

Northwest Missouri State University — Missouri S&T

General Engineering Transfer Guide

Effective as of Fall 2017

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>Northwest Missouri State University</u>			<u>Semester</u>	<u>Missouri S&T</u>		
MATH 120	Calculus I	4	MATH 1214	Calculus for Engineers I	Grade of C or better is required.	4
MATH 121	Calculus II	4	MATH 1215	Calculus for Engineers II	Grade of C or better is required.	4
MATH 321	Multivariate Calculus	4	MATH 2222	Calculus with Analytic Geometry III	Grade of C or better is required.	4
MATH 361	Differential Equations	3	MATH 3304	Elementary Differential Equations		3
PHYS 120, 121	Fundamentals of Classical Physics I and Lab	5	PHYSICS 1135	Engineering Physics I	Grade of C or better is required.	4
PHYS 230, 231	Fundamentals of Classical Physics II and Lab	5	PHYSICS 2135	Engineering Physics II	Grade of C or better is required.	4
CHEM 114, 115	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab		5
TECH 102	General Technical Drawing	3	MECH ENG 1720	Engineering Design with Computer Appl		3
ENGL 111	Composition	3	ENGLISH 1120	Exposition and Argumentation		3
ECON 151 or ECON 150	General Economics II or General Economics I	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics		3
Total Hours			38			Total Hours
						37

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 history, economics, political science, sociology, psychology, philosophy, fine art, literature, or foreign language. Missouri S&T approved HSS courses are listed at ugs.mst.edu. Your campus may have additional acceptable options. Consult with your advisor or email transfer@mst.edu with questions.

Aerospace Engineering Group 2 Major Requirements

<u>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HUM 103 or POL S 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
ENGL 112 or COM 230 or ENGL 315	Composition or Public Speaking or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
COMP 131	Intro to Structured Programming	3	CS 1570	Intro to Programming (C++)	3
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 320	Classical Mechanics/Dynamics	3	AERO ENG 2360	Dynamics	3
	<i>See your advisor for course options.</i>			Literature Elective	3
	<i>See your advisor for course options.</i>			Ethics Elective	3
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	15		Group 2 Major Requirements	21
	Group 1 Core Requirements	38		Group 1 Core Requirements	37
	Total Hours	53		Total Hours*	58

*S&T advisor permission is required to transfer more than 66 credits toward the S&T Aerospace Engineering degree.

Architectural Engineering Group 2 Major Requirements

<u>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HUM 103	Western Civilization II	3	HISTORY 1200	Modern Western Civilization	3
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 320	Classical Mechanics/Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
			ENGLISH 1160 or SPMS 1185 or HSS Elective	Writing and Research or Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3
ENGL 112 or COM 230	Composition or Public Speaking	3		Intro to Physical Geology or Principles of Biology or Introductory Astronomy (or other chemistry, geology, biology, physics, or astronomy course that is not otherwise required for the degree)	3
GEOL 110, 110L or BIOL 106 or PHSC 122	General Geology and Lab or Principles of Biology or Descriptive Astronomy	4	GEOLOGY 1111 or BIO SCI 1213 or PHYSICS 1505	Principles of Biology or Introductory Astronomy (or other chemistry, geology, biology, physics, or astronomy course that is not otherwise required for the degree)	3
	<i>No free electives applied to the degree.</i>			Applies to the degree as a basic science elective	
	Group 2 Major Requirements	16		Maximum Free Electives	0
	Group 1 Core Requirements	38		Group 2 Major Requirements	15
	Total Hours	54		Group 1 Core Requirements	37
				Total Hours*	52

*S&T advisor permission is required to transfer more than 66 credits toward the S&T Architectural Engineering degree.

