

# East Central College — Missouri S&T

## Computer Science BS Transfer Guide

Effective as of Fall 2020

### East Central College

### Missouri S&T

#### Communication Skills and (Take all courses)

ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or ENG 104	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 1600	Writing and Research or Intro to Technical Communication	3
COM 110	Public Speaking	3	SPMS 1185	Principles of Speech	3
Total Hours			9		
Total Hours			9		

#### Computer Science, Mathematics, and Science (Take all courses)

EGR 251 or EGR 221,222	Data Structures or C++ Program Engineers and Lab	3-4	CS 1500 or CS 1971,1981	Computational Problem Solving or Intro to Programming Methodology and Lab (C++)	3
MTH 190	Analytic Geometry & Calculus I	5	MATH 1214	Calculus for Engineers I	4
MTH 210	Analytic Geometry & Calculus II	5	MATH 1215	Calculus for Engineers II	4
PHY 211, 212	General Physics I and Lab	5	PHYSICS 1135	Engineering Physics I	4
PHY 221, 222	General Physics II and Lab	5	PHYSICS 2135	Engineering Physics II	4
Total Hours			23		
Total Hours			19		

#### Social Sciences (Select 9 credit hours to include one course to satisfy state requirement)

CIV 202 or HST 101 or HST 102 or PSC 102	European Civilization II or US History to 1865 or US History 1865-1945 or US Government National and State <small>(At least one of these courses is required to satisfy state requirement)</small>	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 <small>(At least one of these courses is required to satisfy state requirement)</small>	3
ECO 102 or ECO 101	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
PSY 101	General Psychology	3	PSYCH 1101	General Psychology	3
<i>See your advisor for course options</i>			Other economics, history, political science, sociology, psychology elective.		
Total Hours			9		
Total Hours			9		

#### Literature and Ethics

#### (Select 6 credit hours to include at least one literature course and one ethics course)

ENG 210	Survey British Lit: Beginnings to 1784	3	ENGLISH 1211	British Literature I: The Beginnings to 1800	3
ENG 221	Survey American Lit: Colonial to 1865	3	ENGLISH 1221	American Literature: 1600 to 1865	3
ENG 214	Women's Literature	3	ENGLISH 2242	Literature by Women	3
ENG 215	African-American Literature	3	ENGLISH 2245	African American Literature	3
PHL 203	Ethics	3	PHILOS 1130	Intro to Ethics <small>Computer Science department will substitute for required ethics elective.</small>	3
<i>See your advisor for course options</i>			Other literature or ethics elective		
Total Hours			6		
Total Hours			6		

#### Additional Degree Requirements (Select up to 25 hours)

COL 101	Foundation Seminar	1	FR ENG 1100	Study and Careers in Engineering and Computing	1
MTH 220	Analytical Geometry & Calculus III	5	MATH 2222	Calculus with Analytic Geometry III <small>(Not required for Computer Science BS. Will transfer as science/engineering elective)</small>	4
MTH 241	Linear Algebra	3	MATH 3108	Linear Algebra	3
MTH 242	Engineering Statistics	3	STAT 3115	Engineering Statistics	3
CHM 111 or BIO 111 or GEO 101,102	General Chemistry I and Lab or General Biology I and Lab or Intro to Physical Geology and Lab	5	CHEM 1310, 1319 or BIO SCI 1113, 1219 or GEOLOGY 1110	General Chemistry I and Lab or General Biology and Lab or Physical and Environmental Geology <small>(Applies to S&amp;T degree as science/engineering elective)</small>	5

#### Maximum credit hours to be transferred to Missouri S&T degree requirements.

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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.