

Westminster College — 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>Westminster College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
MAT 124	Calculus I	5	MATH 1214	Calculus for Engineers I	Grade of C or better is required.	4
MAT 214	Calculus II	4	MATH 1215	Calculus for Engineers II	Grade of C or better is required.	4
MAT 224	Calculus III	4	MATH 2222	Calculus with Analytic Geometry III	Grade of C or better is required.	4
MAT 312	Differential Equations	3	MATH 3304	Elementary Differential Equations		3
PHY 201	Physics I	4	PHYSICS 1135	Engineering Physics I	Grade of C or better is required.	4
PHY 212	Physics II	4	PHYSICS 2135	Engineering Physics II	Grade of C or better is required.	4
CHM 114, 115	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab		5
EGR 101	Intro to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl		3
ENG 103	Academic Writing	3	ENGLISH 1120	Exposition and Argumentation		3
ECON 212 or ECON 211	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics		3
Total Hours			37			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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 103 or HIS 104 or HIS 106 or	U.S. History to 1890 or U.S. History since 1890 or Western Civilization II or	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or	American History to 1877 or American History since 1877 or Modern Western Civilization or
POL 211	American Government and Politics		POL SCI 1200	American Government
SPE 101	Introduction to Speech	3	SPMS 1185	Principles of Speech
CSC 111 or CSC 211	Fundamentals of Computer Science I or Fundamentals of Computer Science II	3	CS 1971, 1981 or CS 1570	Intro to Programming Method and Lab (C++) or Intro to Programming (C++)
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MAT 215 or MAT 313	Linear Algebra or Mathematical 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>
<i>See your advisor for course options.</i>				Literature Elective
<i>See your advisor for course options.</i>				Ethics Elective
<i>No free electives applied to the degree.</i>				Maximum Free Electives
Group 2 Major Requirements		15	Group 2 Major Requirements	
Group 1 Core Requirements		37	Group 1 Core Requirements	
Total Hours		52	Total Hours*	
			21	
			37	
			58	

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

Architectural Engineering Group 2 Major Requirements

<u>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 106 or HIS 103 or HIS 104	Western Civilization II or U.S. History to 1890 or U.S. History since 1890	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>
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics <small>(Will be substituted for STAT 3113.)</small>
SPE 101	Introduction to Speech	3	SPMS 1185 or HSS Elective	Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language
AST 211 or PHY 223	Astronomy or Physics III	3	PHYSICS 1505 or PHYSICS 2305	introductory Astronomy or Intro to Modern Physics (or other chemistry, geology, biology, physics, or astronomy course that is not otherwise required for the degree) <small>Applies to the degree as a basic science elective</small>
<i>No free electives applied to the degree.</i>				Maximum Free Electives
Group 2 Major Requirements		15	Group 2 Major Requirements	
Group 1 Core Requirements		37	Group 1 Core Requirements	
Total Hours		52	Total Hours*	
			15	
			37	
			52	

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

Ceramic Engineering Group 2 Major Requirements

<u>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 103 or HIS 104 or HIS 106 or POL 211	U.S. History to 1890 or U.S. History since 1890 or Western Civilization II or American Government and Politics	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
CHM 314, 315	Organic Chemistry and Lab	4	CHEM 2210/2219	Organic Chemistry I and Lab (Not a specific requirement. Will satisfy technical elective requirement.)
CHM 124	General Chemistry II	3	CHEM 1320	General Chemistry II
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics
SPE 101	Introduction to Speech	3	SPMS 1185 or HSS Elective	Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language
<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		19	Group 2 Major Requirements	
Group 1 Core Requirements		37	Group 1 Core Requirements	
Total Hours		56	Total Hours*	
			60	

