5 | CHEM 1320,1510     | General Chemistry II and Qualitative Analysis | 5 |
| PHY 250            | Engineering Physics I                | 5 | PHYSICS 1135       | Engineering Physics I                         | 4 |
| PHY 251            | Engineering Physics II               | 5 | PHYSICS 2135       | Engineering Physics II                        | 4 |
| <b>Total Hours</b> |                                      |   | <b>Total Hours</b> |   |   |
| 35                 |                                      |   | 30                 |   |   |

#### Social Sciences

Select up to 9 credit hours to include one course to satisfy Missouri state requirement.

|   |  |   |   |   |   |
|---|--|---|---|---|---|
| HIS 146 or<br>HIS 101 or<br>HIS 102 or<br>POL 101 | Western Civ: Modern European Heritage or<br>US History to 1877 or<br>US History Since 1877 or<br>American Government<br><small>At least one of these courses is required to satisfy state requirement.</small> | 3 | HISTORY 1200 or<br>HISTORY 1300 or<br>HISTORY 1310 or<br>POL SCI 1200 | Modern Western Civilization or<br>American History to 1877 or<br>American History Since 1877 or<br>American Government<br><small>At least one of these courses is required to satisfy Missouri state requirement.</small> | 3 |
| ECO 120 or<br>ECO 110                             | Principles of Microeconomics or<br>Principles of Macroeconomics<br><small>or other economics</small>   | 3 | ECON 1100 or<br>ECON 1200   | Principles of Microeconomics or<br>Principles of Macroeconomics<br><small>or other economics</small>  | 3 |
| PSY 101   | Intro to Psychology <small>or other psychology</small>   | 3 | PSYCH 1101  | General Psychology <small>or other psychology</small>   | 3 |
| Social Science                                    | Other economics, history, political science,<br>sociology, or psychology.  | 3 | Social Science  | Other economics, history, political science,<br>sociology, or psychology.   | 3 |
| <b>Total Hours</b>                                |  |   | <b>Total Hours</b>  |   |   |
| 9   |  |   | 9   |   |   |

#### Humanities

Select 6 hours.

|   |  |   |   |   |   |
|---|--|---|---|---|---|
| LIT 250 or<br>LIT 210 or<br>LIT 272 or<br>LIT 223 | English Literature Before 1800 or<br>American Literature From 1620-1865 or<br>World Lit-Ancient World thru Renaissance or<br>African American Literature<br><small>or other literature</small> | 3 | ENGLISH 1211 or<br>ENGLISH 1221 or<br>ENGLISH 1231 or<br>ENGLISH 2245 | British Literature I: The Beginnings to 1800 or<br>American Literature: 1600 to 1865 or<br>World Literature I or<br>African American Literature<br><small>or other literature</small> | 3 |
| ART 1001 or<br>MUS 111 or<br>THE 122              | Art Appreciation or<br>Music Appreciation or<br>Intro of Theatre<br><small>or other art, music, or theatre</small>   | 3 | ART 1180 or<br>MUSIC 1150 or<br>THEATRE 1190                          | Art Appreciation or<br>Music Appreciation or<br>Theatre via Video<br><small>or other art, music, or theatre</small>   | 3 |
| PHL 101   | Intro to Philosophy<br><small>or other philosophy</small>  | 3 | PHILOS 1105   | Self and World: Intro to Philosophy<br><small>or other philosophy</small>   | 3 |
| Humanities  | Other fine art, literature, or philosophy  | 3 | Humanities  | Other fine art, literature, or philosophy   | 3 |
| <b>Total Hours</b>                                |  |   | <b>Total Hours</b>  |   |   |
| 6   |  |   | 6   |   |   |

#### Additional Degree Requirements

Select additional courses to total up to the maximum transfer credit hours shown below.

|                                     |  |   |  |  |   |
|-------------------------------------|--|---|--|--|---|
| CHM 240 and<br>CHM 241, 243         | Organic Chemistry I and<br>Organic Chemistry II and Lab<br><small>The combination of SCC CHM 240, 241, and 243 is equivalent to the combination of S&amp;T CHEM 2210, 2219, 2220, and 2229. All courses must be taken to receive full transfer credit.</small> | 8 | CHEM 2210, 2219 and<br>CHEM 2220, 2229 | Organic Chemistry I and Lab and<br>Organic Chemistry II and Lab<br><small>The combination of SCC CHM 240, 241, and 243 is equivalent to the combination of S&amp;T CHEM 2210, 2219, 2220, and 2229. All courses must be taken to receive full transfer credit.</small> | 8 |
| CPT 135 or<br>CPT 185 or<br>CPT 189 | Computer Science 1 with Python (4) or<br>Programming in C Sharp (3) or<br>Java Programming (3)   | 3 | CS 1500                                | Computational Problem Solving  | 3 |

#### Maximum credit hours to be transferred to Missouri S&T degree requirements.

**60**

Missouri S&T residency requirements: The last 60 hours of any Missouri S&T degree must be completed at Missouri S&T.  
Students must receive special permission from Missouri S&T to apply more than the maximum credit hours listed above toward the Missouri S&T degree.  
Students are not required to complete all courses on this guide before transferring to Missouri S&T.