## Metropolitan Community College - Missouri S\&T

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

| Metropolitan Community College |  |  | Missouri S\&T |  |  |
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| Communication Skills (Take all courses) |  |  |  |  |  |
| ENGL 101 | Composition and Reading I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| ENGL 102 or ENGL 215 | Composition and Reading II or Technical Writing | 3 | ENGLISH 1160 or <br> ENGLISH 3560 | Writing and Research or Technical Writing | 3 |
| COMM 100 | Fundamentals of Speech (ff required for AA degree) | 3 | SPMS 1185 | Principles of Speech (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) |  |  |  |  |  |
| MATH 180 | Analytic Geometry \& Calculus I | 5 | MATH 1214 | Calculus I |  |
| MATH 190 | Analytic Geometry \& Calculus II | 5 | MATH 1215 | Calculus II | 4 |
| MATH 210 | Analytic Geometry \& Calculus III | 4 | MATH 2222 | Calculus III | 4 |
| CHEM 111 | General College Chemistry I | 5 | CHEM 1310, 1319 | General Chemistry I and Lab | 5 |
| CHEM 112 | General College Chemistry II | 5 | CHEM 1320,1510 | General Chemistry II and Qualitatve Analysis | 5 |
| PHYS 220 | Engineering Physics I | 5 | PHYSICS 1135 | Engineering Physics I | 4 |
| PHYS 221 | Engineering Physics II | 5 | PHYSICS 2135 | Engineering Physics II | 4 |
| ENGR 215 | Engineering Statistics and Computation | 3 | STAT 3115 | Engineering Statistics | 3 |
|  | Total Hours | 34 |  | Total Hours | 33 |
| Social Sciences (Select up to 6 credit hours to include one course to satisfy state requirement) |  |  |  |  |  |
| HIST 134 or HIST 120 or HIST 121 or POLS 136 | Western Civilization II or United States History to 1865 or United States History since 1865 or Introduction to American Politics (At least one of these courses is required to satisfy 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 |
| ECON 211 or ECON 210 | Microeconomics or Macroeconomics (or other economics course) | 3 | $\begin{aligned} & \text { ECON } 1100 \text { or } \\ & \text { ECON } 1200 \end{aligned}$ | Principles of Microeconomics or Principles of Macroeconomics (or other economics course) | 3 |
| PSYC 140 | General Psychology | 3 | PSYCH 1101 | General Psychology or other psychology course | 3 |
|  | Other economics, history, political science, sociology, psychology elective. |  |  | Other economics, history, political science, sociology, psychology elective. | 3 |
|  | Total Hours | 9 |  | Total Hours | 9 |
| Humanities (Select 6 hours) |  |  |  |  |  |
| ENGL 220 or <br> ENGL 222 or <br> ENGL 254 or <br> ENGL 260 or <br> ENGL 262/268 | British Literature to 1750 or <br> American Literature I or <br> World Literature I or <br> African-American Literature or <br> Women's Lives and Autobiography/Women's Literature <br> (or other literature elective) | 3 | ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2245 or ENGLISH 2242 or | British Literature I: The Beginnings to 1800 or <br> American Literature: 1600 to 1865 or <br> World Literature I or <br> African American Literature or <br> Literature by Women <br> (or other literature elective) | 3 |
| ART 108 or MUSI 108 or SPDR 106 | Survey of Art or Music Appreciation or Theater Appreciation | 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 |
| PHIL 100 | Introduction 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 | 9 |  | Total Hours | 6 |
| Additional Degree Requirements <br> Select additional courses to total up to the maximum transfer credit hours shown below. |  |  |  |  |  |
|  |  |  |  |  |  |
| CHEM 222 | Organic Chemistry II | 5 | CHEM 2220, 2229 | Organic Chemistry II and Lab | 4 |
| CSIS 123 or CSIS 223 or ENGR 204 | Programming Fundamentals $\mathrm{C}_{+}+$or Object-Oriented Programming w/ C++ or Programming for Engineers | 3 | CS 1971, 1981 or CS 1972, 1982 or CS 1500 | Intro to Programming Method and Lab (C++) or Intro to MATLAB Programming and Lab or Computational Problem Solving | 3 |
| Total Hours |  | 13 |  | Total Hours | 11 |
| 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. |  |  |  |  |  |
| This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2023 . Further information or updates are available from Missouri S\&T Transfer Admissions at transfer.mst.edu,transfer@mst.edu, or $800-522-0938$. |  |  |  |  |  |