*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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 103 or HIS 104 or HIS 106 or POL 211	U.S. History to 1890 or U.S. History since 1890 or Western Civilization II or American Government and Politics	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
CHM 124	General Chemistry II	3	CHEM 1320	General Chemistry II
CHM 314, 315	Organic Chemistry and Lab	4	CHEM 2210	Organic Chemistry I
CHM 324, 325	Organic Chemistry II and Lab	4	CHEM 2220	Organic Chemistry II (Will satisfy science elective requirement.)
CSC 111 or CSC 211	Fundamentals of Computer Science I or Fundamentals of Computer Science II	3	CS 1971, 1981 or CS 1570	Intro to Programming Method and Lab (C++) or Intro to Programming (C++)
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
<i>See your advisor for course options.</i>				Humanities/Social Science Elective
<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		20	Group 2 Major Requirements	
Group 1 Core Requirements		37	Group 1 Core Requirements	
Total Hours		57	Total Hours*	
			63	

*S&T advisor permission is required to transfer more than 63 credits toward the S&T Chemical Engineering degree.

Chemical Engineering - Biochemical Engineering Emphasis Group 2 Major Requirements

<u>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 103 or HIS 104 or HIS 106 or POL 211	U.S. History to 1890 or U.S. History since 1890 or Western Civilization II or American Government and Politics	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
CHM 124	General Chemistry II	3	CHEM 1320	General Chemistry II
CHM 314, 315	Organic Chemistry and Lab	4	CHEM 2210	Organic Chemistry I
CHM 324, 325	Organic Chemistry II and Lab	4	CHEM 2220	Organic Chemistry II (Will satisfy science elective requirement.)
CSC 111 or CSC 211	Fundamentals of Computer Science I or Fundamentals of Computer Science II	3	CS 1971, 1981 or CS 1570	Intro to Programming Method and Lab (C++) or Intro to Programming (C++)
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
<i>See your advisor for course options.</i>				Humanities/Social Science Elective
<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		20	Group 2 Major Requirements	
Group 1 Core Requirements		37	Group 1 Core Requirements	
Total Hours		57	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>Westminster College</u>	<u>Semester</u>			<u>Missouri S&T</u>	
SPE 101	3	Introduction to Speech		SPMS 1185	3
HIS 103 or		U.S. History to 1890 or		HISTORY 1300 or	
HIS 104 or		U.S. History since 1890 or		HISTORY 1310 or	
HIS 106 or	3	Western Civilization II or		HISTORY 1200 or	3
POL 211		American Government and Politics		POL SCI 1200	
GEO 108	4	Intro to Physical Geology and Lab		GEO 1110/GE 1150	3
EGR 230	3	Engineering Mechanics-Statics		CIV ENG 2200	3
MAT 313	3	Mathematical Probability and Statistics		STAT 3115	3
		<i>See your advisor for course options.</i>			
		<i>No free electives applied to the degree.</i>			
		Group 2 Major Requirements	16	Group 2 Major Requirements	18
		Group 1 Core Requirements	37	Group 1 Core Requirements	37
		Total Hours	53		Total Hours*
				Maximum Free Electives	0
				Engineering Statistics (Will be substituted for STAT 3113.)	3
				Humanities/Social Science Elective	3
					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>Westminster College</u>	<u>Semester</u>			<u>Missouri S&T</u>	
SPE 101	3	Introduction to Speech		SPMS 1185	3
HIS 103 or		U.S. History to 1890 or		HISTORY 1300 or	
HIS 104 or		U.S. History since 1890 or		HISTORY 1310 or	
HIS 106 or	3	Western Civilization II or		HISTORY 1200 or	3
POL 211		American Government and Politics		POL SCI 1200	
CSC 211	3	Fundamentals of Computer Science II		CS 1570	4
MAT 215	3	Linear Algebra		MATH 3108	3
MAT 313	3	Mathematical Probability and Statistics		STAT 3115	3
		<i>See your advisor for course options.</i>			
		<i>See your advisor for course options.</i>			
		Group 2 Major Requirements	15	Group 2 Major Requirements	22
		Group 1 Core Requirements	37	Group 1 Core Requirements	37
		Total Hours	52		Total Hours*
				Maximum Free Electives	3
				Engineering Statistics (Will be substituted for STAT 3117.)	3
				Humanities/Social Science Elective	3
					59

