

Moberly Area Community 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>Partner School</u>		<u>Semester</u>	<u>Missouri S&T</u>		
MTH 201	Analytic Geometry and Calculus I	5	MATH 1214	Calculus for Engineers I <small>Grade of C or better is required.</small>	4
MTH 202	Analytic Geometry and Calculus II	5	MATH 1215	Calculus for Engineers II <small>Grade of C or better is required.</small>	4
MTH 203	Analytic Geometry and Calculus III	5	MATH 2222	Calculus with Analytic Geometry III <small>Grade of C or better is required.</small>	4
MTH 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHY 201	College Physics I	5	PHYSICS 1135	Engineering Physics I <small>Grade of C or better is required.</small>	4
PHY 202	College Physics II	5	PHYSICS 2135	Engineering Physics II <small>Grade of C or better is required.</small>	4
PHY 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
LAL 101	English I	3	ENGLISH 1120	Exposition and Argumentation	3
ECN 102 or ECN 101	Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours		39			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

Partner School	Semester	Missouri S&T	
HST 105 or HST 106 or HST 102 or PCS 103 or PSC 105	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
LAL 102 or SPK 101 or IND 120	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing
CIT 105 or CIT 205	3	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)
EGN 201	3	CIV ENG 2200	Engineering Mechanics-Statics
MTH 220	3	STAT 3115	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			Group 2 Major Requirements
Group 1 Core Requirements			Group 1 Core Requirements
Total Hours			Total Hours*
	15		21
	39		34
	54		55

*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

Partner School	Semester	Missouri S&T	
HST 102 or HST 105 or HST 106	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>
EGN 201	3	CIV ENG 2200	Engineering Mechanics-Statics
MTH 220	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
LAL 102 or SPK 101 or HSS Elective	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
PHY 263 or PHY 262	3	GEOLOGY 1111 or PHYSICS 1505 or	Intro to Physical Geology or Introductory Astronomy or (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			Group 2 Major Requirements
Group 1 Core Requirements			Group 1 Core Requirements
Total Hours			Total Hours*
	15		15
	39		34
	54		49

*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>Partner School</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HST 105 or HST 106 or HST 102 or PCS 103 or PSC 105 EGN 201	American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government Statics	3 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
PHY 222	Organic Chemistry I	5	CHEM 2210/2219	Organic Chemistry I and Lab (Not a specific requirement. Will satisfy technical elective requirement.)
PHY 122	General Chemistry II	5	CHEM 1320	General Chemistry II
MTH 220	Probability and Statistics - Calc Based	3	STAT 3115	Engineering Statistics
LAL 102 or SPK 101 or HSS Elective	Exposition or Public Speaking I or See your advisor for course options.	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
<i>See your advisor for course options.</i>				3
<i>No free electives applied to the degree.</i>				0
	Group 2 Major Requirements	22		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	61		Total Hours*
				57

