St. Charles Community College — Missouri S&T
Computer Science BS
Transfer Guide Effective as of Fall 2024

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	English Composition II	3	ENGLISH 1160 or ENGLISH 1600	Writing and Research or Intro to Technical Communication	3
COM 106	Public Speaking	3	SPMS 1185	Principles of Speech	3
	Total Hours	9		Total Hours	9
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, 1580	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
PHY 250	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHY 251	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
CHM 115 or BIO 105, 106 or BIO 150 or PHY 145	General Chemistry I (5) or Essentials of Biology (3) and Lab (1) or General Biology: Cells to Organisms (5) or Historical Geology (3)	5	CHEM 1310, 1319 or BIO SCI 1113, 1219 or GEOLOGY 1120, 1129	General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (1) or Evolution of the Earth (3) and Lab (1) *Satisfies the 5-hour science lecture/lab requirement. Credit hours apply to degree totals as indicated for each course.*	5
	Total Hours	37		Total Hours	33

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/

St. Charles Community College			Missouri S&T		
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* *Satisfies the 3-hour science lecture/lab requirement. 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
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
	*A maximum of 6 hours applies to engineering/science elective requirements. Any additional credit hours apply to degree totals as general elective credit.				
	Total Hours	6		Total Hours	6

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

St. Charles Community College			Missouri S&T		
HIS 146 or HIS 101 or HIS 102 or 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 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 120 or ECO 110	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 101	Intro to Psychology *or upper-level psychology*	3	PSYCH 1101	General Psychology *or upper-level psychology*	3
BUS 201 or ACT 110 or BUS 246	Principles of Management or Financial Accounting I or Legal Environment of Business *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.

St. Charles Community College			Missouri S&T		
BUS 105	Business Ethics *or other upper-level ethics*	3	PHILOS 3235	Business Ethics *or other upper-level ethics* *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
THE 123 or COM 101	Intro to Cinema or History of Film	3	ART 1185	Study of Film	3
MUS 111	Music Appreciation	3	MUS 1150	Music Understanding and Appreciation	3
THE 122	Intro to Theatre	3	THEATRE 1190	Theatre via Video	3
LIT 250 or LIT 210 or LIT 272 or LIT 223	English Literature Before 1800 or American Literature From 1620-1865 or World Lit-Ancient World thru Renaissance or African American Literature	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	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.

St. Charles Community College			Missouri S&T		
EGR 100	Introduction to Engineering	1	FR ENG 1100	Study and Careers in Engineering and Computing	1
Electives	Maximum Free Electives	8	Electives	Maximum Free Electives	8

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.