

Southwest Baptist University — Missouri S&T

General Engineering Transfer Guide

Effective as of Fall 2023

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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
MAT 1195	Calculus I	5	MATH 1214	Calculus I	Grade of C or better is required. 4
MAT 2255	Calculus II	4	MATH 1215	Calculus II	Grade of C or better is required. 4
MAT 2263	Calculus III	3	MATH 2222	Calculus III	Grade of C or better is required. 4
MAT 3363	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHY 2214, 2211	University Physics I and Lab	5	PHYSICS 1135	Engineering Physics I	Grade of C or better is required. 4
PHY 2224, 2221	University Physics II and Lab	5	PHYSICS 2135	Engineering Physics II	Grade of C or better is required. 4
CHE 1115	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
ENG 1113	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ECO 2023 or ECO 2033	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours					36
					Total Hours 34

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
Ceramic Engineering
Chemical Engineering
Chemical Engineering/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>Southwest Baptist University</u>	<u>Semester</u>	<u>Missouri S&T</u>	
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics 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
ENG 2213 or COM 1103 or ENG 4003	English Composition II or Fundamentals of Speech Communication or Technical Writing 3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing 3
PHY 3233	Statics 3	CIV ENG 2200	Engineering Mechanics-Statics 3
MAT 3323 or MAT 3343	Linear Algebra or Probability and Statistics 3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics (Will satisfy the Advanced Math/Comp Sci elective requirement.) 3
	Literature Elective 3		Literature Elective 3
	Ethics Elective 3		Ethics Elective Engineering, business, bio, social or other ethics approved by advisor. 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 36		Group 1 Core Requirements 34
	Total Hours 54		Total Hours* 52

*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>Southwest Baptist University</u>	<u>Semester</u>	<u>Missouri S&T</u>	
HIS 1123 (or HIS 2213 or HIS 2223)	Intro to History of World Civilization (or History of US 1492-1865 or History of US 1865-Present) 3 <small>*HIS 1123 is preferred; 2213 or 2223 will also be accepted.</small>	HISTORY 1200* (or HISTORY 1300 or HISTORY 1310)	Modern Western Civilization* (or American History to 1877 or American History since 1877) 3 <small>*HISTORY 1200 is preferred; 1300 or 1310 will also be accepted.</small>
PHY 3233	Statics 3	CIV ENG 2200	Engineering Mechanics-Statics 3
PHY 4233	Dynamics 3	MECH ENG 2350	Engineering Mechanics-Dynamics 2
MAT 3343	Probability and Statistics 3	STAT 3115*	Engineering Statistics* 3 <small>*Will be substituted for STAT 3113.</small>
HSS Elective	Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language 3	HSS Elective	Humanities/Social Science Elective: 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 14
	Group 1 Core Requirements 36		Group 1 Core Requirements 34
	Total Hours 51		Total Hours* 48

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

Ceramic Engineering Group 2 Major Requirements

<u>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHE 3304	Organic Chemistry	4	CHEM 2210/2219	Organic Chemistry I and Lab <small>(Not a specific requirement. Will satisfy technical elective requirement.)</small>	5
CHE 1125	General Chemistry II	5	CHEM 1320	General Chemistry II	3
MAT 3343	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
PHY 3363	Modern Physics	3	PHYS 2305	Intro to Modern Physics	3
ENG 2213 or COM 1103 or HSS Elective	English Composition II or Fundamentals of Speech Communication 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 Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	27		Group 2 Major Requirements	26
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	60

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

Chemical Engineering Group 2 Major Requirements

<u>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 4003	Technical Writing	3	ENGLISH 3560	Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
CHE 1125	General Chemistry II	5	CHEM 1320	General Chemistry II	3
CHE 3304	Organic Chemistry	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*The lab is not required for the degree, will partially satisfy 9-credit-hour science elective requirement.</small>	4
CHE 3314	Organic Chemistry II	4	CHEM 2220	Organic Chemistry II <small>Will partially satisfy 9-credit-hour science elective requirement</small>	3
CIS 1033	Foundations of Computer Science	3	CS 1500	Computational Problem Solving	3
MAT 3343	Probability and Statistics	3	STAT 3115*	Engineering Statistics* <small>*Will be substituted for STAT 3113.</small>	3
CIS 1033	Foundations of Computer Science	3	SPMS 1185	Principles of Speech	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	31		Group 2 Major Requirements	28
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	67		Total Hours*	62