*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&T</u>	
LAL 102 or IND 120 HST 105 or HST 106 or HST 102 or PCS 103 or PSC 105 PHY 122 PHY 222	Exposition or Technical Report Writing American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government General Chemistry II Organic Chemistry I	3 3 5 5	ENGLISH 1160 or ENGLISH 3560 HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	Writing and Research or Technical Writing American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
CIT 105 or CIT 205	Programming I or Programming II	3	CHEM 1320 CHEM 2210 CS 1971, 1981 or CS 1972, 1982 or CS 1570, 1580	General Chemistry II Organic Chemistry I Intro to Programming Method and Lab (C++) or Intro to MATLAB Programming and Lab or Intro to Programming and Lab (C++)
MTH 220	Probability and Statistics - Calc Based	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.) Humanities/Social Science Elective Humanities/Social Science Elective
<i>See your advisor for course options.</i>				3
<i>See your advisor for course options.</i>				3
<i>No free electives applied to the degree.</i>				0
	Group 2 Major Requirements	22		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	61		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>Partner School</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or IND 120 HST 105 or HST 106 or HST 102 or PCS 103 or PSC 105 PHY 122 PHY 222	Exposition or Technical Report Writing American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government General Chemistry II Organic Chemistry I	3 3 5 5	ENGLISH 1160 or ENGLISH 3560 HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	Writing and Research or Technical Writing American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
CIT 105 or CIT 205	Programming I or Programming II	3	CHEM 1320 CHEM 2210 CS 1971, 1981 or CS 1972, 1982 or CS 1570, 1580	General Chemistry II Organic Chemistry I Intro to Programming Method and Lab (C++) or Intro to MATLAB Programming and Lab or Intro to Programming and Lab (C++)
MTH 220	Probability and Statistics - Calc Based	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.) Humanities/Social Science Elective Humanities/Social Science Elective
<i>See your advisor for course options.</i>				3
<i>See your advisor for course options.</i>				3
<i>No free electives applied to the degree.</i>				0
	Group 2 Major Requirements	22		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	61		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>Partner School</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or SPK 101 or IND 120 HST 105 or HST 106 or HST 102 or PCS 103 or PSC 105 PHY 263 EGN 201	Exposition or Public Speaking I or Technical Report Writing American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government Geology Statics	3 3 3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560 HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200 GEO 1111/GE 1150 CIV ENG 2200 STAT 3115	Writing and Research or Public Speaking or Technical Writing American History to 1877 or American History since 1877 or Modern Western Civilization or American Government Intro to Physical Geology Engineering Mechanics-Statics Engineering Statistics (Will be substituted for STAT 3113.) Humanities/Social Science Elective Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements
	<i>See your advisor for course options.</i> <i>No free electives applied to the degree.</i>			3 3 3 3 0 18 34
	Group 2 Major Requirements Group 1 Core Requirements	16 39		0 18 34
	Total Hours	55		Total Hours* 52

*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&T</u>	
SPK 101 LAL 102 or IND 120 HST 105 or HST 106 or HST 102 or PCS 103 or PSC 105 CIT 205 CIS 208 EGN 201 MTH 220	Public Speaking I Exposition or Technical Report Writing American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government Programming II Data Structures I Statics Probability and Statistics - Calc Based	3 3 3 3 3 3 3 3 3 3 3	SPMS 1185 ENGLISH 1160 or ENGLISH 3560 HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200 CS 1570, 1580 CS 1575 CIV ENG 2200 STAT 3115	Public Speaking Writing and Research or Technical Writing American History to 1877 or American History since 1877 or Modern Western Civilization or American Government Intro to Programming and Lab (C++) Data Structures Engineering Mechanics-Statics (Can be combined with MECH ENG 2350 for an Engineering science elective.) Engineering Statistics (Will be substituted for STAT 3117.) Humanities/Social Science Elective Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements
	<i>See your advisor for course options.</i> <i>See your advisor for course options.</i>			4 3 3 3 3 3 3 28 34
	Group 2 Major Requirements Group 1 Core Requirements	21 39		3 3 3 28 34
	Total Hours	60		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>Partner School</u>		<u>Semester</u>	<u>Missouri S&T</u>	
SPK 101 LAL 102 or IND 120 HST 105 or HST 106 or HST 102 or PCS 103 or PSC 105 CIT 205 EGN 201 MTH 220	Public Speaking I Exposition or Technical Report Writing American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government Programming II Statics Probability and Statistics - Calc Based	3 3 3 3 3 3 3 3 3 3	SPMS 1185 ENGLISH 1160 or ENGLISH 3560 HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200 CS 1570, 1580 CIV ENG 2200 STAT 3115	Public Speaking Writing and Research or Technical Writing American History to 1877 or American History since 1877 or Modern Western Civilization or American Government Intro to Programming and Lab (C++) Engineering Mechanics-Statics (Can be combined with MECH ENG 2350 for an Engineering science elective.) Engineering Statistics (Will be substituted for STAT 3117.) Humanities/Social Science Elective Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements
	<i>See your advisor for course options.</i> <i>See your advisor for course options.</i>			4 3 3 3 3 25 34
	Group 2 Major Requirements Group 1 Core Requirements	18 39		3 3 3 25 34
	Total Hours	57		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&T</u>		
PSY 101	General Psychology	3	PSYCH 1101	General Psychology	3
HST 105 or	American History to 1865 or		HISTORY 1300 or	American History to 1877 or	
HST 106 or	American History from 1865 or		HISTORY 1310 or	American History since 1877 or	3
HST 102 or	Western Civilization II or	3	HISTORY 1200 or	Modern Western Civilization or	
PCS 103 or	American Government or		POL SCI 1200	American Government	
PSC 105	Functions & Policies of American Government		ENGLISH 1160 or	Writing and Research or	
LAL 102 or	Exposition or		SPMS 1185 or	Principles of Speech or	3
SPK 101 or	Public Speaking I or	3	ENGLISH 3560	Technical Writing	
IND 120	Technical Report Writing		CIV ENG 2200	Engineering Mechanics-Statics	3
EGN 201	Statics	3	STAT 3115	Engineering Statistics	3
MTH 220	Probability and Statistics - Calc Based	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Maximum Free Electives	3
	<i>See your advisor for course options.</i>			Group 2 Major Requirements	21
	Group 2 Major Requirements	15		Group 1 Core Requirements	14
	Group 1 Core Requirements	39		Total Hours*	55
	Total Hours	54			

