

Central Methodist 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>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
MA 118	Calculus and Analytical Geometry I	5	MATH 1214	Calculus for Engineers I	Grade of C or better is required. 4
MA 209	Calculus and Analytical Geometry II	5	MATH 1215	Calculus for Engineers II	Grade of C or better is required. 4
MA 308	Calculus and Analytical Geometry III	5	MATH 2222	Calculus with Analytic Geometry III	Grade of C or better is required. 4
MA 315	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PH 205, 205L	Calculus Physics I and Lab	5	PHYSICS 1135	Engineering Physics I	Grade of C or better is required. 4
PH 206, 206L	Calculus Physics II and Lab	5	PHYSICS 2135	Engineering Physics II	Grade of C or better is required. 4
CH 111	General Chemistry	4	CHEM 1310, 1319	General Chemistry I and Lab	5
EN 101	Composition and Rhetoric	3	ENGLISH 1120	Exposition and Argumentation	3
EC 202 or EC 201	Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours		38	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 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>Central Methodist University</u>	<u>Semester</u>		<u>Missouri S&T</u>	
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
EN 305 or CT 101 or EN 306	Expository Writing or Communication Skills or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
CS 172 or CS 235	Structured Programming I or Object Oriented Programming	4	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)	3
MA 318	Linear Algebra	3	MATH 3108	Linear Algebra I <small>(Will satisfy the Advanced Math/Comp Sci elective requirement.)</small>	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	13		Group 2 Major Requirements	18
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	51		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>Central Methodist University</u>	<u>Semester</u>		<u>Missouri S&T</u>	
HI 102 or HI 117 or HI 118	Modern Western Civilization or Development of the US I or Development of the US II	3	HISTORY 1200* <small>(or HISTORY 1300 or HISTORY 1310)</small>	Modern Western Civilization* <small>(or American History to 1877 or American History since 1877)</small> <small>*HISTORY 1200 is preferred; 1300 or 1310 will also be accepted.</small>	3
EN 305 or CT 101 or HSS elective	Expository Writing or Communication Skills 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 Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language Principles of Biology or	3
BIO 101 or AS 102 or PH 307	General Biology or Descriptive Astronomy or Modern Physics	4	BIO SCI 1213 or 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>	3
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	10		Group 2 Major Requirements	9
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	48		Total Hours*	43

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

Ceramic Engineering Group 2 Major Requirements

<u>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
CH 341, 342	Organic Chemistry and Lab	4	CHEM 2210/2219	Organic Chemistry I and Lab <small>(Not a specific requirement. Will satisfy technical elective requirement.)</small>	5
CH 114	General Chemistry II	4	CHEM 1320	General Chemistry II	3
EN 305 or CT 101 or HSS elective	Expository Writing or Communication Skills 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> <i>No free electives applied to the degree.</i>	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 Humanities/Social Science Elective	3
				Maximum Free Electives	0
	Group 2 Major Requirements	14		Group 2 Major Requirements	17
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	52		Total Hours*	51

*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>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EN 305 or EN 306	Expository Writing or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
CH 114	General Chemistry II	4	CHEM 1320	General Chemistry II	5
CH 341, 342	Organic Chemistry and Lab	4	CHEM 2210	Organic Chemistry I	3
CH 342	Organic Chemistry II and Lab	4	CHEM 2220	Organic Chemistry II <small>(Will satisfy science elective requirement.)</small>	3
CS 172 or CS 235	Structured Programming I or Object Oriented Programming	4	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (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	22		Group 2 Major Requirements	26
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	60		Total Hours*	60

*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>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EN 305 or EN 306	Expository Writing or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
CH 114	General Chemistry II	4	CHEM 1320	General Chemistry II	5
CH 341, 342	Organic Chemistry and Lab	4	CHEM 2210	Organic Chemistry I	3
CH 342	Organic Chemistry II and Lab	4	CHEM 2220	Organic Chemistry II <small>(Will satisfy science elective requirement.)</small>	3
CS 172 or CS 235	Structured Programming I or Object Oriented Programming	4	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (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	22		Group 2 Major Requirements	26
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	60		Total Hours*	60

*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>Central Methodist University</u>	<u>Semester</u>		<u>Missouri S&T</u>	
EN 305 or CT 101 or EN 306	Expository Writing or Communication Skills or Technical Writing	3		ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	3		HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	3
GL 101	Geology	3		GEO 1110/GE 1150	3
	<i>See your advisor for course options.</i>			Intro to Physical Geology	3
	<i>No free electives applied to the degree.</i>			Humanities/Social Science Elective	3
				Maximum Free Electives	0
	Group 2 Major Requirements	9		Group 2 Major Requirements	12
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	47		Total Hours*	46

