

Eastern Illinois University — Missouri S&T

General Engineering

Transfer Guide Effective as of Fall 2025

Complete Group 1 - Core Requirements and Group 2 - Major Requirements for major of choice.

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

Group 1 - Core Requirements: All Majors Take All Courses

Engineering students take all Group 1 - Core Requirements and Group 2 - Major Requirements for major of choice. Math prerequisites: While they are not part of Missouri S&T engineering degree requirements, algebra and trigonometry skills are critical to success in calculus. To prepare for entry into calculus, students should follow math placement testing and advising recommendations at their college.

Eastern Illinois University			Semester	Missouri S&T		
MAT 1441G	Calculus and Analytic Geometry I	5		MATH 1214	Calculus I	4
MAT 2442	Calculus and Analytic Geometry II	5		MATH 1215	Calculus II	4
MAT 2443	Calculus and Analytic Geometry III	4		MATH 2222	Calculus III	4
MAT 3501	Differential Equations I	3		MATH 3304	Elementary Differential Equations	3
PHY 1351G, 1352G and PHY 1361, 1362 and PHY 1371, 1372	General Physics I and Lab and General Physics II and Lab and General Physics III and Lab EIU PHY 1351G, 1352G, 1361, 1362, 1371, 1372 must all be taken to receive credit for S&T PHYSICS 1135 and 2135.	12		PHYSICS 1135 and PHYSICS 2135	Engineering Physics I and Physics II	8
PHY 1001	Intro to Physics and Engineering	1		FR ENG 1100	Study and Careers in Engineering and Computing	1
ENG 1001G	Composition and Language	3		ENGLISH 1120	Exposition and Argumentation	3
		Total Hours	33			Total Hours
						27

Group 2 - Major Requirements: Take All Courses for Major of Choice

Engineering students take all Group 1 - Core Requirements (above) and Group 2 - Major Requirements for chosen major from list below. See course requirements on following pages.

Aerospace Engineering
Architectural Engineering
Biomedical Engineering/Biomanufacturing or Biomaterials
Ceramic Engineering
Chemical Engineering and Biochemistry Emphasis
Civil Engineering
Computer Engineering
Electrical Engineering

Engineering Management
Environmental Engineering
Geological Engineering
Mechanical Engineering
Metallurgical Engineering
Mining Engineering
Nuclear Engineering
Petroleum Engineering

Engineering Major Requirements are detailed on the following pages.

Free Electives: Some programs allow Free Electives as indicated within each major. Free Electives should be selected in consultation with your advisor and may not include remedial/deficiency courses, algebra, trigonometry, pre-calculus, or extra credits in required courses.

This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2025.
Further information or updates are available from Missouri S&T Transfer Admissions at transfer.msT.edu, transfer@msT.edu, or 800-522-0938.

Aerospace Engineering Group 2 Major Requirements

Eastern Illinois University		Semester	Missouri S&T		
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CIT 1813	Intro to Programming (C++)	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
PHY 3270	Intro to Circuit Analysis	3	EE 2800	Electrical Circuits	3
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MAT 2550	Introduction to Linear Algebra	3	MATH 3108	Linear Algebra I Will satisfy the Advanced Math/Comp Sci elective requirement.	3
Ethics	Ethics Elective or other engineering, business, bio, social ethics approved by advisor	3	Ethics	Ethics Elective or other engineering, business, bio, social ethics approved by advisor	3
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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
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
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		37	Group 2 Major Requirements		38
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		70	Total Hours*		65
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.					

Architectural Engineering Group 2 Major Requirements

<u>Eastern Illinois University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
Humanities, Arts, and Social Sciences General Education Requirements					
From the options listed in each group below, select 9 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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 3 hours.					
PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
<i>No free electives applied to the degree.</i>		0	Maximum Free Electives		0
Group 2 Major Requirements		19	Group 2 Major Requirements		20
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		52	Total Hours*		47
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Architectural Engineering degree.					