*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&T</u>		
LAL 102 or	Exposition or		ENGLISH 1160 or	Writing and Research or	
SPK 101 or	Public Speaking I or	3	SPMS 1185 or	Public Speaking or	3
IND 120	Technical Report Writing		ENGLISH 3560	Technical Writing	
HST 105 or	American History to 1865 or		HISTORY 1300 or	American History to 1877 (preferred) or	
HST 106 or	American History from 1865 or	3	HISTORY 1310 or	American History since 1877 (preferred) or	3
HST 102	Western Civilization II or		HISTORY 1200	Modern Western Civilization	
PHY 263	Geology	4	GEO 1111/GE 1150	Intro to Physical Geology	3
PHY 122	General Chemistry II	5	CHEM 1320	General Chemistry II	3
BIO 101	Biology	4	BIO SCI 1113	General Biology	4
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MTH 220	Probability and Statistics - Calc Based	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	25		Group 2 Major Requirements	25
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	64		Total Hours*	59

*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&T</u>		
LAL 102 or	Exposition or		ENGLISH 1160 or	Writing and Research or	
SPK 101 or	Public Speaking I or	3	SPMS 1185 or	Public Speaking or	3
IND 120	Technical Report Writing		ENGLISH 3560	Technical Writing	
HST 105 or	American History to 1865 or		HISTORY 1300 or	American History to 1877 or	
HST 106 or	American History from 1865 or		HISTORY 1310 or	American History since 1877 or	3
HST 102 or	Western Civilization II or	3	HISTORY 1200 or	Modern Western Civilization or	
PCS 103 or	American Government or		POL SCI 1200	American Government	
PSC 105	Functions & Policies of American Government		CIV ENG 2200	Engineering Mechanics-Statics	3
EGN 201	Statics	3	BIO SCI 1113 or	General Biology or	
BIO 101 or	Biology or		CHEM 1320 or	General Chemistry II or	3
PHY 122 or	General Chemistry II or		CHEM 2210	Organic Chemistry I	
PHY 222	Organic Chemistry I			<i>or any 3-hour course in chemistry, geochemistry, or biology</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	18
	Group 1 Core Requirements	39		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 Geological Engineering degree.

