St. Charles Community College — Missouri S&T
Computer Science BS Transfer Guide
Effective as of Fall 2023

St. Charles Community College			Missouri S&T		
Communication Skills and (Take all courses)					
ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research	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 PHY 125	General Chemistry I (5) Essentials of Biology (3) and Lab (1) or Intro to Physical Geology (3)	4	CHEM 1310, 1319 or BIO SCI 1113, 1219 or GEOLOGY 1110	General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (2) or Physical and Environmental Geology (3) (Applies to S&T degree as science/engineering elective)	4
	Total Hours	36		Total Hours	32
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 Analytical Geometry III or Differential Equations	3	MATH 2222 or MATH 3304	Calculus III or Elementary Differential Equations Or other math 2000-level or higher or statistics 4000-level or higher	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
	Any biology, chemistry, geology, or environmental science.	3		Any biology, chemistry, geology, or environmental science.	3
	Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145.	3		Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145.	3
	Total Hours	6		Total Hours	6
Social Sciences (Select 9 credit hours to include one course to satisfy state requirement)					
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	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics (or upper-level economics)	3
PSY 101	Intro to 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
	Other economics, history, political science, psychology, business elective from the Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/	3		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 ethics course)					
BUS 105	Business Ethics	3	PHILOS 3235	Business Ethics At least one ethics course is required.	3
PHL 101	Intro to Philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy	3
THE 123 or COM 124	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
	Other humanities elective from the list of approved courses.	3		Other humanities elective from the list of approved courses.	3
	Total Hours	6		Total Hours	6
Additional Degree Requirements					
Select additional courses to total up to the maximum transfer credit hours shown below.					
EGR 100	Introduction to Engineering	1	FR ENG 1100	Study and Careers in Engineering and Computing	1
	Maximum Free Electives	8		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.