

# East Central College — Missouri S&T

## Data Science BS

Transfer Guide Effective as of Fall 2026

Students are not required to complete all courses on this guide before transferring to Missouri S&T.

### East Central College

### Missouri S&T

#### English and Communication Skills

Take all courses.

ENG 101	English Composition I	3		ENGLISH 1120	Exposition and Argumentation	3		
ENG 102 or ENG 104 or COM 110	English Composition II or Technical Writing or Public Speaking	3		ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech	3		
Total Hours						6	Total Hours	6

#### Mathematics, Statistics, and Computer Science

Take all courses.

MTH 190	Analytic Geometry & Calculus I	5		MATH 1214	Calculus I	4		
MTH 210	Analytic Geometry & Calculus II	5		MATH 1215	Calculus II	4		
MTH 220	Analytic Geometry & Calculus III	5		MATH 2222	Calculus III	4		
MTH 245	Differential Equations	3		MATH 3304	Elementary Differential Equations	3		
MTH 241	Linear Algebra	3		MATH 3108	Linear Algebra	3		
MTH 242	Engineering Statistics	3		STAT 3115	Engineering Statistics	3		
EGR 251 or EGR 221,222	Data Structures (3) or C++ Program Engineers and Lab (4)	3		COMP SCI 1500 or COMP SCI 1971, 1981*	Computational Problem Solving or Intro to Programming Methodology and Lab*	3		
Total Hours						27	Total Hours	24

#### Natural Sciences General Education Requirements

Select 7 hours to include at least two specific disciplines and to include at least 1 hour of lab.

CHM 111 or BIO 111 or BIO 122	General Chemistry I and Lab (5) or General Biology and Lab (5) or Principles of Biology II and Lab (5) <small>Lecture/lab pair must total a minimum of 4 hours.</small>	4		CHEM 1310, 1319 or BIO SCI 1113, 1219 or BIO SCI 1223, 1229	General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (1) or Biodiversity (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						7	Total Hours	7

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

From the options listed in each group below, select 15 hours to include  
6 hours Humanities and Fine Arts from at least two specific disciplines and  
6 hours Behavioral and Social Sciences from at least two specific disciplines.

\*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.

ENG 210 or ENG 211 or ENG 221 or ENG 222 or ENG 124 or HST 101* or HST 102* or ART 101 or MUS 101 or THE 101 or Literature	Survey British Lit: Beginnings - 1784 or Survey British Lit: Romantic-Present or Survey American Lit: Beginnings - 1865 or Survey American Lit: 1865-Present or World Literature I or <b>US History to 1877*</b> or <b>US History Since 1877*</b> or Art Appreciation or Music Appreciation or Theatre Appreciation or Any literature with prerequisite of no more than English Composition I. <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 <b>HISTORY 1300*</b> or <b>HISTORY 1310*</b> or ART 1180 or MUSIC 1150 or THEATRE 1190 or Literature	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 <b>American History to 1877*</b> or <b>American History Since 1877*</b> or Art Appreciation or Music Appreciation or Theatre via Video or Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
--	--	---	--	--	---	---

##### Behavioral and Social Sciences

Select 6 hours from at least two specific disciplines to include either ECON 1100 or 1200.

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
CIV 201 or CIV 202* or GRY 101 or PHL 101 or PHL 111 or PSC 102* or PSY 101 or Foreign Language	Western Civilization I or <b>Western Civilization II*</b> or World Geography or Intro to Philosophy or Intro to Logic or <b>US Government I: National and State*</b> or General Psychology or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3		HISTORY 1100 or <b>HISTORY 1200*</b> or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or <b>POL SCI 1200*</b> or PSYCH 1101or Foreign Language	Early Western Civilization or <b>Modern Western Civilization</b> or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or <b>American Government</b> or General Psychology or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3

##### Humanities, Arts, and Social Sciences

Select 3 hours.

HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3		HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3		
Total HASS Hours						15	Total HASS Hours	15

#### Additional Degree Requirements

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

Technical Electives	Technical electives in biology, business, chemistry, computer science, economics, education, engineering, finance, geology, geophysics, information science and technology, marketing, mechanics, physics, or technical communication approved by advisor.			Technical Electives	Technical electives in biology, business, chemistry, computer science, economics, education, engineering, finance, geology, geophysics, information science and technology, marketing, mechanics, physics, or technical communication approved by advisor.	
Electives	Free Electives			Electives	Free Electives	

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

**60**

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.