

Moberly Area Community College — Missouri S&T

General Engineering Transfer Guide

Effective as of Fall 2020

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>Moberly Area Community College</u>			<u>Semester</u>	<u>Missouri S&T</u>			
MTH 201	Analytic Geometry and Calculus I	5		MATH 1214	Calculus for Engineers I	Grade of C or better is required. 4	
MTH 202	Analytic Geometry and Calculus II	5		MATH 1215	Calculus for Engineers II	Grade of C or better is required. 4	
MTH 203	Analytic Geometry and Calculus III	5		MATH 2222	Calculus with Analytic Geometry III	Grade of C or better is required. 4	
MTH 250	Differential Equations	3		MATH 3304	Elementary Differential Equations	3	
PHY 201	Engineering Physics I	5		PHYSICS 1135	Engineering Physics I	Grade of C or better is required. 4	
PHY 202	Engineering Physics II	5		PHYSICS 2135	Engineering Physics II	Grade of C or better is required. 4	
PHY 121	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5	
LAL 101	Composition 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

<u>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government
LAL 102 or SPK 101 or IND 120	Composition II or Public Speaking I or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
LAL 150 or LAL 120 or LAL 210 or LAL 255 or LAL 125	English Literature Survey to 1750 or American Literature Survey to 1870 or A Survey of World Literature I or Women's Literature or African-American Literature (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245 or	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature (or other literature elective)
	<i>See your advisor for course options.</i>	3		Ethics Elective
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	18		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	57		Total Hours*
				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

<u>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HST 102 (or HST 105 or HST 106)	Western Civilization II or American History to 1865 or American History fromn 1865	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	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
LAL 102 or SPK 101 or HSS Elective	Composition II or Public Speaking I 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
PHY 163	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	16		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	55		Total Hours*
				49

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

Ceramic Engineering Group 2 Major Requirements

<u>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
PHY 222	Organic Chemistry I	5	CHEM 2210,2219	Organic Chemistry I (4) and Lab (1) <small>(Not a specific requirement. CHEM 2210 will satisfy the advanced chemistry elective requirement; CHEM 2219 will transfer as elective credit.)</small>
PHY 122	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) <small>*Note: CHEM 1510 is not an S&T degree requirement; course transfers as elective credit.</small>
LAL 102 or SPK 101 or HSS Elective	Composition II or Public Speaking I 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
<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		22	Group 2 Major Requirements	
Group 1 Core Requirements		39	Group 1 Core Requirements	
Total Hours		61	Total Hours*	
			56	

*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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or IND 120	Composition II or Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government
PHY 122	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II and Qualitative Analysis* <small>*Note: CHEM 1510 is not an S&T degree requirement; course transfers as elective credit.</small>
PHY 222	Organic Chemistry I	5	CHEM 2210,2219	Organic Chemistry I (4) and Lab (1)
PHY 122	General Chemistry II	5	CHEM 2220, 2229	Organic Chemistry II (4) and Lab (1) <small>(CHEM 2220 will transfer science elective requirement; CHEM 2229 will transfer as elective credit.)</small>
SPK 101	Public Speaking I	3	SP&MS 1185	Principles of Speech
<i>See your advisor for course options.</i>		3	Humanities/Social Science Elective	
<i>No free electives applied to the degree.</i>		0	Maximum Free Electives	
Group 2 Major Requirements		30	Group 2 Major Requirements	
Group 1 Core Requirements		39	Group 1 Core Requirements	
Total Hours		69	Total Hours*	
			65	

*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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or IND 120	Composition II or Report Writing	Technical 3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing 3
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History from 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government 3
PHY 122	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II and Qualitative Analysis* *Note: CHEM 1510 is not an S&T degree requirement; course transfers as elective credit. 3
PHY 222	Organic Chemistry I	5	CHEM 2210, 2219	Organic Chemistry I (4) and Lab (1) 5
PHY 122	General Chemistry II	5	CHEM 2220, 2229	Organic Chemistry II (4) and Lab (1) (CHEM 2220 will transfer science elective requirement; CHEM 2229 will transfer as elective credit. 5
SPK 101	Public Speaking I	3	SP&MS 1185	Principles of Speech 3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective 3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives 0
	Group 2 Major Requirements	30		Group 2 Major Requirements 31
	Group 1 Core Requirements	39		Group 1 Core Requirements 34
	Total Hours	69		Total Hours* 65

*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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or SPK 101 or IND 120	Composition II 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 3
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History from 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government 3
PHY 163	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology 3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics 3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective 3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives 0
	Group 2 Major Requirements	19		Group 2 Major Requirements 18
	Group 1 Core Requirements	39		Group 1 Core Requirements 34
	Total Hours	58		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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
SPK 101	Public Speaking I	3	SPMS 1185	Public Speaking	3
LAL 102 or IND 120	Composition II or Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government	3
CIV ENG 2200 and Missouri S&T Dynamics (BOTH of the courses above or ONE of the courses below.) OR PHY 222	Engineering Mechanics-Statics (3) and MECH ENG 2350 Dynamics to be taken at S&T (Both courses above combined or any one of the following courses will satisfy a required engineering science elective.) OR Organic Chemistry I (5)	3-5	CIV ENG 2200 and MECH ENG 2350 (BOTH of the courses above or ONE of the courses below.) OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (3) (Both courses above combined or any one of the following courses will satisfy a required engineering science elective.) OR Organic Chemistry I (4)	4-6
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Maximum Free Electives	3
	Group 2 Major Requirements	21		Group 2 Major Requirements	22
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	60		Total Hours*	56