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

Chemical Engineering - Biochemical Engineering Emphasis Group 2 Major Requirements

<u>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 4003	Technical Writing	3	ENGLISH 3560	Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
CHE 1125	General Chemistry II	5	CHEM 1320	General Chemistry II	3
CHE 3304	Organic Chemistry	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*The lab is not required for the degree, will partially satisfy 9-credit-hour science elective requirement.</small>	4
CHE 3314	Organic Chemistry II	4	CHEM 2220	Organic Chemistry II <small>Will partially satisfy 9-credit-hour science elective requirement</small>	3
CIS 1033	Foundations of Computer Science	3	CS 1500	Computational Problem Solving	3
MAT 3343	Probability and Statistics	3	STAT 3115*	Engineering Statistics*	3
COM 1103	Fundamentals of Speech Communication	3	SPMS 1185	Principles of Speech	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	31		Group 2 Major Requirements	28
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	67		Total Hours*	62

*S&T advisor permission is required to transfer more than 70 credits toward the S&T Chemical/Biochemical Engineering degree.

Civil Engineering Group 2 Major Requirements

<u>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 2213 or COM 1103 or ENG 4003	English Composition II or Fundamentals of Speech Communication or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 4233	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
MAT 3343	Probability and Statistics	3	STAT 3115*	Engineering Statistics*	3
	Humanities/Social Science Elective	3		<small>*Will be substituted for STAT 3113.</small> Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	18		Group 2 Major Requirements	17
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	54		Total Hours*	51

*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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COM 1103	Fundamentals of Speech Communication	3	SPMS 1185	Principles of Speech	3
ENG 2213 or ENG 4003	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
CIS 1033	Foundations of Computer Science	3	CS 1500	Computational Problem Solving	3
PHY 3233 or PHY 4233 or PHY 3363 or CHE 3304 or BIO 3324	Statics (3) or Dynamics (3) or Modern Physics I (3) Organic Chemistry I (4) or Genetics (4)	3	CIV ENG 2200 or MECH ENG 2350 or PHYSICS 2311 or CHEM 2210 or BIO SCI 2223	Engineering Mechanics-Statics (3) or Engineering Mechanics-Dynamics (2) or Modern Physics I (3) Organic Chemistry I (4) or General Genetics (3)	3
MAT 3323	Linear Algebra	3	MATH 3108	Linear Algebra <small>(Will satisfy a required math elective.)</small>	3
MAT 3343	Probability and Statistics	3	STAT 3115*	Engineering Statistics* <small>*Will be substituted for STAT 3117.</small>	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	27		Group 2 Major Requirements	27
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	61

*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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COM 1103	Fundamentals of Speech Communication	3	SPMS 1185	Principles of Speech	3
ENG 2213 or ENG 4003	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
CIS 1033	Foundations of Computer Science	3	CS 1500	Computational Problem Solving	3
PHY 3233 and PHY 4233 <small>(BOTH of the courses above or ONE of the courses below.)</small>	Statics (3) and Dynamics (3) <small>(Both courses above combined or any one of the following courses will satisfy a required engineering science elective.)</small>	3	CIV ENG 2200 and MECH ENG 2350 <small>(BOTH of the courses above or ONE of the courses below.)</small>	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (3) <small>(Both courses above combined or any one of the following courses will satisfy a required engineering science elective.)</small>	3
OR	OR		OR	OR	
PHY 3363 or CHE 3304 or BIO 3324	Modern Physics I (3) Organic Chemistry I (4) or Genetics (4)		PHYSICS 2311 or CHEM 2210 or BIO SCI 2223	Modern Physics I (3) Organic Chemistry I (4) or General Genetics (3)	
MAT 3323	Linear Algebra	3	MATH 3108	Linear Algebra	3
MAT 3343	Probability and Statistics	3	STAT 3115*	Engineering Statistics* <small>*Will be substituted for STAT 3117.</small>	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	27		Group 2 Major Requirements	27
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	61