Biomedical Engineering-Biomanufacturing Group 2 Major Requirements

Eastern Illinois University		Semester	Missouri S&T		
CMN 1310G	Intro to Speech Communication	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 1410, 1415	General Chemistry II and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 2440, 2445	Organic Chemistry I and Lab	4	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHM 2840, 2845 or BIO 1500	Organic Chemistry II and Lab or General Biology I	4	CHEM 2220, 2229* or BIO SCI 1213*, 1219	Organic Chemistry II and Lab*or Principles of Biology* Applies to degree as Track Elective. *BIO SCI 1213 will be substituted for 1113.	4
BIO 2210	Anatomy and Physiology I	4	BIO SCI 3333, 3359	Anatomy and Physiology I and Lab	4
CIT 1813	Intro to Programming (C++)	3	CS 1971,1981*	Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 9 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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 3 hours.					
GEO 1200G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		35	Group 2 Major Requirements		35
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		68	Total Hours*		62
*S&T advisor permission is required to transfer more than 69 credit hours toward the degree.					

Biomedical Engineering-Biomaterials Group 2 Major Requirements

Eastern Illinois University			Semester	Missouri S&T	
CMN 1310G	Intro to Speech Communication	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 1410, 1415	General Chemistry II and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 2440, 2445	Organic Chemistry I and Lab	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	4
CHM 2840, 2845 or BIO 1500	Organic Chemistry II and Lab	4	CHEM 2220, 2229*	Organic Chemistry II and Lab* Applies to degree as Track Elective.	4
BIO 1500	General Biology I	4	BIO SCI 1213*, 1219	Principles of Biology* *Applies to degree as Track Elective (Non-engineering). BIO SCI 1213 will be substituted for 1113.	4
BIO 2210	Anatomy and Physiology I	4	BIO SCI 3333, 3359	Human Anatomy and Physiology I and Lab	4
CIT 1813	Intro to Programming (C++)	3	CS 1971,1981*	Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 3270	Intro to Circuit Analysis	3	ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for ELEC ENG 2100. Applies to the degree as a Track Elective (Engineering).	4
Humanities, Arts, and Social Sciences General Education Requirements					
From the options listed in each group below, select 9 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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 3 hours.					
GEO 1200G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		45	Group 2 Major Requirements		46
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		78			Total Hours* 73
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Biomedical Engineering degree.					

Ceramic Engineering Group 2 Major Requirements

Eastern Illinois University		Semester	Missouri S&T			
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CHM 1410, 1415	General Chemistry II and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3	
CHM 2440, 2445	Organic Chemistry I and Lab	4	CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) Satisfies the advanced chemistry elective requirement. *The lab is not a degree requirement, transfers as general elective credit.	3	
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.						
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.						
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	
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	
No free electives applied to the degree.		0	Maximum Free Electives		0	
Group 2 Major Requirements		33	Group 2 Major Requirements		32	
Group 1 Core Requirements		33	Group 1 Core Requirements		27	
Total Hours		66			Total Hours*	59
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.						

Chemical Engineering or Chemical Engineering - Biochemical Engineering Emphasis Group 2 Major Requirements

Eastern Illinois University			Semester	Missouri S&T	
CMN 1310G	Intro to Speech Communication	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 1410, 1415	General Chemistry II and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) *CHEM 1510 is not a degree requirement; transfers as general elective credit.	3
CHM 2440, 2445	Organic Chemistry I and Lab	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2210 is a degree requirement. CHEM 2219 applies to the degree as 1 of 9 required science elective credits See note below .	4
CHM 2840, 2845	Organic Chemistry II and Lab	4	CHEM 2220, 2229*	Organic Chemistry II (3) and Lab* (1) CHEM 2220 applies to the degree as 3 of the 9 required science elective credits. CHEM 2229 is not a degree requirement; transfers as general elective credit.	3
CIT 1813	Intro to Programming (C++)	3	CS 1971,1981*	Intro to Programming Methodology and Lab* C++ *Will be substituted for CS 1500.	3
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 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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		34	Group 2 Major Requirements		33
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		67	Total Hours*		60
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Chemical Engineering degree.					

Civil Engineering Group 2 Major Requirements

<u>Eastern Illinois University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
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
<i>No free electives applied to the degree.</i>		0	Maximum Free Electives		0
Group 2 Major Requirements		25	Group 2 Major Requirements		26
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		58	Total Hours*		53
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.					