Ceramic Engineering Group 2 Major Requirements

<u>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HUM 103 or POLS 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHEM 342, 343	Organic Chemistry and Lab	5	CHEM 2210/2219	Organic Chemistry I and Lab (Not a specific requirement. Will satisfy technical elective requirement.)	5
CHEM 116, 117	General Chemistry II and Lab	5	CHEM 1320	General Chemistry II	3
ENGL 112 or COM 230	Composition or Public Speaking	3	ENGLISH 1160 or SPMS 1185 or HSS Elective	Writing and Research or Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Maximum Free Electives	0
<i>No free electives applied to the degree.</i>				Group 2 Major Requirements	20
	Group 2 Major Requirements	19		Group 1 Core Requirements	37
	Group 1 Core Requirements	38		Total Hours*	57
	Total Hours	57			

*S&T advisor permission is required to transfer more than 60 credits toward the S&T Ceramic Engineering degree.

Chemical Engineering Group 2 Major Requirements

<u>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 112 or ENGL 315	Composition or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HUM 103 or POLS 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
CHEM 116, 117	General Chemistry II and Lab	5	CHEM 1320	General Chemistry II	5
CHEM 342, 343	Organic Chemistry and Lab	5	CHEM 2210	Organic Chemistry I	3
CHEM 344, 345	Organic Chemistry II and Lab	5	CHEM 2220	Organic Chemistry II (Will satisfy science elective requirement.)	3
COMP 131	Intro to Structured Programming	3	CS 1570	Intro to Programming (C++)	3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective	3
<i>No free electives applied to the degree.</i>				Maximum Free Electives	0
	Group 2 Major Requirements	24		Group 2 Major Requirements	26
	Group 1 Core Requirements	38		Group 1 Core Requirements	37
	Total Hours	62		Total Hours*	63

*S&T advisor permission is required to transfer more than 60 credits toward the S&T Chemical Engineering degree.

Chemical Engineering - Biochemical Engineering Emphasis Group 2 Major Requirements

<u>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 112 or ENGL 315	Composition or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HUM 103 or POLS 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
CHEM 116, 117	General Chemistry II and Lab	5	CHEM 1320	General Chemistry II	5
CHEM 342, 343	Organic Chemistry and Lab	5	CHEM 2210	Organic Chemistry I	3
CHEM 344, 345	Organic Chemistry II and Lab	5	CHEM 2220	Organic Chemistry II (Will satisfy science elective requirement.)	3
COMP 131	Intro to Structured Programming	3	CS 1570	Intro to Programming (C++)	3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective	3
<i>No free electives applied to the degree.</i>				Maximum Free Electives	0
	Group 2 Major Requirements	24		Group 2 Major Requirements	26
	Group 1 Core Requirements	38		Group 1 Core Requirements	37
	Total Hours	62		Total Hours*	63

*S&T advisor permission is required to transfer more than 71 credits toward the S&T Chemical/Biochemical Engineering degree.

Civil Engineering Group 2 Major Requirements

<u>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENGL 112 or	Composition or		ENGLISH 1160 or	Writing and Research or
COM 230 or	Public Speaking or	3	SPMS 1185 or	Public Speaking or
ENGL 315	Technical Writing		ENGLISH 3560	Technical Writing
HUM 103 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
POLS 102	Intro to American Government and Politics	3	POL SCI 1200	American Government
GEOL 110, 110L	General Geology and Lab	4	GEO 1110/GE 1150	Intro to Physical Geology
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
PHYS 320	Classical Mechanics/Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective
	<i>No free electives applied to the degree.</i>			Maximum Free Electives
	Group 2 Major Requirements	16		Group 2 Major Requirements
	Group 1 Core Requirements	38		Group 1 Core Requirements
	Total Hours	54		Total Hours*
				55