*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>Westminster College</u>	<u>Semester</u>			<u>Missouri S&T</u>	
SPE 101	3	Introduction to Speech		SPMS 1185	3
HIS 103 or		U.S. History to 1890 or		HISTORY 1300 or	
HIS 104 or		U.S. History since 1890 or		HISTORY 1310 or	
HIS 106 or	3	Western Civilization II or		HISTORY 1200 or	3
POL 211		American Government and Politics		POL SCI 1200	
CSC 211	3	Fundamentals of Computer Science II		CS 1570	4
MAT 215	3	Linear Algebra		MATH 3108	3
MAT 313	3	Mathematical Probability and Statistics		STAT 3115	3
		<i>See your advisor for course options.</i>			
		<i>See your advisor for course options.</i>			
		Group 2 Major Requirements	15	Group 2 Major Requirements	22
		Group 1 Core Requirements	37	Group 1 Core Requirements	37
		Total Hours	52		Total Hours*
				Maximum Free Electives	3
				Engineering Statistics (Will be substituted for STAT 3117.)	3
				Humanities/Social Science Elective	3
					59

*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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSY 112	Psychology as a Natural Science	3	PSYCH 1101	General Psychology	3
HIS 103 or	U.S. History to 1890 or		HISTORY 1300 or	American History to 1877 or	
HIS 104 or	U.S. History since 1890 or	3	HISTORY 1310 or	American History since 1877 or	3
HIS 106 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or	
POL 211	American Government and Politics		POL SCI 1200	American Government	
SPE 101	Introduction to Speech	3	SPMS 1185	Principles of Speech	3
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics	3
				Humanities/Social Science Elective	3
				Maximum Free Electives	3
				Group 2 Major Requirements	21
				Group 1 Core Requirements	37
Total Hours			52	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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
SPE 101	Introduction to Speech	3	SPMS 1185	Principles of Speech	3
HIS 103 or	U.S. History to 1890 or		HISTORY 1300 or	American History to 1877 (preferred) or	
HIS 104 or	U.S. History since 1890 or	3	HISTORY 1310 or	American History since 1877 (preferred) or	3
HIS 106	Western Civilization II		HISTORY 1200	Modern Western Civilization	
GEO 108	Intro to Physical Geology and Lab	4	GEO 1110/GE 1150	Intro to Physical Geology	3
CHM 124	General Chemistry II	3	CHEM 1320	General Chemistry II	3
BIO 105	Intro to Biology Principles	3	BIO SCI 1113	General Biology	4
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)	3
				Humanities/Social Science Elective	3
				Maximum Free Electives	0
				Group 2 Major Requirements	25
				Group 1 Core Requirements	37
Total Hours			59	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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
SPE 101	Introduction to Speech	3	SPMS 1185	Principles of Speech	3
HIS 103 or	U.S. History to 1890 or		HISTORY 1300 or	American History to 1877 or	
HIS 104 or	U.S. History since 1890 or	3	HISTORY 1310 or	American History since 1877 or	3
HIS 106 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or	
POL 211	American Government and Politics		POL SCI 1200	American Government	
GEO 108	Intro to Physical Geology and Lab	4	GEO 1110/GE 1119	Physical and Environmental Geology	3
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
BIO 105 or	Intro to Biology Principles or		BIO SCI 1113 or	General Biology or	
CHM 124 or	General Chemistry II or	3	CHEM 1320 or	General Chemistry II or	
CHM 314	Organic Chemistry I		CHEM 2210	Organic Chemistry I	
				or any 3-hour course in chemistry, geochemistry, or biology	
				Humanities/Social Science Elective	3
				Humanities/Social Science Elective	3
				Maximum Free Electives	0
				Group 2 Major Requirements	18
				Group 1 Core Requirements	37
Total Hours			53	Total Hours*	
				55	

