

Three Rivers College — 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.

Three Rivers College			Semester	Missouri S&T		
MATH 171	Analytic Geometry and Calculus I	5		MATH 1214	Calculus I	4
MATH 271	Analytic Geometry and Calculus II	5		MATH 1215	Calculus II	4
MATH 272	Analytic Geometry and Calculus III	5		MATH 2222	Calculus III	4
PHYS 211	General Physics I	5		PHYSICS 1135	Engineering Physics I	4
PHYS 212	General Physics II	5		PHYSICS 2135	Engineering Physics II	4
ENGL 111	College Writing	3		ENGLISH 1120	Exposition and Argumentation	3
		Total Hours	28			Total Hours
						23

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

Three Rivers College		Semester	Missouri S&T		
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 121	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab <small>*CHEM 1310 will be substituted for CHEM 1305.</small>	5
PHIL 233	Ethics <small>or other engineering, business, bio, social ethics approved by advisor</small>	3	PHILOS 1130	How Should I Live? An Introduction to Ethics <small>or other engineering, business, bio, social ethics approved by advisor</small>	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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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>	6	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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>	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		28	Group 1 Core Requirements		23
Total Hours		53	Total Hours*		49
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.</small>					

Architectural Engineering Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T			
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3	
CHEM 121	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab <small>*CHEM 1310 will be substituted for CHEM 1305.</small>	5	
CIVL 116 and 216	Surveying I and II	6	CIV ENG 2401	Fundamentals of Surveying	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.						
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <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 HISTORY 1200.						
HIST 122*	World Civilization since the Renaissance* <small>*Satisfies the State of Missouri Government requirement.</small>	3	HISTORY 1200*	Modern Western Civilization* <small>*Satisfies the State of Missouri Government requirement.</small>	3	
PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	Intro to Philosophy or National and State 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	PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy 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	
No free electives applied to the degree.		0	Maximum Free Electives		0	
Group 2 Major Requirements		25	Group 2 Major Requirements		23	
Group 1 Core Requirements		28	Group 1 Core Requirements		23	
Total Hours		53			Total Hours*	46
<small>*S&T advisor permission is required to transfer more than 69 credits toward the S&T Architectural Engineering degree.</small>						

Biomedical Engineering-Biomanufacturing Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T			
SCOM 110	Public Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CHEM 122	General Chemistry II	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	
BIOL 100 or BIOL 191	Survey of Biological Principles (3) or Biology I (4)	3	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* Applies to degree as Track Elective. *BIO SCI 1213 will be substituted for BIO SCI 1113.	4	
BIOL 231	Anatomy and Physiology	4	BIO SCI 3333, 3359	Anatomy and Physiology I and Lab	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.						
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre *Satisfies the State of Missouri government requirement.	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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences						
Select 3 hours.						
HIST 121 or HIST 122* or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or National and State 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	HISTORY 1100 or HISTORY 1200* or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* 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		28	
Group 1 Core Requirements		28	Group 1 Core Requirements		23	
Total Hours		55			Total Hours*	51
*S&T advisor permission is required to transfer more than 69 credit hours toward the degree.						

Biomedical Engineering-Biomaterials Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T		
SCOM 110	Public Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 122	General Chemistry II	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
BIOL 100 or BIOL 191	Survey of Biological Principles (3) or Biology I (4)	3	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* Applies to degree as Track Elective. *BIO SCI 1213 will be substituted for BIO SCI 1113.	4
BIOL 231	Anatomy and Physiology	4	BIO SCI 3333, 3359	Human Anatomy and Physiology I and Lab	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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre *Satisfies the State of Missouri government requirement.	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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 3 hours.					
HIST 121 or HIST 122* or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or National and State 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	HISTORY 1100 or HISTORY 1200* or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* 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		28
Group 1 Core Requirements		28	Group 1 Core Requirements		23
Total Hours		55			Total Hours* 51
*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

Three Rivers College		Semester	Missouri S&T		
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 122	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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>	6	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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>	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		26	Group 2 Major Requirements		26
Group 1 Core Requirements		28	Group 1 Core Requirements		23
Total Hours		54	Total Hours*		49
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.</small>					

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

Three Rivers College		Semester	Missouri S&T		
SCOM 110	Public Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 122	General Chemistry II	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
BIOL 253	Microbiology	4	BIO SCI 3313	Microbiology Will satisfy 3 of 9 required hours of science electives.	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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre *Satisfies the State of Missouri government requirement.	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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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		27	Group 2 Major Requirements		26
Group 1 Core Requirements		28	Group 1 Core Requirements		23
Total Hours		55			Total Hours* 49
*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

Three Rivers College		Semester	Missouri S&T			
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3	
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CIVL 116 and 216	Surveying I and II	6	CIV ENG 2401	Fundamentals of Surveying	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.						
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <small>*Satisfies the State of Missouri government requirement.</small>	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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>	6	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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>	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		28	Group 2 Major Requirements		26	
Group 1 Core Requirements		28	Group 1 Core Requirements		23	
Total Hours		56			Total Hours*	49
<small>*S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.</small>						

Computer Engineering Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T		
SCOM 110	Public Speaking	3	SPMS 1185	Principles of Speech	3
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre *Satisfies the State of Missouri government requirement.	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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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.					
ENGL 112	Advanced College Writing	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	3	Electives	Maximum Free Electives	3
	Group 2 Major Requirements	25		Group 2 Major Requirements	26
	Group 1 Core Requirements	28		Group 1 Core Requirements	23
	Total Hours	53		Total Hours*	49
*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

Three Rivers College		Semester	Missouri S&T		
SCOM 110	Public Speaking	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre *Satisfies the State of Missouri government requirement.	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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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.					
ENGL 112	Advanced College Writing	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	6	Electives	Maximum Free Electives	6
	Group 2 Major Requirements	28		Group 2 Major Requirements	29
	Group 1 Core Requirements	28		Group 1 Core Requirements	23
	Total Hours	56		Total Hours*	52
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Electrical Engineering degree.					

