

Moberly Area Community College — Missouri S&T

General Engineering Transfer Guide

Effective as of Fall 2023

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 I	Grade of C or better is required.	4
MTH 202	Analytic Geometry and Calculus II	5	MATH 1215	Calculus II	Grade of C or better is required.	4
MTH 203	Analytic Geometry and Calculus III	5	MATH 2222	Calculus 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	Microeconomics or	3	ECON 1100 or	Principles of Microeconomics or		3
ECN 101	Macroeconomics	3	ECON 1200	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 art, English and technical communication, etymology, foreign language, music, philosophy, speech and media studies, or theatre. Your campus may have additional acceptable options. Consult with your advisor or email transfer@mst.edu with questions. See Missouri S&T online catalog at <https://catalog.mst.edu/undergraduate/degreeprogramsandcourses/> for more information.

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	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	3
LAL 102 or SPK 101 or IND 120	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	3
ITC 220	3	CS 1971, 1981	3
EGN 201	3	CIV ENG 2200	3
LAL 150 or LAL 120 or LAL 210 or LAL 255 or LAL 125	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245 or	3
	3	Ethics Elective	3
	0	Engineering, business, bio, social or other ethics approved by advisor.	0
<i>No free electives applied to the degree.</i>	0	Maximum Free Electives	0
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 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)	3	HISTORY 1200* (or HISTORY 1300 or HISTORY 1310)	3
EGN 201	3	CIV ENG 2200	3
HSS Elective	3	HSS Elective	3
PHY 163	4	GEOLOGY 1110 (GEO ENG 1150)	3
	0	Physical and Environmental Geology	0
<i>No free electives applied to the degree.</i>	0	Maximum Free Electives	0
Group 2 Major Requirements	13	Group 2 Major Requirements	12
Group 1 Core Requirements	39	Group 1 Core Requirements	34
Total Hours	52	Total Hours*	46

*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	3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 222	Organic Chemistry I	5	CHEM 2210, 2219	Organic Chemistry I (4) and Lab (1) <small>(CHEM 2210 will satisfy the advanced chemistry elective requirement; CHEM 2219 will transfer as elective credit.)</small>	5
PHY 122	General Chemistry II	5	CHEM 1320	General Chemistry II	3
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	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	22		Group 2 Major Requirements	20
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	61		Total Hours*	54

*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>		
IND 120	Technical Report Writing	3	ENGLISH 3560	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 122	General Chemistry II	5	CHEM 1320	General Chemistry II	3
PHY 222	Organic Chemistry I	5	CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) <small>*The lab is not required for the degree, will transfer as 1 of 9 required science elective credits (below) .</small>	4
BIO 206	Microbiology	4	BIO SCI 3313, 3319	Microbiology and Lab (5) or <small>(Will transfer as 5 of 9 required science elective credits (above).</small>	5
ITC 125 or ITC 243 or ITC 244 or ITC 247 or ITC 220*	Object-Oriented Programming I or Object-Oriented Programming II: Java or Object-Oriented Programming II: C# or Python Programming or Programming II*	3	CS 1500 or CS 1971, 1981*	Computational Problem Solving or Programming Methodology and Lab * (C++) <small>*CS 1971, 1981 will be substituted for CS 1500.</small>	3
SPK 101	Public Speaking I	3	SP&MS 1185	Principles of Speech	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	29		Group 2 Major Requirements	27
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	68		Total Hours*	61

*S&T advisor permission is required to transfer more than 68 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>		
IND 120	Technical Report Writing	3	ENGLISH 3560	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	General Chemistry II	3
PHY 222	Organic Chemistry I	5	CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*The lab is not required for the degree, will transfer as 1 of 9 required science elective credits (below) .</small>	4
BIO 206	Microbiology	4	BIO SCI 3313, 3319	Microbiology and Lab (5) or <small>(Will transfer as 5 of 9 required science elective credits (above).</small>	5
ITC 125 or ITC 243 or ITC 244 or ITC 247 or ITC 220*	Object-Oriented Programming I or Object-Oriented Programming II: Java or Object-Oriented Programming II: C# or Python Programming or Programming II*	3	CS 1500 or CS 1971, 1981*	Computational Problem Solving or Programming Methodology and Lab * (C++) <small>*CS 1971, 1981 will be substituted for CS 1500.</small>	3
SPK 101	Public Speaking I	3	SP&MS 1185	Principles of Speech	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	29		Group 2 Major Requirements	27
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	68		Total Hours*	61

*S&T advisor permission is required to transfer more than 70 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
EGR 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	16		Group 2 Major Requirements	15
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	55		Total Hours*	49

