

McKendree University — 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>McKendree University</u>			<u>Semester</u>	<u>Missouri S&T</u>			
MTH 210	Calculus I	4		MATH 1214	Calculus for Engineers I <small>Grade of C or better is required.</small>	4	
MTH 211	Calculus II	4		MATH 1215	Calculus for Engineers II <small>Grade of C or better is required.</small>	4	
MTH 212	Calculus III	4		MATH 2222	Calculus with Analytic Geometry III <small>Grade of C or better is required.</small>	4	
MTH 370	Differential Equations and Modeling	3		MATH 3304	Elementary Differential Equations	3	
PHY 221	Univ Physics I: Mechanical and Thermal Physics	5		PHYSICS 1135	Engineering Physics I <small>Grade of C or better is required.</small>	4	
PHY 222	Univ Physics II: Electricity, Magnetism, and Quantum Physics	5		PHYSICS 2135	Engineering Physics II <small>Grade of C or better is required.</small>	4	
CHE 105	College Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5	
ENG 111	English I: Academic Writing	3		ENGLISH 1120	Exposition and Argumentation	3	
ECO 211 or ECO 212	Principles of Microeconomics or Principles of Macroeconomics	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3	
Total Hours			36	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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
PHY 303	Electronic Circuits	4	EE 2800	Circuit Analysis I	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 302	Engineering Mechanics II: Dynamics	3	AERO ENG 2360	Dynamics	3
MTH 360	Linear Algebra	3	MATH 3108	Linear Algebra I (Will satisfy the Advanced Math/Comp Sci elective requirement.)	3
	Literature Elective	3		Literature Elective	3
	Ethics Elective	3		Ethics Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	25		Group 2 Major Requirements	24
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	61		Total Hours*	58

*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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIST 162 (HIST 261 or HIST 262)	World Civilization Since 1450 (United States History to 1875 or United States History since 1875)	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>	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 302	Engineering Mechanics II: Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
ENG 112 or HSS Elective	English II: Research and Writing (4) or Humanities/Social Science Elective (3): history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3	ENGLISH 1160 or HSS Elective	Writing and Research or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	12		Group 2 Major Requirements	12
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	48		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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHE 205	Organic Chemistry I	5	CHEM 2210	Organic Chemistry I (Not a specific requirement. Will satisfy the advanced chemistry elective requirement.)	3
CHE 106	College Chemistry II	5	CHEM 1320	General Chemistry II	3
ENG 112 or HSS Elective	English II: Research and Writing (4) or Humanities/Social Science Elective (3): history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3	ENGLISH 1160 or HSS Elective	Writing and Research 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	18
	Group 1 Core Requirements	36		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 Ceramic Engineering degree.

Chemical Engineering Group 2 Major Requirements

<u>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
CHE 106	College Chemistry II	5	CHEM 1320	General Chemistry II	3
CHE 205	Organic Chemistry I	5	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHE 206	Organic Chemistry II	5	CHEM 2220	Organic Chemistry II (Will transfer as a science elective requirement.)	3
CSI 230 or CSI 330	Intro to Computing II (5) or Data Structures and Algorithms (3)	3	CS 1500	Computational Problem Solving (3)	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	27		Group 2 Major Requirements	22
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	56

*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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
CHE 106	College Chemistry II	5	CHEM 1320	General Chemistry II	3
CHE 205	Organic Chemistry I	5	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHE 206	Organic Chemistry II	5	CHEM 2220	Organic Chemistry II (Will transfer as a science elective requirement.)	3
CSI 230 or CSI 330	Intro to Computing II (5) or Data Structures and Algorithms (3)	3	CS 1500	Computational Problem Solving (3)	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	27		Group 2 Major Requirements	22
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	63		Total Hours*	56

*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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 302	Engineering Mechanics II: Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	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	15		Group 2 Major Requirements	15
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	51		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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing 3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization 3
CSI 230 or CSI 330	Intro to Computing II (5) or Data Structures and Algorithms (3)	3	CS 1500	Computational Problem Solving (3) 3
PHY 301 and PHY 302 (BOTH of the courses above or ONE the course below.) OR CHE 205	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (3) (Both courses above combined or the following course will satisfy a required engineering science elective.) OR Organic Chemistry I (3)	3	CIV ENG 2200 and MECH ENG 2350 (BOTH of the courses above or ONE the course below.) OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (3) (Both courses above combined or the following course will satisfy a required engineering science elective.) OR Organic Chemistry I (3) 3
PHY 303	Electronic Circuits	4	EE 2100**	Circuits I **A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 2100. 3
MTH 360 or MTH 300	Linear Algebra or Transition to Advanced Mathematics	3	MATH 3108 or MATH 3109	Linear Algebra or Foundations of Mathematics (Will satisfy a required math elective.) 3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective 3
	See your advisor for course options.	0		Maximum Free Electives 3
	Group 2 Major Requirements	22		Group 2 Major Requirements 24
	Group 1 Core Requirements	36		Group 1 Core Requirements 34
	Total Hours	58		Total Hours* 58

