

# Rockhurst 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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
MT 1800	Calculus I	4	MATH 1214	Calculus for Engineers I	4
MT 1810	Calculus II	4	MATH 1215	Calculus for Engineers II	4
MT 2800	Calculus III	4	MATH 2222	Calculus with Analytic Geometry III	4
MT 3700	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PH 2800, 2810	General Physics I and Lab	4	PHYSICS 1135	Engineering Physics I	4
PH 2900, 2910	General Physics II and Lab	4	PHYSICS 2135	Engineering Physics II	4
CH 2610,	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
ES 001	Intro Engineering	1	FR ENG 1100	Study and Careers in Engineering	1
EN 1110	College Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
EC 2100 or	Principles of Microeconomics or	3	ECON 1100 or	Principles of Microeconomics or	3
EC 2000	Principles of Macroeconomics		ECON 1200	Principles of Macroeconomics	3
<b>Total Hours</b>		<b>34</b>	<b>Total Hours</b>		<b>35</b>

### 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](http://ugs.mst.edu). Your campus may have additional acceptable options. Consult with your advisor or email [transfer@mst.edu](mailto:transfer@mst.edu) with questions.

## Aerospace Engineering Group 2 Major Requirements

Partner School		Semester	Missouri S&T	
HS 2100 or HS 2500 or HS 1500 or PS 1100	History of the US I or History of the US II or Survey of Western Civilization II or Introduction to 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
EN 1120 or CT 2000	College Composition II or Fundamentals of Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Public Speaking
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
ES 3400	Engineering Thermodynamics	3	MECH ENG 2519	Thermodynamics
MT 3810 or MT 3400	Linear Alegbra or Probability and Stat I	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics (Will satisfy the Advanced Math/Comp Sci elective requirement.)
<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		34	Group 1 Core Requirements	
Total Hours		49	Total Hours*	
			56	

\*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

Partner School		Semester	Missouri S&T	
HS 1500* (or HS 2100 or HS 2500)	Survey of Western Civilization II* (History of the US I or of the US II)	History 3	HISTORY 1200* (or HISTORY 1300 or HISTORY 1310)	Modern Western Civilization* (or American History to 1877 or American History since 1877) *HISTORY 1200 is preferred; 1300 or 1310 will also be accepted.
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
EN 1120 or CT 2000	College Composition II or Fundamentals of Communication	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
PH 1610 or PH 4500	Introductory Astronomy or Physics	Modern 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) Applies to the degree as a basic science 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		34	Group 1 Core Requirements	
Total Hours		49	Total Hours*	
			50	

\*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>Partner School</u>	<u>Semester</u>	<u>Missouri S&amp;T</u>
HS 2100 or HS 2500 or HS 1500 or PS 1100 ES 3500	History of the US I or History of the US II or Survey of Western Civilization II or Introduction to Politics Engineering Statics 3 3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200 CIV ENG 2200 American History to 1877 or American History since 1877 or Modern Western Civilization or American Government Engineering Mechanics-Statics 3 5
CH 2710, 2720 CH 2630 MT 3400	Organic Chemistry I and Lab General Chemistry II Probability and Stat I 4 3 3	CHEM 2210/2219 CHEM 1320 STAT 3115 ENGLISH 1160 or SPMS 1185 or HSS Elective Organic Chemistry I and Lab (Not a specific requirement. Will satisfy technical elective requirement.) General Chemistry II Engineering Statistics Writing and Research or Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine Humanities/Social Science Elective 3 3 3 3 3 3
<i>See your advisor for course options.</i> <i>No free electives applied to the degree.</i>		Maximum Free Electives 0
Group 2 Major Requirements 19 Group 1 Core Requirements 34 <b>Total Hours 53</b>		Group 2 Major Requirements 23 Group 1 Core Requirements 35 <b>Total Hours* 58</b>

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

## Chemical Engineering Group 2 Major Requirements

<u>Partner School</u>	<u>Semester</u>	<u>Missouri S&amp;T</u>
EN 1120 HS 2100 or HS 2500 or HS 1500 or PS 1100 CH 2630 CH 2710 CH 2730 MT 3400	College Composition II History of the US I or History of the US II or Survey of Western Civilization II or Introduction to Politics General Chemistry II Organic Chemistry I Organic Chemistry II Probability and Stat I 3 3 3 4 4 3	ENGLISH 1160 HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200 CHEM 1320 CHEM 2210 CHEM 2220 STAT 3115 Writing and Research American History to 1877 or American History since 1877 or Modern Western Civilization or American Government General Chemistry II Organic Chemistry I Organic Chemistry II (Will satisfy science elective requirement.) Engineering Statistics (Will be substituted for STAT 3113.) Humanities/Social Science Elective Humanities/Social Science Elective Maximum Free Electives 3 3 3 3 3 3 3 3 3 3 0
<i>See your advisor for course options.</i> <i>See your advisor for course options.</i> <i>No free electives applied to the degree.</i>		Maximum Free Electives 0
Group 2 Major Requirements 20 Group 1 Core Requirements 34 <b>Total Hours 54</b>		Group 2 Major Requirements 26 Group 1 Core Requirements 35 <b>Total Hours* 61</b>