*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

Engineering Management Group 2 Major Requirements					
<u>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSY 1013	General Psychology	3	PSYCH 1101	General Psychology	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
COM 1103	Fundamentals of Speech Communication	3	SPMS 1185	Principles of Speech	3
ENG 2213 or ENG 4003	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 4233	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
MAT 3343	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	27		Group 2 Major Requirements	26
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	60

*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

Environmental Engineering Group 2 Major Requirements					
<u>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 2213 or COM 1103 or ENG 4003	English Composition II or Fundamentals of Speech Communication or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History since 1877	3
CHE 1125	General Chemistry II	5	CHEM 1320	General Chemistry II	3
BIO 1114	General Biology I	4	BIO SCI 1113	General Biology	4
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 4233	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
MAT 3343	Probability and Statistics	3	STAT 3115*	Engineering Statistics*	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	27		Group 2 Major Requirements	24
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	58

*Will be substituted for STAT 3113.
*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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 4003	Technical Writing	3	ENGLISH 3560	Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 4233	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
MAT 3343	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
BIO 1114 or CHE 1125 or CHE 3304	General Biology I or General Chemistry II or Organic Chemistry	3	BIO SCI 1113 or CHEM 1320 or CHEM 2210	General Biology or General Chemistry II or Organic Chemistry I <small>or any 3-hour course in chemistry, geochemistry, or biology. Satisfies chemistry/geochemistry elective requirement.</small>	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	24		Group 2 Major Requirements	23
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	60		Total Hours*	57

*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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
ENG 2213 or COM 1103 or ENG 4003	English Composition II or Fundamentals of Speech Communication or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MAT 3323 or MAT 3343	Linear Algebra or Probability and Statistics	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics <small>(Will satisfy the Advanced Math/Comp Sci elective requirement.)</small>	3
	Literature Elective	3		Literature Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	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	36		Group 1 Core Requirements	34
	Total Hours	54		Total Hours*	52

*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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 2213 or COM 1103 or ENG 4003	English Composition II or Fundamentals of Speech Communication or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MAT 3343	Probability and Statistics	3	STAT 3115*	Engineering Statistics*	3
CHE 1125	General Chemistry II	5	CHEM 1320	General Chemistry II	3
CHE 3304 or PHY 3363	Organic Chemistry I (4) or Modern Physics (3)	3	CHEM 2210 or PHYSICS 2305	Organic Chemistry I (4) or Intro to Modern Physics (3)	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	5		Maximum Free Electives	3
	Group 2 Major Requirements	31		Group 2 Major Requirements	27
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	67		Total Hours*	61

*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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 2213 or ENG 4003	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
MAT 3343	Probability and Statistics	3	STAT 3115*	Engineering Statistics*	3
PHY 3233	Statics	3	CIV ENG 2200*	Engineering Mechanics-Statics	3
PHY 4233	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	21		Group 2 Major Requirements	20
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	57		Total Hours*	54

*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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 2213 or COM 1103 or ENG 4003	English Composition II or Fundamentals of Speech Communication or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
MAT 3323	Linear Algebra	3	MATH 3108	Linear Algebra I	3
MAT 3343	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 3363	Modern Physics	3	PHYSICS 2305	Intro to Modern Physics	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	6		Maximum Free Electives	6
	Group 2 Major Requirements	30		Group 2 Major Requirements	30
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	66		Total Hours*	64

*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>Southwest Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 2213 or ENG 4003	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing (preferred)	3
HIS 1123 or HIS 2213 or HIS 2223 or POL 1113	Intro to History of World Civilization or History of US 1492-1865 or History of US 1865-Present or American Government and Politics	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
PHY 3233	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 4233	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	18		Group 2 Major Requirements	17
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	54		Total Hours*	51

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