Three Rivers College — Missouri S&T

General Engineering

Transfer Guide Effective as of Fall 2024

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

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		<u>Missouri S&T</u>		
MATH 171	Analytic Geometry and Calculus I		5		MATH 1214	Calculus I Grade of C or better is required.		4
MATH 271	Analytic Geometry and Calculus II		5		MATH 1215	Calculus II Grade of C or better is required.		4
MATH 272	Analytic Geometry and Calculus III		5		MATH 2222	Calculus III Grade of C or better is required.		4
PHYS 211	General Physics I		5		PHYSICS 1135	Engineering Physics I Grade of C or better is required.		4
PHYS 211	General Physics II		5		PHYSICS 2135	Engineering Physics II Grade of C or better is required.		4
CHEM 121	General Chemistry I		5		CHEM 1310, 1319	General Chemistry I and Lab		5
ENGL 111	English Composition I		3		ENGLISH 1120	Exposition and Argumentation		3
ECON 212 or	Principles of Microeconomics or		~		ECON 1100 or	Principles of Microeconomics or		~
ECON 211	Principles of Macroeconomics		3		ECON 1200	Principles of Macroeconomics		3
		Total Hours	36				Total Hours	31

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.

Engineering Management

Environmental Engineering

Geological Engineering

Mechanical Engineering

Metallurgical Engineering

Mining Engineering

Nuclear Engineering

Petroleum Engineering

Aerospace Engineering

Architectural Engineering

Biomedical Engineering/Biomanufacturing or Biomaterials

Ceramic Engineering

Chemical Engineering and Biochemistry Emphasis

- **Civil Engineering**
- **Computer Engineering**

Electrical 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.

Humanities/Social Science (HSS) Electives: HSS electives may include any art, English and technical communication, etymology, foreign language, music, philosophy, speech and media studies, or theatre. Your campus may have additional acceptable options. Consult with your advisor or email transfer@mst.edu with questions. See Missouri S&T online catalog at https://catalog.mst.edu/undergraduate/degreeprogramsandcourses/ for more information.

Aerospace E	Indineering	Group 2 Ma	ior Require	ments

	Three Rivers College		Semester		Missouri S&T	
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
ENGL 112 or SCOM 110	English Composition II or Public Speaking	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
ENGL 231 or ENGL 241 or ENGL 221	English Literature to 1798 or American Literature to 1870 or World Literature to 1600 or other iterature	3		ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or other literature	3
PHILOS 233	Ethics or other engineering, business, bio, social ethics approved by advisor	3		PHILOS 1130	How Should I Live? An Introduction to Ethics or other engineering, business, bio, social ethics approved by advisor	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	12			Group 2 Major Requirements	12
	Group 1 Core Requirements	36			Group 1 Core Requirements	31
	Total Ho	urs 48			Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.	43

	Architectural Enginee	ring	<mark>j Gro</mark> u	up 2 Major I	Requirements	
	Three Rivers College	S	emester		Missouri S&T	
HIST 122 (or HIST 111 or HIST 112)	World Civilization since the Renaissance (or American History to 1877 or American History since 1877)	3		HISTORY 1200* (or HISTORY 1300 or HISTORY 1310)	Modern Western Civilization* (or American History to 1877 or American History since 1877) 'HISTORY 1200 is prefered; 1300 or 1310 will also be accepted.	3
CIVL 116 and 216	Surveying I and II	6		CIV ENG 2401	Fundamentals of Surveying	3
PHYS 150	Environmental Geology MOTR GEOL 100	4		GEOLOGY 1110	Physical and Environmental Geology MOTR GEOL 100	3
Humanities or Social Science or Communication	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language or one communication course from this list: ENGL 112 or SCOM 110.	3		Humanities or Social Science or Communication	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language or one communication course from this list: ENGLISH 1160, 1600, 3560 or SPMS 1185.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	16 36			Group 2 Major Requirements Group 1 Core Requirements	12 31
	Total Hours	52			Total Hours* *S&T advisor permission is required to transfer more than 69 credits toward the S&T Architectural Engineering degree.	43

	Biomedical Eng				
	Three Rivers College	Semester	equirements	Missouri S&T	
SCOM 110	Public Speaking	3	SP&MS 1185	Principles of Speech	3
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
CHEM 122	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree reguirement. Will transfer as general credit.	3
BIOL 101	General Biology	5	BIO SCI 1113, 1219	General Biology and Lab Applies to degree as Track Elective.	4
BIOL 231	Anatomy and Physiology	4	BIO SCI 3333, 3339	Anatomy and Physiology I and Lab	4
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3	Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Total Hours	0 23 36 59		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements "S&T advisor permission is required to transfer more than 68 credit hours toward the degree.	0 20 31 51

					ng-Biomate quirements		
	Three Rivers College		<u>S</u>	emester		<u>Missouri S&T</u>	
SCOM 110	Public Speaking		3		SP&MS 1185	Principles of Speech	3
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government		3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
CHEM 122	General Chemistry II		5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree reguirement. Will transfer as general credit.	3
BIOL 101	General Biology		5		BIO SCI 1113*, 1219*	General General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4
BIOL 231	Anatomy and Physiology		4		BIO SCI 3333, 3339	Human Anatomy and Physiology I and Lab	4
	No free electives applied to the degree.		0			Maximum Free Electives	0
	Group 2 Major Requirements		20			Group 2 Major Requirements	17
	Group 1 Core Requirements		36			Group 1 Core Requirements	31
		Total Hours	56			Total Hours* *S&T advisor permission is required to transfer more than 65 credits toward the S&T Biomedicall Engineering degree.	48