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

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

<u>Partner School</u>	<u>Semester</u>	<u>Missouri S&amp;T</u>
EN 1120 HS 2100 or HS 2500 or HS 1500 or PS 1100 CH 2630 CH 2710 CH 2730 MT 3400	College Composition II History of the US I or History of the US II or Survey of Western Civilization II or Introduction to Politics General Chemistry II Organic Chemistry I Organic Chemistry II Probability and Stat I 3 3 3 4 4 3	ENGLISH 1160 HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200 CHEM 1320 CHEM 2210 CHEM 2220 STAT 3115 Writing and Research American History to 1877 or American History since 1877 or Modern Western Civilization or American Government General Chemistry II Organic Chemistry I Organic Chemistry II (Will satisfy science elective requirement.) Engineering Statistics (Will be substituted for STAT 3113.) Humanities/Social Science Elective Humanities/Social Science Elective Maximum Free Electives 3 3 3 3 3 3 3 3 3 3 0
<i>See your advisor for course options.</i> <i>See your advisor for course options.</i> <i>No free electives applied to the degree.</i>		Maximum Free Electives 0
Group 2 Major Requirements 20 Group 1 Core Requirements 34 <b>Total Hours 54</b>		Group 2 Major Requirements 26 Group 1 Core Requirements 35 <b>Total Hours* 61</b>

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
EN 1120 or	College Composition II or	3	ENGLISH 1160 or	Writing and Research or
CT 2000	Fundamentals of Communication		SPMS 1185	Public Speaking
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 or
HS 2500 or	History of the US II or	3	HISTORY 1310 or	American History since 1877 or
HS 1500 or	Survey of Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
PS 1100	Introduction to Politics		POL SCI 1200	American Government
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
<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		12	Group 2 Major Requirements	
Group 1 Core Requirements		34	Group 1 Core Requirements	
Total Hours		46	Total Hours*	
			50	

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
CT 2000	Fundamentals of Communication	3	SPMS 1185	Public Speaking
EN 1120	College Composition II	3	ENGLISH 1160	Writing and Research
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 or
HS 2500 or	History of the US II or	3	HISTORY 1310 or	American History since 1877 or
HS 1500 or	Survey of Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
PS 1100	Introduction to Politics		POL SCI 1200	American Government
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MT 3810	Linear Algebra	3	MATH 3108	Linear Algebra (Will satisfy a required math elective.)
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3117.)
<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		18	Group 2 Major Requirements	
Group 1 Core Requirements		34	Group 1 Core Requirements	
Total Hours		52	Total Hours*	
			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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
CT 2000	Fundamentals of Communication	3	SPMS 1185	Public Speaking
EN 1120	College Composition II	3	ENGLISH 1160	Writing and Research
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 or
HS 2500 or	History of the US II or	3	HISTORY 1310 or	American History since 1877 or
HS 1500 or	Survey of Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or
PS 1100	Introduction to Politics		POL SCI 1200	American Government
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MT 3810	Linear Algebra	3	MATH 3108	Linear Algebra
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3117.)
<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		18	Group 2 Major Requirements	
Group 1 Core Requirements		34	Group 1 Core Requirements	
Total Hours		52	Total Hours*	
			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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
PY 1000	Intro to Psychology	3	PSYCH 1101	General Psychology	3
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 or	
HS 2500 or	History of the US II or	3	HISTORY 1310 or	American History since 1877 or	
HS 1500 or	Survey of Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or	3
PS 1100	Introduction to Politics		POL SCI 1200	American Government	
EN 1120 or	College Composition II or	3	ENGLISH 1160 or	Writing and Research or	
CT 2000	Fundamentals of Communication		SPMS 1185	Public Speaking	3
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ES 3400	Engineering Thermodynamics	3	MECH 2527	Thermal Analysis	3
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics	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		18	Group 2 Major Requirements		24
Group 1 Core Requirements		34	Group 1 Core Requirements		35
Total Hours		52	Total Hours*		59

