

| St. Charles Community College — Missouri S&T | | | | | |
|---|---|----|---|--|----|
| Computer Science BS | | | | | |
| Transfer Guide Effective as of Fall 2025 | | | | | |
| Students are not required to complete all courses on this guide before transferring to Missouri S&T. | | | | | |
| 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 ENG 115 | English Composition II or Technical Writing | 3 | ENGLISH 1160 or ENGLISH 3560 | Writing and Research or Technical Writing | 3 |
| Total Hours | | 6 | Total Hours | | 6 |
| Computer Science, Mathematics, and Science | | | | | |
| Take all courses. | | | | | |
| CPT 135 or CPT 185 or CPT 189 | Computer Science I with Python (4) or Programming in C Sharp (3) or Java Programming (3) | 3 | CS 1500 | Computational Problem Solving | 3 |
| CPT 182 | Beginning Programming in C++ | 3 | CS 1570 | Intro to Programming | 3 |
| CPT 281 | Intro to Data Structures with C++ | 3 | CS 1575 | Data Structures | 3 |
| 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 242 | Introductory Linear Algebra | 3 | MATH 3108 | Linear Algebra | 3 |
| Total Hours | | 22 | Total Hours | | 20 |
| Engineering/Science Electives | | | | | |
| Select up to 6 hours in engineering/science electives not already used to satisfy another degree requirement. See Approved Science and Engineering Electives at https://cs.mst.edu/undergraduate-degree/ | | | | | |
| MAT 240 or MAT 250 | Calculus and Analytic Geometry III or Differential Equations | 3 | MATH 2222 or MATH 3304 | Calculus III (4) or Elementary Differential Equations (3) Or other math 2000-level or higher or Any statistics 4000-level or higher Credit hours apply to degree totals as indicated for each course. | 3 |
| EGR 170 or EGR 210 or EGR 220 | Engineering Mechanics-Statics or Engineering Mechanics-Dynamics or Electrical Circuits | 3 | CIV ENG 2200 or MECH ENG 2350 or ELEC ENG 2100 | Statics or Engineering Mechanics-Dynamics (2) or Circuits I Or other course with the equivalent of a Missouri S&T engineering designation. | 3 |
| PHY 150,153 or PHY 250 | General Physics and Lab or Engineering Physics I | 5 | PHYSICS 1145 or PHYSICS 1135 | College Physics I or Engineering Physics I Only one of these courses may be applied to the engineering/science elective requirement. | 4 |
| PHY 151,154 or PHY 251 | General Physics II and Lab or Engineering Physics II | 5 | PHYSICS 2145 or PHYSICS 2135 | College Physics II or Engineering Physics II Only one of these courses may be applied to the engineering/science elective requirement. | 4 |
| Physics | Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145, except as noted above. | 3 | Physics | Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145, except as noted above. | 3 |
| Science | Any biology, chemistry, geology, or environmental science. | 3 | Science | Any biology, chemistry, geology, or environmental science. | 3 |
| Total Hours | | 6 | Total Hours | | 6 |
| Natural Sciences General Education Requirements | | | | | |
| Select 7 hours to include at least two specific disciplines and to include at least 1 hour of lab. | | | | | |
| CHM 115 or BIO 105, 106 or BIO 150 or BIO 151 or PHY 130, 131 | General Chemistry I (5) Essentials of Biology (3) and Lab (1) or General Biology: Cells to Organisms (5) General Biology: Organisms to Environment or Astronomy (3) and Lab (1) | 5 | CHEM 1310, 1319 or BIO SCI 1113, 1219 or BIO SCI 1213, 1219 or BIO SCI 1223, 1229 or PHYSICS 1505, 1509 | General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (1) or Principles of Biology and Lab Biodiversity (3) and Lab (1) or Introductory Astronomy (3) and Lab (1) Satisfies the gen ed natural science lecture/lab requirement. Lecture/lab pair must total a minimum of 4 hours. | 4 |
| Natural Science | Any Biology (1113 or higher), Chemistry (1301 or higher), Geology (1110 or higher) or Physics (1111 or higher) | 3 | Natural Science | Any Biology (1113 or higher), Chemistry (1301 or higher), Geology (1110 or higher) or Physics (1111 or higher) | 3 |
| Total Hours | | 7 | Total Hours | | 7 |
| Humanities, Arts, and Social Sciences General Education Requirements | | | | | |
| From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement. | | | | | |
| Humanities and Fine Arts | | | | | |
| Select 6 hours from at least two specific disciplines. | | | | | |
| LIT 250 or LIT 260 or LIT 210 or LIT 220 or LIT 272 or HIS 101* or HIS 102* or ART 1001 or MUS 111 or THE 122 | English Literature Before 1800 or English Literature After 1800 or American Literature From Beginnings-1865 or American Literature From 1865-Present or World Literature-Ancient World thru Renaissance or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to the Theatre *Satisfies the State of Missouri government requirement. | 6 | ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150 | British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877 or American History Since 1877 or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement. | 6 |
| Behavioral and Social Sciences | | | | | |
| Select 6 hours from at least two specific disciplines, to include an upper-level ethics course. | | | | | |
| BUS 105 | Business Ethics or other upper-level ethics | 3 | PHILOS 3235 | Business Ethics Or other upper-level ethics elective. At least one upper-level ethics course is required. | 3 |
| HIS 145 or HIS 146* or GEO 110 or POL 101* or PSY 101 or ECO 120 or ECO 110 or Foreign Language | Western Civilizations Ancient and Medieval or Western Civilizations Modern European* or Geography for Educators or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement. | 3 | HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language | Early Western Civilization or Modern Western Civilization* or World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement. | 3 |
| Humanities, Arts, and Social Sciences | | | | | |
| COM 106 | Public Speaking | 3 | SPMS 1185 | Principles of Speech | 3 |
| Total Hours | | 15 | Total Hours | | 15 |
| Additional Degree Requirements | | | | | |
| Select additional courses to total up to the maximum transfer credit hours shown below. | | | | | |
| EGR 100 | Intro to Engineering | 1 | FR ENG 1100 | Study and Careers in Engineering and Computing | 1 |
| Electives | Maximum Free Electives | 7 | Electives | Maximum Free Electives | 7 |
| Maximum credit hours to be transferred to Missouri S&T degree requirements. | | | | | 68 |
| 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. | | | | | |
| This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2025. Further information or updates are available from Missouri S&T Transfer Admissions at transfer@mst.edu , transfer@mst.edu , or 800-522-0938. | | | | | |