	Ceramic Engineerir	Ŋ	Group	2 Major Re	quirements	
HIST 122 or HIST 111 or	Three Rivers College World Civilization since the Renaissance or American History to 1877 or		Semester	HISTORY 1200 or HISTORY 1300 or	Missouri S&T Modern Western Civilization or American History to 1877 or	
HIST 112 or GOVT 121	American History since 1877 or National and State Government	3		HISTORY 1310 or POL SCI 1200	American History since 1877 or American Government	3
CHEM 122	General Chemistry II	5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree reguirement. Will transfer as general credit.	3
ENGL 112 or SCOM 110 or HSS Elective	English Composition II or Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3		ENGLISH 1160 or SPMS 1185 or HSS Elective	Writing and Research or Principles of Speech or Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	17			Group 2 Major Requirements	15
	Group 1 Core Requirements	36			Group 1 Core Requirements	31
	Total Hours	53			"S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	46

Chemical Engineering or
Chemical Engineering - Biochemical Engineering Emphasis

Grou	р 2 Ма	jor Rec	quirement	tS
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	Three Rivers College		Semester	r -	Missouri S&T	
SCOM 110	Public Speaking	3		SP&MS 1185	Principles of Speech	3
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
CHEM 122	General Chemistry II	5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree reguirement. Will transfer as general credit.	3
BIOL 253	Microbiology	3		BIO SCI 3313	Microbiology Will satisfy 3 of 9 required hours of science electives.	8
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	17			Group 2 Major Requirements	20
	Group 1 Core Requirements	36			Group 1 Core Requirements	31
	Total Hours	53			Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Chemical Engineering degree.	51

	Civil Engineering	J G	roup 2	Major Requ	uirements	
	Three Rivers College		Semester		Missouri S&T	
ENGL 112 or SCOM 110	English Composition II or Public Speaking	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Public Speaking	3
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
CIVL 116 and 216	Surveying I and II	6		CIV ENG 2401	Fundamentals of Surveying	3
PHYS 150	Environmental Geology MOTR GEOL 100	4		GEOLOGY 1110	Physical and Environmental Geology MOTR GEOL 100	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements Total Hours	19 36 55			Group 2 Major Requirements Group 1 Core Requirements "S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.	15 31 46

Computer Engineering Group 2 Major Requirements

	Three Rivers College		Semester		<u>Missouri S&T</u>	
SCOM 110	Public Speaking	3		SPMS 1185	Public Speaking	3
ENGL 112	English Composition II	3		ENGLISH 1160	Writing and Research	3
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Electives	Maximum Free Electives	3		Electives	Maximum Free Electives	3
	Group 2 Major Requirements	15			Group 2 Major Requirements	15
	Group 1 Core Requirements	36			Group 1 Core Requirements	31
	Total Hours	51			Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Computer Engineering degree.	46

	Electrical Engineering Group 2 Major Requirements						
	Three Rivers College		Semester		Missouri S&T		
SCOM 110	Public Speaking	3		SPMS 1185	Public Speaking	3	
ENGL 112	English Composition II	3		ENGLISH 1160	Writing and Research	3	
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3	
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3	
Electives	Maximum Free Electives	3		Electives	Maximum Free Electives	3	
	Group 2 Major Requirements Group 1 Core Requirements	15 36			Group 2 Major Requirements Group 1 Core Requirements	15 31	
	Total Hours	51			Total Hours* "S&T advisor permission is required to transfer more than 68 credits toward the S&T Electrical Engineering degree.	46	

	Engineering Management Group 2 Major Requirements							
	Three Rivers College		Semester		Missouri S&T			
PSYC 111	General Psychology	3		PSYCH 1101	General Psychology	3		
HIST 122 or	World Civilization since the Renaissance or			HISTORY 1200 or	Modern Western Civilization or			
HIST 111 or	American History to 1877 or	2		HISTORY 1300 or	American History to 1877 or	3		
HIST 112 or	American History since 1877 or	3		HISTORY 1310 or	American History since 1877 or	3		
GOVT 121	National and State Government			POL SCI 1200	American Government			
SCOM 110	Public Speaking	3		SPMS 1185	Principles of Speech	3		
ENGL 112	English Composition II	3		ENGLISH 1160	Writing and Research	3		
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		
	No free electives applied to the degree.	3		Electives	Maximum Free Electives	0		
	Group 2 Major Requirements	18			Group 2 Major Requirements	15		
	Group 1 Core Requirements	36			Group 1 Core Requirements	31		
	Total Hours	54			*S&T advisor permission is required to transfer more than 68 credits toward the S&T Engineering Management degree.	61		