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

Computer Engineering Group 2 Major Requirements

	<u>Central Methodist University</u>	<u>Semester</u>		<u>Missouri S&T</u>	
CT 101	Communication Skills	3		SPMS 1185	3
EN 305 or EN 306	Expository Writing or Technical Writing	3		ENGLISH 1160 or ENGLISH 3560	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	3		HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	3
MA 107	Discrete Math	3		CS 1200	3
CS 235	Object Oriented Programming	3		CS 1570, 1580	4
CS 342	Data Structures	3		CS 1575	3
MA 318	Linear Algebra	3		MATH 3108	3
	<i>See your advisor for course options.</i>			Linear Algebra (Will satisfy a required math elective.)	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
				Maximum Free Electives	3
	Group 2 Major Requirements	21		Group 2 Major Requirements	28
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	59		Total Hours*	62

*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>Central Methodist University</u>	<u>Semester</u>		<u>Missouri S&T</u>	
CT 101	Communication Skills	3		SPMS 1185	3
EN 305 or EN 306	Expository Writing or Technical Writing	3		ENGLISH 1160 or ENGLISH 3560	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	3		HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	3
CS 235	Object Oriented Programming	3		CS 1570, 1580	4
MA 318	Linear Algebra	3		MATH 3108	3
	<i>See your advisor for course options.</i>			Linear Algebra	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
				Maximum Free Electives	3
	Group 2 Major Requirements	15		Group 2 Major Requirements	22
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	53		Total Hours*	56

*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>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PY 101	General Psychology	3	PSYCH 1101	General Psychology	3
HI 117 or HI 118 or HI 102 or	Development of the US I or Development of the US II or Modern Western Civilization 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	3
PS 101	Intro to American Nat, State, and Local Govt		POL SCI 1200	American Government	
EN 305 or CT 101 or EN 306	Expository Writing or Communication Skills or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	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	9		Group 2 Major Requirements	15
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	47		Total Hours*	49

*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>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EN 305 or CT 101 or EN 306	Expository Writing or Communication Skills or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HI 117 or HI 118 or HI 102	Development of the US I or Development of the US II or Modern Western Civilization	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 (preferred) or American History since 1877 (preferred) or Modern Western Civilization	3
GL 101	Geology	3	GEO 1110/GE 1150	Intro to Physical Geology	3
CH 114	General Chemistry II	4	CHEM 1320	General Chemistry II	3
BI 101	General Biology	4	BIO SCI 1113	General Biology	4
	<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	17		Group 2 Major Requirements	19
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	55		Total Hours*	53

*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>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EN 305 or CT 101 or EN 306	Expository Writing or Communication Skills or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HI 117 or HI 118 or HI 102 or	Development of the US I or Development of the US II or Modern Western Civilization 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	3
PS 101	Intro to American Nat, State, and Local Govt		POL SCI 1200	American Government	
GL 101	Geology	3	GEO 1110, 119	Physical and Environmental Geology	3
BI 101 or CH 114 or CH 341	General Biology or Chemistry II or Organic Chemistry	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>			<i>or any 3-hour course in chemistrv. geochemistrv. or biologv</i>	
	<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
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	13		Group 2 Major Requirements	15
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	51		Total Hours*	49

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

Mechanical Engineering Group 2 Major Requirements

	<u>Central Methodist University</u>	<u>Semester</u>		<u>Missouri S&T</u>	
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
EN 305 or CT 101 or EN 306	Expository Writing or Communication Skills or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
CS 172 or CS 235	Structured Programming I or Object Oriented Programming	4	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)	3 4
MA 318	Linear Algebra	3	MATH 3108	Linear Algebra	3
				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	3		Group 2 Major Requirements	9
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	41		Total Hours*	43

*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>Central Methodist University</u>	<u>Semester</u>		<u>Missouri S&T</u>	
EN 305 or CT 101 or EN 306	Expository Writing or Communication Skills or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
CH 114	General Chemistry II	4	CHEM 1320 CHEM 2210	General Chemistry II Organic Chemistry I	3 3
CH 341, 342	Organic Chemistry and Lab	4		<i>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement</i>	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	5
	Group 2 Major Requirements	14		Group 2 Major Requirements	23
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	52		Total Hours*	57

*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>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EN 305 or EN 306	Expository Writing or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
GL 101	Geology	3	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	9		Group 2 Major Requirements	15
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	47		Total Hours*	49

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

Nuclear Engineering Group 2 Major Requirements

<u>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EN 305 or EN 306	Expository Writing or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
CS 172 or CS 235	Structured Programming I or Object Oriented Programming	4	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)	3 4
	<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	10		Group 2 Major Requirements	18
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	48		Total Hours*	52

*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>Central Methodist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EN 305 or EN 306	Expository Writing or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HI 117 or HI 118 or HI 102 or PS 101	Development of the US I or Development of the US II or Modern Western Civilization or Intro to American Nat, State, and Local Govt	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	3
GL 101	Geology	3	GEO 1110, 1119	Physical and Environmental 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	3		Group 2 Major Requirements	9
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	41		Total Hours*	43

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