Computer Engineering Group 2 Major Requirements

Eastern Illinois University			Semester	Missouri S&T	
CMN 1310G	Intro to Speech Communication	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CIT 1813	Intro to Programming (C++)	3	CS 1971,1981*	Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
PHY 2390 or CHM 2440	Statics or Organic Chemistry I	3	CIV ENG 2200 or CHEM 2210	Engineering Mechanics-Statics (3) or Organic Chemistry I (3) Satisfies a required engineering/science elective.	3
PHY 3270	Intro to Circuit Analysis	3	EE 2100**	Circuits I **A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 2100.	4
MAT 2550	Intro to Linear Algebra	3	MATH 3108	Linear Algebra Will satisfy a required math elective.	3
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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
Humanities, Arts, and Social Sciences Select 3 hours.					
ENG 1002G	Composition and Literature	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	3	Electives	Maximum Free Electives	3
	Group 2 Major Requirements	37		Group 2 Major Requirements	39
	Group 1 Core Requirements	33		Group 1 Core Requirements	27
	Total Hours	70			Total Hours*
				*S&T advisor permission is required to transfer more than 68 credits toward the S&T Computer Engineering degree.	

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Computer Engineering degree.

Electrical Engineering Group 2 Major Requirements

Eastern Illinois University			Semester	Missouri S&T		
CMN 1310G	Intro to Speech Communication	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CIT 1813	Intro to Programming (C++)	3		CS 1971,1981*	Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
PHY 2390 or S&T MECH ENG 2350 BOTH of the courses above or ONE of the courses below. OR CHM 2440	Statics (3) and Engineering Mechanics-Dynamics (2) at Missouri S&T Both courses above combined or any one of the following courses will satisfy a required engineering science elective. OR Organic Chemistry I (3)			CIV ENG 2200 and MECH ENG 2350 BOTH of the courses above or ONE of the courses below. OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2) Both courses above combined or any one of the following courses will satisfy a required engineering science elective. OR Organic Chemistry I (3)	3
PHY 3270	Intro to Circuit Analysis	3		ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for ELEC ENG 2100.	4
MAT 2550	Intro to Linear Algebra	3		MATH 3108	Linear Algebra	3
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.						
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6		HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.						
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
Humanities, Arts, and Social Sciences Select 3 hours.						
ENG 1002G	Composition and Literature	3		ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	6		Electives	Maximum Free Electives	6
	Group 2 Major Requirements	37			Group 2 Major Requirements	42
	Group 1 Core Requirements	33			Group 1 Core Requirements	27
	Total Hours	70			Total Hours*	69

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Electrical Engineering degree.

Engineering Management Group 2 Major Requirements

Eastern Illinois University		Semester	Missouri S&T		
CMN 1310G	Intro to Speech Communication	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CIT 1813	Intro to Programming (C++)	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
PHY 3270	Intro to Circuit Analysis	3	ELEC ENG 2800	Electrical Circuits	3
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines to include PSYCH 1101.					
PSY 1879G	Introductory Psychology	3	PSYCH 1101	General Psychology Required	3
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
Humanities, Arts, and Social Sciences					
Select 3 hours.					
ENG 1002G	Composition and Literature	3	ENGLISH 1160	Writing and Research	3
No free electives applied to the degree.		0	Electives	Maximum Free Electives	0
Group 2 Major Requirements		34	Group 2 Major Requirements		32
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		67			Total Hours* 61
*S&T advisor permission is required to transfer more than 61 credits toward the S&T Engineering Management degree.					

Environmental Engineering Group 2 Major Requirements

Eastern Illinois University			Semester	Missouri S&T	
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 1410, 1415	General Chemistry II and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)	3
BIO 1500	General Biology I	4	BIO SCI 1213*, 1219	*CHEM 1510 is not a degree requirement, transfers as general elective credit. Principles of Biology*	3
PHY 2390	Statics	3	CIV ENG 2200	*BIO SCI 1213 will be substituted for 1113. Engineering Mechanics-Statics	3
Humanities, Arts, and Social Sciences General Education Requirements					
From the options listed in each group below, select 9 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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 3 hours.					
PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		27	Group 2 Major Requirements		26
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		60	Total Hours*		53
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Environmental Engineering degree.					

