

# Metropolitan Community Colleges — 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.

### Metropolitan Community Colleges

### Missouri S&T

#### Communication Skills

Take all courses.

ENGL 101	Composition and Reading I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 102 or ENGL 215	Composition and Reading II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
Total Hours			Total Hours		
6			6		

#### Computer Science, Mathematics, and Science

Take all courses.

MATH 121* and MATH 122*	Discrete Structures for Computer Science I* and Discrete Structures for Computer Science II* <small>*The combination of MCC MATH 121 AND 122 is equivalent to Missouri S&amp;T COMP SCI 1200. Both courses must be taken to receive credit for Missouri S&amp;T COMP SCI 1200.</small>	6	COMP SCI 1200*	Discrete Mathematics for Computer Science* <small>*The combination of MCC MATH 121 AND 122 is equivalent to Missouri S&amp;T COMP SCI 1200. Both courses must be taken to receive credit for Missouri S&amp;T COMP SCI 1200.</small>	3
CSIS 271 or CSIS 123 or CSIS 223	Data Structures and Algorithm Analysis or Programming Fundamentals or Object-Oriented Programming with C++ or	3	COMP SCI 1500* or COMP SCI 1971,1981*	Computational Problem Solving* (preferred) or Intro to Programming Methodology and Lab* <small>*COMP SCI 1500 is preferred; COMP SCI 1971,1981 will be accepted in lieu of COMP SCI 1500 if necessary.</small>	3
MATH 180	Analytic Geometry and Calculus II	5	MATH 1214	Calculus I	4
MATH 190	Analytic Geometry and Calculus II	5	MATH 1215	Calculus II	4
ENGR 215	Engineering Statistics and Computation	3	STAT 3115	Engineering Statistics	3
Total Hours			Total Hours		
22			17		

#### 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/>

MATH 210 or MATH 230	Analytic Geometry & Calculus III or Differential Equations	4	MATH 2222 or MATH 3304	Calculus III (4) or Elementary Differential Equations (3) <small>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.</small>	3
ENGR 229 or ENGR 230 or ENGR 240 or ENGR 222 or ENGR 233	Statics or Dynamics or Mechanics of Materials or Thermodynamics or Circuit Analysis I <small>Or other course with the equivalent of a Missouri S&amp;T engineering designation.</small>	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 <small>Or other course with the equivalent of a Missouri S&amp;T engineering designation.</small>	3
PHYS 130 or PHYS 220	General Physics I or Engineering Physics I	5	PHYSICS 1145 or PHYSICS 1135	College Physics I or Engineering Physics I	4
PHYS 131 or PHYS 221	General Physics II or Engineering Physics II	5	PHYSICS 2145 or PHYSICS 2135	College Physics II or Engineering Physics II	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
<small>*A maximum of 6 hours applies to engineering/science elective requirements. Any additional credit hours apply to degree totals as general elective credit.</small>					
Total Hours			Total Hours		
6			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.

CHEM 111 or BIOL 101 or BIOL 123 or BIOL 124 or GEOL 102 or PHYS 106L	General College Chemistry I (5) or General Biology (5) or General Biology for Majors I (4) or General Biology for Majors II (4) or Historical Geology (4) or General Astronomy with Lab (5)	5	CHEM 1310, 1319 or BIO SCI 1113, 1219 or BIO SCI 1223, 1229 or GEOLOGY 1120, 1129 or PHYSICS 1505, 1509	General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (1) or Biodiversity (3) and Lab (1) or Evolution of the Earth (3) and Lab (1) or Introductory Astronomy (3) and Lab (1) <small>Satisfies the gen ed natural science lecture/lab requirement. Lecture/lab pair must total a minimum of 4 hours.</small>	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			Total Hours		
7			7		

#### Humanities, Arts, and Social Sciences General Education Requirements

From the options listed in each group below, select 12 hours to include  
6 hours Humanities and Fine Arts from at least two specific disciplines and  
3 hours Behavioral and Social Sciences.

**\*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.

ENGL 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254 or HIST 120* or HIST 121* or ART 108 or MUSI 108 or SPDR 106	British Literature to 1750 or British Literature 1750-Present or American Literature to 1860 or American Literature 1860-Present or World Literature I or United States History to 1865* or United States History since 1865* or Survey of Art or Music Appreciation or Theatre Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	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 1190	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 via Video <small>*Satisfies the State of Missouri government requirement.</small>	6
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##### Behavioral and Social Sciences

Select 3 hours.

HIST 133 or HIST 134* or GEOG 105 or POLS 136* or PSYC 140 or ECON 211 or ECON 210 or Foreign Language	Foundations of Western Civilization or Modern Western Civilization* or World Geography or Intro to US National Politics* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	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 <small>*Satisfies the State of Missouri government requirement.</small>	3
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#### Humanities, Arts, and Social Sciences

COMM 100	Fundamentals of Speech	3	SPMS 1185	Principles of Speech	3
Total Hours			Total Hours		
12			12		

#### Additional Degree Requirements

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

ENGR 101	Intro to the Engineering Profession	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.