*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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
COM 230	Public Speaking	3	SPMS 1185	Public Speaking
ENGL 112 or	Composition or	3	ENGLISH 1160 or	Writing and Research or
ENGL 315	Technical Writing		ENGLISH 3560	Technical Writing
HUM 103 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
POLS 102	Intro to American Government and Politics	3	POL SCI 1200	American Government
MATH 1215	Discrete Mathematics	4	CS 1200	Discrete Math for Computer Science
COMP 131	Intro to Structured Programming	3	CS 1570	Intro to Programming (C++)
			CS 1575	Data Structures
			CIV ENG 2200 and	Engineering Mechanics-Statics and
PHYS 322 and	Statics and	3	MECH ENG 2350	Engineering Mechanics-Dynamics
PHYS 320	Classical Mechanics/Dynamics			<i>(Both courses combined will satisfy a required engineering science elective.)</i>
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective
	<i>See your advisor for course options.</i>			Maximum Free Electives
	Group 2 Major Requirements	19		Group 2 Major Requirements
	Group 1 Core Requirements	38		Group 1 Core Requirements
	Total Hours	57		Total Hours*
				68

*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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
COM 230	Public Speaking	3	SPMS 1185	Public Speaking
ENGL 112 or	Composition or	3	ENGLISH 1160 or	Writing and Research or
ENGL 315	Technical Writing		ENGLISH 3560	Technical Writing
HUM 103 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
POLS 102	Intro to American Government and Politics	3	POL SCI 1200	American Government
COMP 131	Intro to Structured Programming	3	CS 1570	Intro to Programming (C++)
			CIV ENG 2200 and	Engineering Mechanics-Statics and
PHYS 322 and	Statics and	3	MECH ENG 2350	Engineering Mechanics-Dynamics
PHYS 320	Classical Mechanics/Dynamics			<i>(Both courses combined will satisfy a required engineering science elective.)</i>
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective
	<i>See your advisor for course options.</i>			Maximum Free Electives
	Group 2 Major Requirements	15		Group 2 Major Requirements
	Group 1 Core Requirements	38		Group 1 Core Requirements
	Total Hours	53		Total Hours*
				62

*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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSYC 103	General Psychology	3	PSYCH 1101	General Psychology	3
HUM 103 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or	
POLS 102	Intro to American Government and Politics	3	POL SCI 1200	American Government	3
ENGL 112 or	Composition or		ENGLISH 1160 or	Writing and Research or	
COM 230 or	Public Speaking or	3	SPMS 1185 or	Principles of Speech or	3
ENGL 315	Technical Writing		ENGLISH 3560	Technical Writing	
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 320	Classical Mechanics/Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
<i>See your advisor for course options.</i>			Humanities/Social Science Elective		3
<i>See your advisor for course options.</i>			Maximum Free Electives		3
Group 2 Major Requirements		15	Group 2 Major Requirements		21
Group 1 Core Requirements		38	Group 1 Core Requirements		37
Total Hours		53	Total Hours*		58

*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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 112 or	Composition or		ENGLISH 1160 or	Writing and Research or	
COM 230 or	Public Speaking or	3	SPMS 1185 or	Public Speaking or	3
ENGL 315	Technical Writing		ENGLISH 3560	Technical Writing	
HUM 103	Western Civilization II	3	HISTORY 1200	Modern Western Civilization	3
GEOL 110, 110L	General Geology and Lab	4	GEO 1110/GE 1150	Intro to Physical Geology	3
CHEM 116, 117	General Chemistry II and Lab	5	CHEM 1320	General Chemistry II	3
BIOL 102, 103	General Biology and Lab	4	BIO SCI 1113	General Biology	4
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 320	Classical Mechanics/Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
<i>See your advisor for course options.</i>			Humanities/Social Science Elective		3
<i>No free electives applied to the degree.</i>			Maximum Free Electives		0
Group 2 Major Requirements		25	Group 2 Major Requirements		25
Group 1 Core Requirements		38	Group 1 Core Requirements		37
Total Hours		63	Total Hours*		62

