

# St. Charles Community College — Missouri S&T

## Chemistry BA with Secondary Education Teacher Certification

Transfer Guide Effective as of Fall 2025

### 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           |
|                       |  | Total Hours |                                 |  | Total Hours |
|                       |  | 6           |                                 |  | 6           |

#### Social Sciences

Take all courses.

|                                     |   |             |  |   |             |
|-------------------------------------|---|-------------|--|---|-------------|
| HIS 145                             | Western Civ: Ancient and Medieval Heritage  | 3           | HISTORY 1100                                 | Early Western Civilization  | 3           |
| HIS 146                             | Western Civ: Modern European Heritage   | 3           | HISTORY 1200                                 | Modern Western Civilization   | 3           |
| ECO 120 or<br>ECO 110 or<br>POL 101 | Principles of Microeconomics or<br>Principles of Macroeconomics or<br>American Government | 3           | ECON 1100 or<br>ECON 1200 or<br>POL SCI 1200 | Principles of Microeconomics or<br>Principles of Macroeconomics or<br>American Government | 3           |
| PSY 101                             | Intro to Psychology   | 3           | PSYCH 1101                                   | General Psychology  | 3           |
|                                     |   | Total Hours |  |   | Total Hours |
|                                     |   | 12          |  |   | 12          |

#### Humanities

Take all courses.

|                                      |  |             |  |   |             |
|--------------------------------------|--|-------------|--|---|-------------|
| ART 1001 or<br>MUS 111 or<br>THE 122 | Art Appreciation or<br>Music Appreciation or<br>Intro of Theatre                   | 3           | ART 1180 or<br>MUSIC 1150 or<br>THEATRE 1190 | Art Appreciation or<br>Music Appreciation or<br>Theatre via Video           | 3           |
| PHL 101                              | Intro to Philosophy  | 3           | PHILOS 1105                                  | Self and World: Intro to Philosophy   | 3           |
| LIT 210 or<br>LIT 220                | American Literature From 1620 - 1865 or<br>American Literature From 1865 - Present | 3           | ENGLISH 1221 or<br>ENGLISH 1222              | American Literature: 1600 to 1865 or<br>American Literature 1865 to Present | 3           |
|                                      |  | Total Hours |  |   | Total Hours |
|                                      |  | 9           |  |   | 9           |

#### Mathematics and Sciences

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           |
| 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           |
| BIO 105, 106 or<br>BIO 150 | Essentials of Biology and Lab (4) or<br>General Biology: Cells to Organisms (5) | 4           | BIO SCI 1113, 1219* or<br>BIO SCI 1213, * 1219* | General Biology and Lab* or<br>Principles of Biology* and Lab*<br><small>*BIO SCI 1213 will be substituted for 1113. The lab is not a degree requirement, transfers as general elective credit.</small> | 3           |
|                            |   | Total Hours |   |   | Total Hours |
|                            |   | 24          |   |   | 21          |

#### Additional Degree Requirements

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

|                       |   |   |                                 |  |   |
|-----------------------|---|---|---------------------------------|--|---|
| PHY 130 or<br>PHY 125 | Astronomy or<br>Intro to Physical Geology             | 3 | PHYSICS 1505 or<br>GEOLOGY 1110 | Introductory Astronomy or<br>Physical and Environmental Geology  | 3 |
| PHY 150 or<br>PHY 250 | General Physics I (3) or<br>Engineering Physics I (5) | 3 | PHYSICS 1145 or<br>PHYSICS 1135 | College Physics I or<br>Engineering Physics I  | 4 |
| CHM 240               | Organic Chemistry I                                   | 3 | CHEM 2210, 2219                 | Organic Chemistry I and Lab  | 4 |
| CHM 241               | Organic Chemistry II                                  | 3 | CHEM 2220, 2229*                | Organic Chemistry II and Lab*<br><small>The lab is not a degree requirement, transfers as general elective credit.</small> | 4 |
| CHEM 222              | Quantitative Analysis                                 | 4 | CHEM 2510                       | Analytical Chemistry I   | 4 |

#### Teacher Certification Requirements

Take all courses.

|         |   |             |                            |  |             |
|---------|---|-------------|----------------------------|--|-------------|
| EDU 212 | Foundations of Education in a Diverse Society | 3           | EDUC 1074                  | Education in a Diverse Society   | 3           |
| EDU 285 | Teaching Profession with Field Experience     | 3           | EDUC 1104                  | Teacher Field Experience I   | 1           |
| EDU 240 | Educational Psychology                        | 3           | EDUC 2102 or<br>PSYCH 2300 | Educational Psychology   | 3           |
| PSY 110 | Human Growth and Development                  | 3           | PSYCH 3310                 | Developmental Psychology   | 3           |
| EDU 250 | Education of Exceptional Learners             | 3           | EDUC 2310 or<br>PSYCH 4310 | Education of the Exceptional Child or<br>Psychology of the Exceptional Child | 3           |
|         |   | Total Hours |                            |  | Total Hours |
|         |   | 15          |                            |  | 13          |

Professional Requirements for Teacher Education Program: Please view all program requirements at <https://teachereducation.mst.edu/secondaryeducation/>.

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

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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.