*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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 103 or HIS 104 or HIS 106 or	U.S. History to 1890 or U.S. History since 1890 or Western Civilization II or	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or	American History to 1877 or American History since 1877 or Modern Western Civilization or
POL 211 SPE 101	American Government and Politics Introduction to Speech	3	POL SCI 1200 SPMS 1185	American Government Principles of Speech
CSC 111 or CSC 211	Fundamentals of Computer Science I or Fundamentals of Computer Science II	3	CS 1971, 1981 or CS 1570	Intro to Programming Method and Lab (C++) or Intro to Programming (C++)
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MAT 215 or MAT 313	Linear Algebra or Mathematical 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>
			Literature 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		6	Group 2 Major Requirements	
Group 1 Core Requirements		37	Group 1 Core Requirements	
Total Hours		43	Total Hours*	
			12	
			37	
			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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
SPE 101	Introduction to Speech	3	SPMS 1185	Principles of Speech
HIS 103 or HIS 104 or HIS 106 or	U.S. History to 1890 or U.S. History since 1890 or Western Civilization II or	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or	American History to 1877 or American History since 1877 or Modern Western Civilization or
POL 211 EGR 230	American Government and Politics Engineering Mechanics-Statics	3	POL SCI 1200 CIV ENG 2200	American Government Engineering Mechanics-Statics
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics
CHM 124	General Chemistry II	3	CHEM 1320	General Chemistry II
CHM 314, 315	Organic Chemistry and Lab	4	CHEM 2210	Organic Chemistry I <small>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement</small>
<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	5
Group 2 Major Requirements		19	Group 2 Major Requirements	
Group 1 Core Requirements		37	Group 1 Core Requirements	
Total Hours		56	Total Hours*	
			29	
			37	
			66	

*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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 103 or	U.S. History to 1890 or		HISTORY 1300 or	American History to 1877 or
HIS 104 or	U.S. History since 1890 or	3	HISTORY 1310 or	American History since 1877 or
HIS 106 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
POL 211	American Government and Politics		POL SCI 1200	American Government
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics
GEO 108	Intro to Physical Geology and Lab	4	GEO 1110/GE 1150	Intro to Physical Geology
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective
	<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	10		Group 2 Major Requirements
	Group 1 Core Requirements	37		Group 1 Core Requirements
	Total Hours	47		Total Hours*
				52

*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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 103 or	U.S. History to 1890 or		HISTORY 1300 or	American History to 1877 or
HIS 104 or	U.S. History since 1890 or	3	HISTORY 1310 or	American History since 1877 or
HIS 106 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
POL 211	American Government and Politics		POL SCI 1200	American Government
CSC 111 or	Fundamentals of Computer Science I or	3	CS 1971, 1981 or	Intro to Programming Method and Lab (C++) or
CSC 211	Fundamentals of Computer Science II		CS 1570	Intro to Programming (C++)
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective
	<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	12		Group 2 Major Requirements
	Group 1 Core Requirements	37		Group 1 Core Requirements
	Total Hours	49		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>Westminster College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 103 or	U.S. History to 1890 or		HISTORY 1300 or	American History to 1877 or
HIS 104 or	U.S. History since 1890 or	3	HISTORY 1310 or	American History since 1877 or
HIS 106 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
POL 211	American Government and Politics		POL SCI 1200	American Government
GEO 108	Intro to Physical Geology and Lab	4	GEO 1110/GE 1119	Physical and Environmental Geology
EGR 230	Engineering Mechanics-Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MAT 313	Mathematical Probability and Statistics	3	STAT 3115	Engineering Statistics
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective
	<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	10		Group 2 Major Requirements
	Group 1 Core Requirements	37		Group 1 Core Requirements
	Total Hours	47		Total Hours*
				52

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