

St. Louis Community College — Missouri S&T

Computer Science BS Transfer Guide

Effective as of Fall 2023

St. Louis Community College				Missouri S&T			
Communication Skills and (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		
			*CS 1500 is preferred; CS 1971,1981 will be accepted in lieu of CS 1500 if necessary.				
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 or GEO 111	General Chemistry I (5) or Introductory Biology I (4) or Principles of Biology I (5) or General Botany I (4) or Physical Geology	4	CHEM 1310, 1319 or BIO SCI 1113, 1219 or BIO SCI 1223, 1229 or BIO SCI 2383, 2389 or GEOLOGY 1120, 1129	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) or Evolution of the Earth (3) and Lab (1) Satisfies science lecture/lab requirement.	4		
		Total Hours	33			Total Hours	29
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 or Elementary Differential Equations Or other math 2000-level or higher or Any statistics 4000-level or higher	4		
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 2100	Statics or Engineering Mechanics-Dynamics (2) or Mechanics of Materials or Thermodynamics 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)							
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		
		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)							
PHL 112	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		
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 210 or ENG 204 or ENG 231 or ENG 216 or ENG 217	British Literature I or American Literature I or World Literature or Women in Literature or Major Black Writers	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245	British Literature I: The Beginnings to 1800 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		
		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.							
GE 121	Principles of Engineering	3	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.							