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

Geological Engineering Group 2 Major Requirements

<u>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 112 or	Composition or		ENGLISH 1160 or	Writing and Research or	
COM 230 or	Public Speaking or	3	SPMS 1185 or	Public Speaking or	3
ENGL 315	Technical Writing		ENGLISH 3560	Technical Writing	
HUM 103 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or	
POLS 102	Intro to American Government and Politics	3	POL SCI 1200	American Government	3
GEOL 110, 110L	General Geology and Lab	4	GEO 1110/GE 1150	Physical and Environmental Geology	3
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 320	Classical Mechanics/Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
BIOL 102, 103 or CHEM 116, 117 or CHEM 342, 343	General Biology and Lab or General Chemistry II or Organic Chemistry I	4	BIO SCI 1113 or CHEM 1320 or CHEM 2210	General Biology or General Chemistry II or Organic Chemistry I	
<i>See your advisor for course options.</i>			or any 3-hour course in chemistry, geochemistry, or biology		
<i>See your advisor for course options.</i>			Humanities/Social Science Elective		3
<i>No free electives applied to the degree.</i>			Humanities/Social Science Elective		3
Group 2 Major Requirements		20	Group 2 Major Requirements		21
Group 1 Core Requirements		38	Group 1 Core Requirements		37
Total Hours		58	Total Hours*		58

*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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HUM 103 or POLS 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
ENGL 112 or COM 230 or ENGL 315	Composition or Public Speaking or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
COMP 131	Intro to Structured Programming	3	CS 1570	Intro to Programming (C++)	3
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 320	Classical Mechanics/Dynamics	3	MECH ENG 2360	Dynamics	3
				Literature Elective	3
				Humanities/Social Science Elective	3
				Maximum Free Electives	0
				Group 2 Major Requirements	12
				Group 1 Core Requirements	37
Total Hours			44		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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 112 or COM 230 or ENGL 315	Composition or Public Speaking or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HUM 103 or POLS 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHEM 116, 117	General Chemistry II and Lab	5	CHEM 1320	General Chemistry II	3
CHEM 342, 343	Organic Chemistry and Lab	5	CHEM 2210	Organic Chemistry I <i>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement</i>	3
				Humanities/Social Science Elective	3
				Humanities/Social Science Elective	3
				Maximum Free Electives	5
				Group 2 Major Requirements	26
				Group 1 Core Requirements	37
Total Hours			57		63

*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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 112 or ENGL 315	Composition or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HUM 103 or POLS 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
PHYS 322	Statics	3	CIV ENG 2200*	Engineering Mechanics-Statics	3
PHYS 320	Classical Mechanics/Dynamics	3	MECH ENG 2350*	Engineering Mechanics-Dynamics	3
<small>*The combination of CIV ENG 2200 and MECH ENG 2350 will be substituted for MECH ENG 2340.</small>					
GEOL 110, 110L	General Geology and Lab	4	GEO 1110/GE 1150	Intro to Physical Geology	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	16		Group 2 Major Requirements	21
	Group 1 Core Requirements	38		Group 1 Core Requirements	37
	Total Hours	54		Total Hours*	58

*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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 112 or ENGL 315	Composition or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HUM 103 or POLS 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
COMP 131	Intro to Structured Programming	3	CS 1570	Intro to Programming (C++)	3
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Maximum Free Electives	6
	Group 2 Major Requirements	12		Group 2 Major Requirements	21
	Group 1 Core Requirements	38		Group 1 Core Requirements	37
	Total Hours	50		Total Hours*	58

*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>Northwest Missouri State University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 112 or ENGL 315	Composition or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HUM 103 or POLS 102	Western Civilization II or Intro to American Government and Politics	3	HISTORY 1200 or POL SCI 1200	Modern Western Civilization or American Government	3
GEOL 110, 110L	General Geology and Lab	4	GEO 1110/GE 1150	Physical and Environmental Geology	3
PHYS 322	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 320	Classical Mechanics/Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	10		Group 2 Major Requirements	15
	Group 1 Core Requirements	38		Group 1 Core Requirements	37
	Total Hours	48		Total Hours*	52

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