*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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
SPK 101	Public Speaking I	3	SPMS 1185	Public Speaking	3
LAL 102 or IND 120	Composition II or Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government	3
CIV ENG 2200 and Missouri S&T Dynamics (BOTH of the courses above or ONE of the courses below.) OR PHY 222	Engineering Mechanics-Statics (3) and MECH ENG 2350 Dynamics to be taken at S&T (Both courses above combined or any one of the following courses will satisfy a required engineering science elective.) OR Organic Chemistry I (5)	3-5	CIV ENG 2200 and MECH ENG 2350 (BOTH of the courses above or ONE of the courses below.) OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (3) (Both courses above combined or any one of the following courses will satisfy a required engineering science elective.) OR Organic Chemistry I (4)	4-6
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Maximum Free Electives	3
	Group 2 Major Requirements	18		Group 2 Major Requirements	18
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	57		Total Hours*	52

*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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSY 101	General Psychology	3	PSYCH 1101	General Psychology	3
HST 102 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or	
HST 105 or	American History to 1865 or		HISTORY 1300 or	American History to 1877 or	
HST 106 or	American History fromn 1865 or	3	HISTORY 1310 or	American History Since 1877 or	3
PSC 105	Intro to American Government		POL SCI 1200	American Government	
LAL 102 or	Composition II or		ENGLISH 1160 or	Writing and Research or	
SPK 101 or	Public Speaking I or	3	SPMS 1185 or	Principles of Speech or	3
IND 120	Technical Report Writing		ENGLISH 3560	Technical Writing	
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Maximum Free Electives	3
	Group 2 Major Requirements	21		Group 2 Major Requirements	24
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	60		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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
LAL 102 or	Composition II 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 102 or	Western Civilization II or		HISTORY 1200 or	Modern Western Civilization or	
HST 105 or	American History to 1865 or	3	HISTORY 1300 or	American History to 1877 or	3
HST 106	American History fromn 1865		HISTORY 1310	American History Since 1877	
PHY 163	Geology	4	GEOLOGY 1110	Physical and Environmental Geology	3
			(GEO ENG 1150)		
PHY 122	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II and Qualitative Analysis*	3
				<small>*Note: CHEM 1510 is not an S&T degree requirement; course transfers as elective credit.</small>	
			BIO SCI 1113	General Biology	4
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	24		Group 2 Major Requirements	25
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	59

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

Geological Engineering Group 2 Major Requirements

<u>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or SPK 101 or IND 120	Composition II 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
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government
PHY 163	Geology	4	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
BIO 101 or PHY 122 or PHY 222	Biology or General Chemistry II or Organic Chemistry I	5	BIO SCI 1113,1219* or CHEM 1320,1510* or CHEM 2210,2219*	General Biology (3) and Lab* (2) or General Chemistry II (3) and Qual. Analysis* (2) or Organic Chemistry I (4) and Lab* (1) <small>or any 3-hour course in chemistry, geochemistry, or biology. Satisfies chemistry/geochemistry elective requirement. *Lab section will transfer as elective credit.</small>
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	24		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	63		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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government
LAL 102 or SPK 101 or IND 120	Composition II or Public Speaking I or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
LAL 150 or LAL 120 or LAL 210 or LAL 255 or LAL 125	English Literature Survey to 1750 or American Literature Survey to 1870 or A Survey of World Literature I or Women's Literature or African-American Literature (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245 or	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature (or other literature elective)
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	12		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	51		Total Hours* 55

*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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or SPK 101 or IND 120	Composition II 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
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History from 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
PHY 122	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II and Qualitative Analysis* <small>*Note: CHEM 1510 is not an S&T degree requirement; course transfers as elective credit.</small>
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>
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>See your advisor for course options.</i>	5		Maximum Free Electives
	Group 2 Major Requirements	33		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	72		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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or SPK 101 or IND 120	Composition II or Public Speaking I or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560 or ENGLISH 1600	Writing and Research or Technical Writing or Intro to Technical Communications
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History from 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
PHY 163	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>No free electives applied to the degree.</i>	0		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*
				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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or IND 120	Composition II or Report Writing	Technical 3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing 3
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government 3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics 3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective 3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective 3
	<i>See your advisor for course options.</i>	6		Maximum Free Electives 6
	Group 2 Major Requirements	24		Group 2 Major Requirements 24
	Group 1 Core Requirements	39		Group 1 Core Requirements 34
	Total Hours	63		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>Moberly Area Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
LAL 102 or IND 120	Composition II or Report Writing	Technical 3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing 3
HST 102 or HST 105 or HST 106 or PSC 105	Western Civilization II or American History to 1865 or American History fromn 1865 or Intro to American Government	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government 3
PHY 163	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology 3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics 3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective 3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective 3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives 0
	Group 2 Major Requirements	19		Group 2 Major Requirements 18
	Group 1 Core Requirements	39		Group 1 Core Requirements 34
	Total Hours	58		Total Hours* 52

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