Environmental Engineering Group 2 Major Requirements

	Three Rivers College	Ser	nester	Missouri S&T	
ENGL 112 or SCOM 110	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIST 122 or HIST 111 or HIST 112	World Civilization since the Renaissance or American History to 1877 or American History since 1877	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History since 1877	3
CHEM 122	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree reguirement. Will transfer as general credit.	3
BIOL 101	General Biology	5	BIO SCI 1113, 1219*	General Biology (3) and Lab* (2) *BIO SCI 1219 is not an S&T degree requirement; course transfers as elective credit.	3
PHYS 150	Environmental Geology MOTR GEOL 100	4	GEOLOGY 1110	Physical and Environmental Geology MOTR GEOL 100	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3	Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	23		Group 2 Major Requirements	18
	Group 1 Core Requirements	36		Group 1 Core Requirements	31
	Total Hours	59		Total Hours* *S&T advisor permission is required to transfer more than 69 credits toward the S&T Environmental Engineering degree	49

Geological Engineering Group 2 Major Requirements

	Three Rivers College		Semester		Missouri S&T	
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
PHYS 150	Environmental Geology MOTR GEOL 100	4		GEOLOGY 1110	Physical and Environmental Geology MOTR GEOL 100	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements Total Hours	13 36 49			Group 2 Major Requirements Group 1 Core Requirements Total Hours*	12 31 43
		49			*S&T advisor permission is required to transfer more than 68 credits toward the S&T Geological Engineering degree.	40

	Mechanical Engineering Group 2 Major Requirements						
	Three Rivers College		Semester		Missouri S&T		
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3	
ENGL 112 or SCOM 110	English Composition II or Public Speaking	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3	
ENGL 231 or ENGL 241 or ENGL 221	English Literature to 1798 or American Literature to 1870 or World Literature to 1600 or other literature	3		ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or other literature	3	
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3	
	No free electives applied to the degree.	0			Maximum Free Electives	0	
	Group 2 Major Requirements Group 1 Core Requirements Total Hours	12 36 48			Group 2 Major Requirements Group 1 Core Requirements Total Hours* "S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.	12 31 43	

	Metallurgical Enginee	rin	g Gro	up 2 Major I	Requirements	
	Three Rivers College		Semester		Missouri S&T	
ENGL 112 or SCOM 110	English Composition II or Public Speaking	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
CHEM 122	General Chemistry II	5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree reguirement. Will transfer as general credit.	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Electives	Maximum Free Electives	5		Electives	Maximum Free Electives	3
	Group 2 Major Requirements	22			Group 2 Major Requirements	18
	Group 1 Core Requirements	36			Group 1 Core Requirements	31
	Total Hours	58			"S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.	49

	Mining Engineering Group 2 Major Requirements							
	Three Rivers College		<u>Semester</u>	Missouri S&T				
ENGL 112	English Composition II	3	ENGLISH 1160	Writing and Research	3			
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3			
PHYS 150	Environmental Geology MOTR GEOL 100	4	GEOLOGY 1110	Physical and Environmental Geology MOTR GEOL 100	3			
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3	Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3			
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3	Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3			
	No free electives applied to the degree.	0		Maximum Free Electives	0			
	Group 2 Major Requirements	16		Group 2 Major Requirements	15			
	Group 1 Core Requirements Total Hours	36 52		Group 1 Core Requirements "S&T advisor permission is required to transfer more than 68 credits toward the S&T Mining Engineering degree.	31 46			

	Nuclear Engineerin	g	Group	2 Major Re	quirements	
	Three Rivers College		Semester	<u></u>	Missouri S&T	
ENGL 112 or SCOM 110	English Composition II or Public Speaking	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Electives	Maximum Free Electives	6		Electives	Maximum Free Electives	6
	Group 2 Major Requirements Group 1 Core Requirements Total Hours	18 36 54			Group 2 Major Requirements Group 1 Core Requirements "S&T advisor permission is required to transfer more than 68 credits toward the S&T Nuclear Engineering degree.	18 31 49

	Petroleum Engineeri	ng	<mark>Grou</mark>	p 2 Major Ro	equirements	
	Three Rivers College		Semester		Missouri S&T	
ENGL 112	English Composition II	3		ENGLISH 1160	Writing and Research	3
HIST 122 or HIST 111 or HIST 112 or GOVT 121	World Civilization since the Renaissance or American History to 1877 or American History since 1877 or National and State Government	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
PHYS 150	Environmental Geology MOTR GEOL 100	4		GEOLOGY 1110	Physical and Environmental Geology MOTR GEOL 100	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3		Humanities or Social Science	Any history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements Total Hours	16 36 52			Group 2 Major Requirements Group 1 Core Requirements "S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.	15 31 46