*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	Composition II or	3	ENGLISH 1160 or	Writing and Research 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 or	American History fromn 1865 or		HISTORY 1310 or	American History since 1877 or	
PSC 105	Intro to American Government		POL SCI 1200	American Government	
ITC 125 or	Object-Oriented Programming I or				
ITC 243 or	Object-Oriented Programming II: Java or	3	CS 1500	Computational Problem Solving	3
ITC 244 or	Object-Oriented Programming II: C# or				
ITC 247	Python Programming				
CIV ENG 2200 or	Engineering Mechanics-Statics (3) or	3	CIV ENG 2200 or	Engineering Mechanics-Statics (3) or	3
PHY 222	Organic Chemistry I (5)		CHEM 2210	Organic Chemistry I (3)	
				Satisfies a required engineering/science elective.	
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	21		Group 2 Major Requirements	21
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	60		Total Hours*	55

*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	Composition II or	3	ENGLISH 1160 or	Writing and Research 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 or	American History fromn 1865 or		HISTORY 1310 or	American History since 1877 or	
PSC 105	Intro to American Government		POL SCI 1200	American Government	
ITC 125 or	Object-Oriented Programming I or				
ITC 243 or	Object-Oriented Programming II: Java or	3	CS 1500	Computational Problem Solving	3
ITC 244 or	Object-Oriented Programming II: C# or				
ITC 247	Python Programming				
CIV ENG 2200 and	Engineering Mechanics-Statics (3) and		CIV ENG 2200 and	Engineering Mechanics-Statics (3) and	
Missouri S&T Dynamics	MECH ENG 2350 Dynamics to be taken at S&T		MECH ENG 2350	Engineering Mechanics-Dynamics (2)	
(BOTH of the courses above or ONE	(Both courses above combined or any one of the following courses will	3	(BOTH of the courses above or	(Both courses above combined or any one of the following courses will satisfy a	3
of the courses below.)	satisfy a required engineering science elective.)		ONE of the courses below.)	required engineering science elective.)	
OR	OR		OR	OR	
PHY 222	Organic Chemistry I (5)		CHEM 2210	Organic Chemistry I (3)	
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	21		Group 2 Major Requirements	21
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	60		Total Hours*	55

*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	3	HISTORY 1300 or	American History to 1877 or	3
HST 106 or	American History fromn 1865 or		HISTORY 1310 or	American History since 1877 or	
PSC 105	Intro to American Government		POL SCI 1200	American Government	
SPK 101	Public Speaking I		SPMS 1185	Principles of Speech	3
LAL 102 or	Composition II or	3	ENGLISH 1160 or	Writing and Research or	3
IND 120	Technical Report Writing		ENGLISH 3560	Technical Writing	
ITC 220	Programming II	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	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 (GEO ENG 1150)	Physical and Environmental 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	Prob & Statistics Calculus Based	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	28		Group 2 Major Requirements	25
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	67		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>		
IND 120	Technical Report Writing	3	ENGLISH 3560	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	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
BIO 101 or PHY 122 or PHY 222	Biology or General Chemistry II or Organic Chemistry I	4	BIO SCI 1113 or CHEM 1320 or CHEM 2210	General Biology or General Chemistry II or Organic Chemistry I <small>or any 3-hour course in chemistry, geochemistry, or biology. Satisfies chemistry/geochemistry elective requirement.</small>	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	23		Group 2 Major Requirements	21
	Group 1 Core Requirements	39		Group 1 Core Requirements	34
	Total Hours	62		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	3
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	3
ITC 220	Programming II	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
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)	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	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 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 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 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>
	Humanities/Social Science Elective	3		Humanities/Social Science Elective
	Humanities/Social Science Elective	3		Humanities/Social Science Elective
	Maximum Free Electives	5		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*
				58

*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 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 163	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology
	Humanities/Social Science Elective	3		Humanities/Social Science Elective
	Humanities/Social Science Elective	3		Humanities/Social Science Elective
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	19		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	58		Total Hours*
				52

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

Nuclear Engineering Group 2 Major Requirements

<u>Moberly Area Community College</u>	<u>Semester</u>			<u>Missouri S&T</u>	
LAL 102 or SPK 101 or IND 120	3	Composition II or Public Speaking Technical Report Writing		ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	3
HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	3	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	3
ITC 220	3	Programming II		CS 1971, 1981	3
EGN 201	3	Statics		CIV ENG 2200	3
	3	Humanities/Social Science Elective			3
	3	Humanities/Social Science Elective			3
	6	Maximum Free Electives			6
	24	Group 2 Major Requirements			24
	39	Group 1 Core Requirements			34
	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>	
IND 120 or LAL 102	3	Technical Report Writing or Composition II		ENGLISH 3560 or ENGLISH 1160	3
HST 102 or HST 105 or HST 106 or PSC 105	3	Western Civilization II or American History to 1865 or American History from 1865 or Intro to American Government		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	3
PHY 163	4	Geology		GEOLOGY 1110 (GEO ENG 1150)	3
EGN 201	3	Statics		CIV ENG 2200	3
	3	Humanities/Social Science Elective			3
	3	Humanities/Social Science Elective			3
	0	<i>No free electives applied to the degree.</i>			0
	19	Group 2 Major Requirements			18
	39	Group 1 Core Requirements			34
	58	Total Hours			52

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