*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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing 3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization 3
CSI 230 or CSI 330	Intro to Computing II (5) or Data Structures and Algorithms (3)	3	CS 1500	Computational Problem Solving (3) 3
PHY 301 and PHY 302 (BOTH of the courses above or ONE the course below.) OR CHE 205	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (3) (Both courses above combined or the following course will satisfy a required engineering science elective.) OR Organic Chemistry I (3)	3	CIV ENG 2200 and MECH ENG 2350 (BOTH of the courses above or ONE the course below.) OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (3) (Both courses above combined or the following course will satisfy a required engineering science elective.) OR Organic Chemistry I (3) 3
PHY 303	Electronic Circuits	4	EE 2100**	Circuits I **A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 2100. 3
MTH 360	Linear Algebra	3	MATH 3108	Linear Algebra 3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective 3
	See your advisor for course options.	3		Maximum Free Electives 3
	Group 2 Major Requirements	25		Group 2 Major Requirements 24
	Group 1 Core Requirements	36		Group 1 Core Requirements 34
	Total Hours	61		Total Hours* 58

*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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSY 153	Intro to Psychology	3	PSYCH 1101	General Psychology	3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
PHY 303	Electronic Circuits	4	EE 2800	Circuit Analysis I	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 302	Engineering Mechanics II: Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Maximum Free Electives	3
	Group 2 Major Requirements	25		Group 2 Major Requirements	24
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	61		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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
CHE 106	College Chemistry II	5	CHEM 1320	General Chemistry II	3
BIO 101	Introductory Biology	4	BIO SCI 1113	General Biology	4
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 302	Engineering Mechanics II: Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	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	24		Group 2 Major Requirements	22
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	60		Total Hours*	56

*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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 302	Engineering Mechanics II: Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
BIO 101 or CHE 106 or CHE 205	Introductory Biology (4) or College Chemistry I (5) or Organic Chemistry I (5)	4	BIO SCI 1113 or CHEM 1320 or CHEM 2210	General Biology or General Chemistry II or Organic Chemistry I	3
				or any 3-hour course in chemistry, geochemistry, or biology. Satisfies chemistry/geochemistry elective requirement.	
	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	22		Group 2 Major Requirements	21
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	58		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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
PHY 303	Electronic Circuits	4	EE 2800	Circuit Analysis I	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 302	Engineering Mechanics II: Dynamics	3	MECH ENG 2360	Dynamics	3
MTH 360	Linear Algebra	3	MATH 3108	Linear Algebra I <small>(Will satisfy the Advanced Math/Comp Sci elective requirement.)</small>	3
	Literature Elective	3		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	25		Group 2 Major Requirements	24
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	61		Total Hours*	58

*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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHE 106	College Chemistry II	5	CHEM 1320	General Chemistry II	3
CHE 205 or PHY 303	Organic Chemistry I (5) or Electronic Circuits (4)	4	CHEM 2210 or EE 2800	Organic Chemistry I (4) or Electrical Circuits (3)	3
	Humanities/Social Science Elective	3		<small>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.</small>	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	5		Maximum Free Electives	5
	Group 2 Major Requirements	29		Group 2 Major Requirements	26
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	65		Total Hours*	60

*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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200*	Engineering Mechanics-Statics	3
PHY 302	Engineering Mechanics II: Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	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	18		Group 2 Major Requirements	18
	Group 1 Core Requirements	36		Group 1 Core Requirements	34
	Total Hours	54		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>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing 3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization 3
MTH 360	Linear Algebra	3	MATH 3108	Linear Algebra 3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics 3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective 3
	Humanities/Social Science Elective	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	36		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 Nuclear Engineering degree.

Petroleum Engineering Group 2 Major Requirements

<u>McKendree University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENG 112 or ENG 360	English II: Research and Writing (4) or Interdisciplinary Professional and Tech Writing (3)	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing 3
HIST 261 or HIST 262 or HIST 162	United States History to 1875 or United States History since 1875 or World Civilization Since 1450	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization 3
PHY 301	Engineering Mechanics I: Statics	3	CIV ENG 2200	Engineering Mechanics-Statics 3
PHY 302	Engineering Mechanics II: Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics 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	18		Group 2 Major Requirements 18
	Group 1 Core Requirements	36		Group 1 Core Requirements 34
	Total Hours	54		Total Hours* 52

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