## St. Charles Community College - Missouri S\&T

## Chemistry BS Transfer Guide <br> Effective as of Fall 2023

| St. Charles Community College |  |  | Missouri S\&T |  |  |
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| Communication Skills (Take all courses) |  |  |  |  |  |
| ENG 101 | English Composition I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| $\begin{aligned} & \text { ENG } 102 \text { or } \\ & \text { ENG } 115 \end{aligned}$ | English Composition II or Technical Writing | 3 | ENGLISH 1160 or <br> ENGLISH 3560 | Writing and Research or Technical Writing | 3 |
| COM 106 | Public Speaking (fif required for AA degree) | 3 | SPMS 1185 | Principles of Speech <br> (Not required for the S\&T degree. Applies to S\&T degree as Free Elective) | 3 |
|  | Total Hours | 9 |  | Total Hours | 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 Qualitatve 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 |
|  | Total Hours | 35 |  | Total Hours | 30 |
| up to 6 credit hours to include one course to satisfy state requirement) |  |  |  |  |  |
| HIS 146 or <br> HIS 101 or <br> HIS 102 or <br> POL 101 | Western Civ: Modern European Heritage or US History to 1877 or US History Since 1877 or American Government (At least one of these courses is required to satisty state requirement) | 3 | HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200 | Modern Western Civilization or <br> American History to 1877 or <br> American History Since 1877 or <br> American Government <br> (At least one of these courses is required to satisfy state requirement) | 3 |
| $\begin{aligned} & \text { ECO } 120 \text { or } \\ & \text { ECO } 110 \end{aligned}$ | Principles of Microeconomics or Principles of Macroeconomics or other economics course | 3 | ECON 1100 or ECON 1200 | Principles of Microeconomics or Principles of Macroeconomics or other economics course | 3 |
| PSY 101 | Intro to Psychology or other psychology course Other economics, history, political science, sociology, psychology elective. | 3 | PSYCH 1101 | General Psychology or other psychology course | 3 |
|  |  |  |  | Other economics, history, political science, sociology, psychology elective. | 3 |
|  | Total Hours 9 |  |  | Total Hours | 9 |
| Humanities (Select 6 hours) |  |  |  |  |  |
| LIT 250 or LIT 210 or LIT 272 or LIT 223 (required) | English Literature Before 1800 or American Literature From 1620-1865 or World Lit-Ancient World thru Renaissance or African American Literature <br> (or other literature elective; at least one literature course is required) | 3 | ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2245 or | British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or African American Literature (or other literature elective) | 3 |
| ART 1001 or MUS 111 or THE 122 | Art Appreciation or Music Appreciation or Intro of Theatre | 3 | ART 1180 or MUSIC 1150 or THEATRE 1190 | Art Appreciation (or other art) or Music Appreciation (or other music) or Theatre via Video (or other theatre) | 3 |
| PHL 101 | Intro to Philosophy | 3 | PHILOS 1105 | Intro to Philosophy (or other philosophy) | 3 |
|  | Other fine art, literature, or philosophy elective |  |  | Other fine art, literature, or philosophy elective | 3 |
|  | Total Hours | 6 |  | ents Total Hours | 6 |
| Select additional courses to total up to the maximum transfer credit hours shown below. |  |  |  |  |  |
| CHEM 240CHEM 241CHEM 243CPT 135orCPT 185 orCPT 189 | Organic Chemistry I <br> Organic Chemistry II <br> Organic Chemistry Lab <br> Computer Science 1 with Python (4) or Programming in C Sharp (3) or Java Programming (3) | 3 | CHEM 2210 <br> CHEM 2220 <br> CHEM 2219,2229 |  | Organic Chemistry I | 4 |
|  |  | 3 |  | Organic Chemistry II | 4 |
|  |  | 2 |  | Organic Chemistry I and II Labs | 2 |
|  |  | Computer Science 1 with Python (4) or Programming in C Sharp (3) or Java Programming (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. <br> 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. |  |  |  |  |  |

