

St. Louis Community College — Missouri S&T

Computer Science BS

Transfer Guide Effective as of Fall 2024

St. Louis Community College

Missouri S&T

Communication Skills

Take all courses.

ENG 101	College Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102	College Composition II	3	ENGLISH 1160	Writing and Research	3
COM 107	Public Speaking	3	SPMS 1185	Principles of Speech	3
Total Hours		9	Total Hours		9

Computer Science, Mathematics, and Science

Take all courses.

MTH 212	Discrete Mathematics	3	CS 1200	Discrete Mathematics for Computer Science	3
ESC 101 or IS 167 or IS 187 or IS 280 or IS 267	Scientific Computer Programming (3) or C++ Programming I (4) or Java Programming I (4) or Python (3) or C++ Programming II (4)	3	CS 1500* or CS 1500* or CS 1500* or CS 1500* or CS 1971,1981*	Computational Problem Solving* (preferred) or Computational Problem Solving* (preferred) or Computational Problem Solving* (preferred) or Computational Problem Solving* (preferred) or Intro to Programming Methodology and Lab*	3
MTH 210	Analytical Geometry and Calculus I	5	MATH 1214	Calculus I	4
MTH 220	Analytical Geometry and Calculus II	5	MATH 1215	Calculus II	4
MTH 215	Linear Algebra	3	MATH 3108	Linear Algebra	3
PHY 122	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHY 223	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
CHM 105 or BIO 111 or BIO 141 or BIO 124	General Chemistry I (5) or Introductory Biology I (4) or Principles of Biology II (5) or General Botany I (4)	5	CHEM 1310, 1319 or BIO SCI 1113, 1219 or BIO SCI 1223, 1229 or BIO SCI 2383, 2389	General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (1) or Biodiversity (3) and Lab (1) or Plant Biology (3) and Lab (1)	5
Total Hours		34	Total Hours		30

*CS 1500 is preferred; CS 1971,1981 will be accepted in lieu of CS 1500 if necessary.

Satisfies the 5-hour science lecture/lab requirement. Credit hours apply to degree totals as indicated for each course.

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/>

MTH 230 or MTH 240	Analytical Geometry and Calculus III or Differential Equations Or other math 2000-level or higher or Any statistics 4000-level or higher	5	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 Satisfies the 3-hour science lecture/lab requirement. Credit hours apply to degree totals as indicated for each course.	3
ESC 203 or ESC 204 or ESC 205 or ESC 207 or ESC 200	Engineering Statics or Engineering Dynamics or Mechanics of Materials or Engineering Thermodynamics or Engineering Circuits I Or other course with the equivalent of a Missouri S&T engineering designation.	3	CIV ENG 2200 or MECH ENG 2350 or CIV ENG 2210 or MECH ENG 2519 or ELEC ENG 2800	Statics or Engineering Mechanics-Dynamics (2) or Mechanics of Materials or Thermodynamics or Electrical Circuits Or other course with the equivalent of a Missouri S&T engineering designation.	3
Science	Any biology, chemistry, geology, or environmental science.	3	Science	Any biology, chemistry, geology, or environmental science.	3
Physics	Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145.	3	Physics	Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145.	3
Total Hours		6	Total Hours		6

*A maximum of 6 hours applies to engineering/science elective requirements. Any additional credit hours apply to degree totals as general elective credit.

Social Sciences

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

HST 128 or HST 101 or HST 102 or PSC 101	Western Civilization 1500 to Present or US History to 1865 or US History 1865 to Present or Intro 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 American History to 1877 or American History Since 1877 or American Government At least one of these courses is required to satisfy state requirement.	3
ECO 152 or ECO 151	Principles of Microeconomics or Principles of Macroeconomics or upper-level economics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics or upper-level economics	3
PSY 200	General Psychology (or upper-level psychology)	3	PSYCH 1101	General Psychology or upper-level psychology	3
MGT 204 or ACC 110 or BLW 101	Business Organization & Management (3) or Financial Accounting I (4) or Business Law I (3) or other approved business course; see Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/	3	BUS 1110 or BUS 1210 or BUS 2910	Intro to Management and Entrepreneurship or Financial Accounting or Business Law or other approved business course; see Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/	3
Social Science	Other economics, history, political science, psychology, business elective from the Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/	3	Social Science	Other economics, history, political science, psychology, business elective from the Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/	3
Total Hours		9	Total Hours		9

Humanities and Ethics

Select one humanities and one upper-level ethics course.

PHL 112	Business Ethics or other upper-level ethics elective	3	PHILOS 3235	Business Ethics or other upper-level ethics elective. At least one upper-level ethics course is required.	3
PHL 101	Intro to Philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy	3
MCM 130	Film Appreciation	3	ART 1185	Study of Film	3
MUS 114	Music Appreciation	3	MUS 1150	Music Understanding and Appreciation	3
THT 101	Intro to Theatre	3	THEATRE 1190	Theatre via Video	3
ENG 211 or ENG 204 or ENG 231 or ENG 216 or ENG 217	British Literature II or American Literature I or World Literature or Women in Literature or Major Black Writers	3	ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245 or	British Literature II: 1800 to Present or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature	3
Foreign Language	Any foreign language	3	Foreign Language	Any foreign language	3
Humanities	Other humanities elective from the list of approved courses at https://cs.mst.edu/undergraduate-degree/	3	Humanities	Other humanities elective from the list of approved courses at https://cs.mst.edu/undergraduate-degree/	3
Total Hours		6	Total Hours		6

Additional Degree Requirements

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

Electives	Maximum Free Electives	8	Electives	Maximum Free Electives	8
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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.