

Missouri Baptist University — 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.

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
MATH 164	Calculus I	4	MATH 1214	Calculus I Grade of C or better is required.
MATH 254	Calculus II	4	MATH 1215	Calculus II Grade of C or better is required.
MATH 264	Calculus III	4	MATH 2222	Calculus III Grade of C or better is required.
MATH 363	Differential Equations	3	MATH 3304	Elementary Differential Equations
PHYS 213, 211	General Physics I and Lab	4	PHYSICS 1135	Engineering Physics I Grade of C or better is required.
PHYS 223, 221	General Physics II and Lab	4	PHYSICS 2135	Engineering Physics II Grade of C or better is required.
CHEM 133, 132	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab
ENGL 113	College Composition I	3	ENGLISH 1120	Exposition and Argumentation
ECON 123 or	Microeconomics or	3	ECON 1100 or	Principles of Microeconomics or
ECON 113	Macroeconomics		ECON 1200	Principles of Macroeconomics
Total Hours		34	Total Hours	

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/Biomufacturing 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.

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 Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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
ENGL 123 or COMM 103	College Composition II or Speech Communications	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech
MATH 353	Linear Algebra	3	MATH 3108	Linear Algebra I <small>Will satisfy the Advanced Math/Comp Sci elective requirement.</small>
	Literature Elective	3		Literature Elective
Ethics	Ethics Elective <small>Engineering, business, bio, social or other ethics approved by advisor.</small>	3	Ethics	Ethics Elective <small>Engineering, business, bio, social or other ethics approved by advisor.</small>
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	15		Group 2 Major Requirements
	Group 1 Core Requirements	34		Group 1 Core Requirements
	Total Hours	49		Total Hours*
				49

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

Architectural Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIST 123* (or HIST 213 or HIST 223)	Western Civilization II (or US History I or US History II) <small>*HIST 123 is preferred; 213 or 223 will also be accepted.</small>	3	HISTORY 1200* (or HISTORY 1300 or HISTORY 1310)	Modern Western Civilization* (or American History to 1877 or American History since 1877) <small>*HISTORY 1200 is preferred; 1300 or 1310 will also be accepted.</small>
PHYS 123	Geology and Earth Science	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology
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 123, COMM 103.	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.
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	9		Group 2 Major Requirements
	Group 1 Core Requirements	34		Group 1 Core Requirements
	Total Hours	43		Total Hours*
				43

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

Biomedical Engineering-Biomanufacturing Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 103	Speech Communications	3	SP&MS 1185	Principles of Speech	3
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 143	General Chemistry II	3	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.</small>	3
CHEM 313, 312	Organic Chemistry I and Lab	5	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHEM 323, 322 or BIOL 103, 101 or BIOL 113, 111 or BIOL 343	Organic Chemistry II and Lab (5) or Intro to Biology and Lab (4) or General Biology I and Lab (4) or Genetics (3)	4	CHEM 2220 or BIO SCI 1113, 1219 or BIO SCI 2223	Organic Chemistry II and Lab or General Biology and Lab or General Genetics <small>Applies to degree as Track Elective.</small>	4
BIOL 423	Cell Biology	3	BIO SCI 2213	Cell Biology	3
ITBU 203	Intro to Application Development	3	CS 1500	Computational Problem Solving	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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	24		Group 2 Major Requirements	26
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	58		Total Hours*	60

*S&T advisor permission is required to transfer more than 68 credit hours toward the degree.

Biomedical Engineering-Biomaterials Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 103	Speech Communications	3	SP&MS 1185	Principles of Speech	3
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 143	General Chemistry II	3	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.</small>	3
CHEM 313, 312	Organic Chemistry I and Lab	5	CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).</small>	4
CHEM 323, 322	Organic Chemistry II and Lab	5	CHEM 2220, 2229*	Organic Chemistry II and Lab* <small>CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).</small>	4
BIOL 103, 101 or BIOL 113, 111	Intro to Biology and Lab or General Biology I and Lab	4	BIO SCI 1113*, 1219*	General General Biology* and Lab* <small>*Applies to degree as Track Elective (Non-engineering).</small>	4
BIOL 423	Cell Biology	3	BIO SCI 2213	Cell Biology	3
ITBU 203	Intro to Application Development	3	CS 1500	Computational Problem Solving	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	29		Group 2 Major Requirements	27
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	61

*S&T advisor permission is required to transfer more than 65 credits toward the S&T Biomedical Engineering degree.

Ceramic Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 313	Organic Chemistry I	3	CHEM 2210	Organic Chemistry I <small>Will satisfy the advanced chemistry elective requirement.</small>	3
CHEM 143	General Chemistry II	3	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.</small>	3
ENGL 123 or COMM 103 or HSS Elective	College Composition II or Speech Communications or Any 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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	18		Group 2 Major Requirements	18
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	52		Total Hours*	52

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

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

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 103	Speech Communications	3	SP&MS 1185	Principles of Speech	3
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 143	General Chemistry II	3	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.</small>	3
CHEM 313, 312	Organic Chemistry I and Lab	5	CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*The lab will apply to the degree as 1 of the 9 science elective credits (below).</small>	4
CHEM 313 or BIOL 423 or BIOL 343	Organic Chemistry I or Cell Biology or Genetics	3	CHEM 2220 or BIO SCI 2213 or BIO SCI 3313, 3319	Organic Chemistry II (3) or Cell Biology and Lab (4) or Microbiology and Lab (5) <small>Will satisfy science elective requirement. Select up to 9 hours from these options or CHEM 2219 Organic Chemistry Lab.</small>	8
ITBU 203	Intro to Application Development	3	CS 1500	Computational Problem Solving	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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	23		Group 2 Major Requirements	27
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	57		Total Hours*	61