Mechanical Engineering Group 2 Major Requirements

<u>Partner School</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HSI 105 or HST 106 or HST 102 or PCS 103 or PSC 105 LAL 102 or SPK 101 or IND 120	American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government Exposition or Public Speaking I or Technical Report Writing	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
			ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing
CIT 105 or CIT 205	Programming I or Programming II	3	CS 1971, 1981 or CS 1972, 1982 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to MATLAB Programming and Lab or Intro to Programming and Lab (C++)
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MTH 220	Probability and Statistics - Calc Based	3	STAT 3115	Engineering Statistics <small>(Will satisfy the Advanced Math/Comp Sci elective requirement.)</small>
	See your advisor for course options.			Literature Elective
	See your advisor for course options.			Humanities/Social Science Elective
	No free electives applied to the degree.			Maximum Free Electives
	Group 2 Major Requirements	6		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	45		Total Hours*
				46

*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&T</u>	
LAL 102 or SPK 101 or IND 120	Exposition or Public Speaking I or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing
HSI 105 or HST 106 or HST 102 or PCS 103 or PSC 105	American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government	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
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
MTH 220	Probability and Statistics - Calc Based	3	STAT 3115	Engineering Statistics
PHY 122	General Chemistry II	5	CHEM 1320	General Chemistry II
PHY 222	Organic Chemistry I	5	CHEM 2210	Organic Chemistry I <small>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement</small>
	See your advisor for course options.			Humanities/Social Science Elective
	See your advisor for course options.			Humanities/Social Science Elective
	See your advisor for course options.			Maximum Free Electives
	Group 2 Major Requirements	22		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	61		Total Hours*
				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>Partner School</u>	<u>Semester</u>		<u>Missouri S&T</u>	
LAL 102 or IND 120	Exposition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 106 or HST 102 or PCS 103 or PSC 105	American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government	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
MTH 220	Probability and Statistics - Calc Based	3	STAT 3115	Engineering Statistics	3
EGN 201	Statics	3	CIV ENG 2200*	Engineering Mechanics-Statics	3
			*The combination of CIV ENG 2200 and MECH ENG 2350 will be substituted for MECH ENG 2340. The Combination of CIV ENG 22000 and 2210 and MECH ENG 2350 will be substituted for MI ENG 3812		
PHY 263	Geology	4	GEO 1111/GE 1150	Intro to Physical Geology	3
				Humanities/Social Science Elective	3
				Humanities/Social Science Elective	3
				Maximum Free Electives	0
		Group 2 Major Requirements			21
		Group 1 Core Requirements			34
		Total Hours			55

*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&T</u>	
LAL 102 or IND 120	Exposition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 106 or HST 102 or PCS 103 or PSC 105	American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government	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
CIT 105 or CIT 205	Programming I or Programming II	3	CS 1971, 1981 or CS 1972, 1982 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to MATLAB Programming and Lab or Intro to Programming and Lab (C++)	3 3 4
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MTH 220	Probability and Statistics - Calc Based	3	STAT 3115	Engineering Statistics	3
				Humanities/Social Science Elective	3
				Humanities/Social Science Elective	3
				Maximum Free Electives	6
		Group 2 Major Requirements			24
		Group 1 Core Requirements			34
		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>Partner School</u>	<u>Semester</u>		<u>Missouri S&T</u>	
LAL 102 or IND 120	Exposition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 106 or HST 102 or PCS 103 or PSC 105	American History to 1865 or American History from 1865 or Western Civilization II or American Government or Functions & Policies of American Government	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
PHY 263	Geology	4	GEO 1110/GE 1150	Physical and Environmental Geology	3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MTH 220	Probability and Statistics - Calc Based	3	STAT 3115	Engineering Statistics	3
				Humanities/Social Science Elective	3
				Humanities/Social Science Elective	3
				Maximum Free Electives	0
		Group 2 Major Requirements			15
		Group 1 Core Requirements			34
		Total Hours			49

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