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
EN 1120 or	College Composition II or	3	ENGLISH 1160 or	Writing and Research or	
CT 2000	Fundamentals of Communication		SPMS 1185	Public Speaking	3
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 (preferred) or	
HS 2500 or	History of the US II or	3	HISTORY 1310 or	American History since 1877 (preferred) or	3
HS 1500	Survey of Western Civilization II		HISTORY 1200	Modern Western Civilization	
CH 2630	General Chemistry II	3	CHEM 1320	General Chemistry II	3
BL 1250	General Biology	3	BIO SCI 1113	General Biology	4
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)	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		18	Group 2 Major Requirements		22
Group 1 Core Requirements		34	Group 1 Core Requirements		35
Total Hours		52	Total Hours*		57

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
EN 1120 or	College Composition II or	3	ENGLISH 1160 or	Writing and Research or	
CT 2000	Fundamentals of Communication		SPMS 1185	Public Speaking	3
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 or	
HS 2500 or	History of the US II or	3	HISTORY 1310 or	American History since 1877 or	3
HS 1500 or	Survey of Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or	
PS 1100	Introduction to Politics		POL SCI 1200	American Government	
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
BL 1250 or	General Biology or		BIO SCI 1113 or	General Biology or	
CH 2630 or	General Chemistry II or		CHEM 1320 or	General Chemistry II or	
CH 2710	Organic Chemistry I		CHEM 2210	Organic Chemistry I	
<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		9	Group 2 Major Requirements		15
Group 1 Core Requirements		34	Group 1 Core Requirements		35
Total Hours		43	Total Hours*		50

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
HS 2100 or HS 2500 or HS 1500 or	History of the US I or History of the US II or Survey of 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
PS 1100	Introduction to Politics		POL SCI 1200	American Government
EN 1120 or CT 2000	College Composition II or Fundamentals of Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Public Speaking
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MT 3810 or MT 3400	Linear Alegbra or Probability and Stat I	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
				Humanities/Social Science Elective
				Maximum Free Electives
		6	Group 2 Major Requirements	
		34	Group 1 Core Requirements	
Total Hours		40	Total Hours*	
			12	
			35	
			47	

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
EN 1120 or CT 2000	College Composition II or Fundamentals of Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Public Speaking
HS 2100 or HS 2500 or HS 1500 or PS 1100	History of the US I or History of the US II or Survey of Western Civilization II or Introduction to 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
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics
CH 2630	General Chemistry II	3	CHEM 1320	General Chemistry II
CH 2720	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>
				Humanities/Social Science Elective
				Humanities/Social Science Elective
				Maximum Free Electives
		18	Group 2 Major Requirements	
		34	Group 1 Core Requirements	
Total Hours		52	Total Hours*	
			29	
			35	
			64	

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
EN 1120	College Composition II	3	ENGLISH 1160	Writing and Research	3
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 or	
HS 2500 or	History of the US II or		HISTORY 1310 or	American History since 1877 or	
HS 1500 or	Survey of Western Civilization II or	3	HISTORY 1200 or	Modern Western Civilization or	3
PS 1100	Introduction to Politics		POL SCI 1200	American Government	
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics	3
ES 3500	Engineering 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>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	12		Group 2 Major Requirements	18
	Group 1 Core Requirements	34		Group 1 Core Requirements	35
	Total Hours	46		Total Hours*	53

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
EN 1120	College Composition II	3	ENGLISH 1160	Writing and Research	3
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 or	
HS 2500 or	History of the US II or		HISTORY 1310 or	American History since 1877 or	
HS 1500 or	Survey of Western Civilization II or	3	HISTORY 1200 or	Modern Western Civilization or	3
PS 1100	Introduction to Politics		POL SCI 1200	American Government	
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics	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	24
	Group 1 Core Requirements	34		Group 1 Core Requirements	35
	Total Hours	46		Total Hours*	59

\*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
EN 1120	College Composition II	3	ENGLISH 1160	Writing and Research	3
HS 2100 or	History of the US I or		HISTORY 1300 or	American History to 1877 or	
HS 2500 or	History of the US II or		HISTORY 1310 or	American History since 1877 or	
HS 1500 or	Survey of Western Civilization II or	3	HISTORY 1200 or	Modern Western Civilization or	3
PS 1100	Introduction to Politics		POL SCI 1200	American Government	
ES 3500	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MT 3400	Probability and Stat I	3	STAT 3115	Engineering Statistics	3
ES 3400	Engineering Thermodynamics	3	MECH ENG 2527	Thermal Analysis	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	9		Group 2 Major Requirements	15
	Group 1 Core Requirements	34		Group 1 Core Requirements	35
	Total Hours	43		Total Hours*	50

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