*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

Three Rivers College		Semester	Missouri S&T			
SCOM 110	Public Speaking	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
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.						
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre *Satisfies the State of Missouri government requirement.	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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *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.						
PSYC 111	General Psychology	3	PSYCH 1101	General Psychology Required	3	
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State Government* or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy or American Government* 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.						
ENGL 112	Advanced College Writing	3	ENGLISH 1160	Writing and Research	3	
No free electives applied to the degree.		0	Electives	Maximum Free Electives	0	
Group 2 Major Requirements		22	Group 2 Major Requirements		23	
Group 1 Core Requirements		28	Group 1 Core Requirements		23	
Total Hours		50			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

Three Rivers College		Semester	Missouri S&T			
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3	
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CHEM 122	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	3	
BIOL 100 or BIOL 191	Survey of Biological Principles (3) or Biology I (4)	3	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* <small>*BIO SCI 1213 will be substituted for BIO SCI 1113.</small>	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.						
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <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 HISTORY 1200						
HIST 122*	World Civilization since the Renaissance* <small>*Satisfies the State of Missouri Government requirement.</small>	3	HISTORY 1200*	Modern Western Civilization* <small>*Satisfies the State of Missouri Government requirement.</small>	3	
PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	Intro to Philosophy or National and State 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	PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy 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	
No free electives applied to the degree.		0	Maximum Free Electives		0	
Group 2 Major Requirements		26	Group 2 Major Requirements		26	
Group 1 Core Requirements		28	Group 1 Core Requirements		23	
Total Hours		54			Total Hours*	49
<small>*S&T advisor permission is required to transfer more than 69 credits toward the S&T Environmental Engineering degree.</small>						

Geological Engineering Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T	
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab
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.				
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre *Satisfies the State of Missouri government requirement.	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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.
Behavioral and Social Sciences				
Select 6 hours from at least two specific disciplines.				
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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.
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.
No free electives applied to the degree.		0	Maximum Free Electives	
Group 2 Major Requirements		19	Group 2 Major Requirements	
Group 1 Core Requirements		28	Group 1 Core Requirements	
Total Hours		47	Total Hours*	
*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

Three Rivers College		Semester	Missouri S&T		
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 121	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab <small>*CHEM 1310 will be substituted for CHEM 1305.</small>	5
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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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>	6	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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>	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		22	Group 2 Major Requirements		23
Group 1 Core Requirements		28	Group 1 Core Requirements		23
Total Hours		50	Total Hours*		46
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.</small>					

Metallurgical Engineering Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T			
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3	
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CHEM 122	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	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.						
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <small>*Satisfies the State of Missouri government requirement.</small>	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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>	6	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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>	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		29	Group 2 Major Requirements		29	
Group 1 Core Requirements		28	Group 1 Core Requirements		23	
Total Hours		57			Total Hours*	52
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.</small>						

Mining Engineering Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T		
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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>	6	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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>	6
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		19	Group 2 Major Requirements		20
Group 1 Core Requirements		28	Group 1 Core Requirements		23
Total Hours		47	Total Hours*		43
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mining Engineering degree.</small>					

Nuclear Engineering Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T			
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3	
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
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.						
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <small>*Satisfies the State of Missouri government requirement.</small>	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
ECON 212 or ECON 211	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3	
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State Government* or General Psychology or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYC 1101 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy or American Government* 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	
Maximum Free Electives		0	Maximum Free Electives		0	
Group 2 Major Requirements		22	Group 2 Major Requirements		23	
Group 1 Core Requirements		28	Group 1 Core Requirements		23	
Total Hours		50			Total Hours*	46
<small>*S&T advisor permission is required to transfer more than 69 credits toward the S&T Nuclear Engineering degree.</small>						

Petroleum Engineering Group 2 Major Requirements

Three Rivers College		Semester	Missouri S&T		
ENGL 112 or SCOM 110	Advanced College Writing or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 121	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
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.					
ENGL 231 or ENGL 232 or ENGL 241 or ENGL 242 or ENGL 221 or HIST 111* or HIST 112* or ARTS 123 or ARTS 110 or MUSC 123 or THEA 120	English Literature to 1798 or English Literature since 1798 or American Literature to 1870 or American Literature since 1870 or World Literature to 1600 or American History to 1877* or American History since 1877* or History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre <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 ART 1180 or MUSIC 1150 or THEATRE 1150	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 Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 200 or GOVT 121* or PSYC 111 or ECON 212 or ECON 211 or Foreign Language	World Civilization to the Renaissance or World Civilization since the Renaissance* or Intro to Philosophy or National and State 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>	6	HISTORY 1100 or HISTORY 1200* or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy 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>	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		22	Group 2 Major Requirements		23
Group 1 Core Requirements		28	Group 1 Core Requirements		23
Total Hours		50			Total Hours*
<small>*S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.</small>					