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

Civil Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 123 or COMM 103	College Composition II or Speech Communications	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 123	Geology and Earth Science	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	12		Group 2 Major Requirements	12
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	46		Total Hours*	46

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

Computer Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 103	Speech Communications	3	SPMS 1185	Principles of Speech	3
ENGL 123	College Composition II	3	ENGLISH 1160	Writing and Research	3
HIST 123 or HIST 213 or HIST 223 or POL S 113	Western Civilization II or US History I or US History II or Federal 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
ITBU 203	Intro to Application Development	3	CS 1500	Computational Problem Solving	3
CHEM 313 or BIOL 423 or BIOL 343	Organic Chemistry I or Cell Biology or Genetics	3	CHEM 2210 or BIO SCI 2213 or BIO SCI 2223	Organic Chemistry I (3) or Cell Biology (3) or General Genetics (3) <small>Satisfies a required engineering/science elective.</small>	3
MATH 353	Linear Algebra	3	MATH 3108	Linear Algebra <small>Will satisfy a required math elective.</small>	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	24		Group 2 Major Requirements	24
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	58		Total Hours*	58

*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

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 103	Speech Communications	3	SPMS 1185	Principles of Speech	3
ENGL 123	College Composition II	3	ENGLISH 1160	Writing and Research	3
HIST 123 or HIST 213 or HIST 223 or POL S 113	Western Civilization II or US History I or US History II or Federal 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
ITBU 203	Intro to Application Development	3	CS 1500	Computational Problem Solving	3
CHEM 313 or BIOL 423 or BIOL 343	Organic Chemistry I or Cell Biology or Genetics	3	CHEM 2210 or BIO SCI 2213 or BIO SCI 2223	Organic Chemistry I (3) or Cell Biology (3) or General Genetics (3) <small>Satisfies a required engineering/science elective.</small>	3
MATH 353	Linear Algebra	3	MATH 3108	Linear Algebra	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	24		Group 2 Major Requirements	24
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	58		Total Hours*	58

*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

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSYC 133	General Psychology	3	PSYCH 1101	General Psychology	3
HIST 123 or HIST 213 or HIST 223 or POL S 113	Western Civilization II or US History I or US History II or Federal 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
COMM 103	Speech Communications	3	SPMS 1185	Principles of Speech	3
ENGL 123	College 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
	<i>No free electives applied to the degree.</i>	3	Electives	Maximum Free Electives	0
	Group 2 Major Requirements	18		Group 2 Major Requirements	15
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	52		Total Hours*	61

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

Environmental Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 123 or COMM 103	College Composition II or Speech Communications	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIST 123 or HIST 213 or HIST 223	Western Civilization II or US History I or US History II	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History since 1877	3
PHYS 123	Geology and Earth Science	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CHEM 143	General Chemistry II	3	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.</small>	3
BIOL 103, 101 or BIOL 113, 111	Intrro to Biology and Lab or General Biology I and Lab	4	BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) <small>*BIO SCI 1219 is not an S&T degree requirement, will transfer as general elective credit.</small>	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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	19		Group 2 Major Requirements	18
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	53		Total Hours*	52

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

Geological Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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
ITBU 203	Intro to Application Development	3	CS 1500	Computational Problem Solving	3
PHYS 123	Geology and Earth Science	3	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	15		Group 2 Major Requirements	15
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	49		Total Hours*	49

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

Mechanical Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 123 or COMM 103	College Composition II or Speech Communications	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
MATH 353	Linear Algebra	3	MATH 3108	Linear Algebra I <small>Will satisfy the Advanced Math/Statistics elective requirement.</small>	3
	Literature Elective	3		Literature Elective	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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	15		Group 2 Major Requirements	15
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	49		Total Hours*	49

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

Metallurgical Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 123 or COMM 103	College Composition II or Speech Communications	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 143	General Chemistry II	3	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.</small>	3
CHEM 313	Organic Chemistry I	3	CHEM 2210	Organic Chemistry I <small>Not specifically required for the degree but will satisfy out-of-department technical elective requirement</small>	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	23		Group 2 Major Requirements	21
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	57		Total Hours*	55

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

Mining Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 123	College Composition II	3	ENGLISH 1160	Writing and Research	3
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 123	Geology and Earth Science	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	15		Group 2 Major Requirements	15
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	49		Total Hours*	49

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

Nuclear Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 123 or COMM 103	College Composition II or Speech Communications	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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
MATH 353	Linear Algebra	3	MATH 3108	Linear Algebra	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	21		Group 2 Major Requirements	21
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	55		Total Hours*	55

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

Petroleum Engineering Group 2 Major Requirements

<u>Missouri Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 123	College Composition II	3	ENGLISH 1160	Writing and Research	3
HIST 123 or HIST 213 or HIST 223 or POLS 113	Western Civilization II or US History I or US History II or Federal 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 123	Geology and Earth Science	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	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
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	15		Group 2 Major Requirements	15
	Group 1 Core Requirements	34		Group 1 Core Requirements	34
	Total Hours	49		Total Hours*	49

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