Geological Engineering Group 2 Major Requirements

<u>Eastern Illinois University</u>			<u>Semester</u>	<u>Missouri S&T</u>		
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CIT 1813	Intro to Programming (C++)	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3	
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
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.						
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	
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	
No free electives applied to the degree.		0	Maximum Free Electives		0	
Group 2 Major Requirements		25	Group 2 Major Requirements		26	
Group 1 Core Requirements		33	Group 1 Core Requirements		27	
Total Hours		58	Total Hours*		53	
*S&T advisor permission is required to transfer more than 65 credits toward the S&T Geological Engineering degree.						

Mechanical Engineering Group 2 Major Requirements

Eastern Illinois University		Semester	Missouri S&T			
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5	
CIT 1813	Intro to Programming (C++)	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3	
PHY 3270	Intro to Circuit Analysis	3	EE 2800	Electrical Circuits	3	
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
MAT 2550	Intro to Linear Algebra	3	MATH 3108	Linear Algebra I Satisfies the Advanced Math/Statistics elective requirement.	3	
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.						
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.						
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	
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	
No free electives applied to the degree.		0	Maximum Free Electives		0	
Group 2 Major Requirements		34	Group 2 Major Requirements		35	
Group 1 Core Requirements		33	Group 1 Core Requirements		27	
Total Hours		67			Total Hours*	62
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.						

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.

Metallurgical Engineering Group 2 Major Requirements

Eastern Illinois University		Semester	Missouri S&T			
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CHM 1410, 1415	General Chemistry II and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3	
CHM 2440, 2445 or PHY 3270	Organic Chemistry I and Lab or Intro to Circuit Analysis	4	CHEM 2210 or EE 2800	Organic Chemistry I (4) or Electrical Circuits (3) Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.	3	
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.						
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	
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	
Maximum Free Electives		3	Maximum Free Electives		3	
Group 2 Major Requirements		36	Group 2 Major Requirements		35	
Group 1 Core Requirements		33	Group 1 Core Requirements		27	
Total Hours		69			Total Hours*	62
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.						

Mining Engineering Group 2 Major Requirements

<u>Eastern Illinois University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
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 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.					
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		22	Group 2 Major Requirements		23
Group 1 Core Requirements		33	Group 1 Core Requirements		27
Total Hours		55	Total Hours*		50
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mining Engineering degree.					

Nuclear Engineering Group 2 Major Requirements

Eastern Illinois University		Semester	Missouri S&T			
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CIT 1813	Intro to Programming (C++)	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3	
MAT 2550	Intro to Linear Algebra	3	MATH 3108	Linear Algebra	3	
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
PHY 3270	Intro to Circuit Analysis	3	ELEC ENG 2800	Electrical Circuits	3	
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.						
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
ECN 2801G or ECN 2802G	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3	
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	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	
Maximum Free Electives		0	Maximum Free Electives		0	
Group 2 Major Requirements		34	Group 2 Major Requirements		35	
Group 1 Core Requirements		33	Group 1 Core Requirements		27	
Total Hours		67			Total Hours*	62
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Nuclear Engineering degree.						

*S&T advisor permission is required to transfer more than 69 credits toward the S&T Nuclear Engineering degree.

Petroleum Engineering Group 2 Major Requirements

Eastern Illinois University		Semester	Missouri S&T			
ENG 1002G or CMN 1310G	Composition and Literature or Intro to Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CHM 1310G,1315G	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
PHY 2390	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
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.						
HIS 2010* or HIS 2020* or ART 2330G or MUS 2555G or MUS 2557G	History of US to 1877* or History of US Since 1877* or Art Appreciation or The Enjoyment of Music or The Evolution of Jazz and Rock *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
GEO 1200G or PHI 1000G or PHI 1900G or PLS 1153G* or PSY 1879G or ECN 2801G or ECN 2802G or Foreign Language	World Regional Geography or God...Values: Intro to Philosophical Questions or Logical and Critical Reasoning or American Government and Constitution* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	
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	
No free electives applied to the degree.		0	Maximum Free Electives		0	
Group 2 Major Requirements		25	Group 2 Major Requirements		26	
Group 1 Core Requirements		33	Group 1 Core Requirements		27	
Total Hours		58			Total Hours*	53
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.						