

William Jewell College — Missouri S&T

General Engineering Transfer Guide

Effective as of Fall 2021

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>William Jewell College</u>	<u>Semester</u>		<u>Missouri S&T</u>	
MAT 109 and MAT 200	Calculus I and Calculus II* <small>*Both MAT 109 and MAT 200 must be taken to receive credit for MATH 1214 and 1215.</small>	8	MATH 1214 and MATH 1215	Calculus for Engineers I and Calculus for Engineers II <small>Grade of C or better is required.</small>	8
MAT 201	Calculus III	4	MATH 2222	Calculus with Analytic Geometry III <small>Grade of C or better is required.</small>	4
MAT 202	Differential Equations	4	MATH 3304	Elementary Differential Equations	3
PH 213	General Physics I and Lab	5	PHYSICS 1135	Engineering Physics I <small>Grade of C or better is required.</small>	4
PH 214	General Physics II and Lab	5	PHYSICS 2135	Engineering Physics II <small>Grade of C or better is required.</small>	4
CHE 121	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CIT 102	Written Communication	4	ENGLISH 1120	Exposition and Argumentation	3
ECO 101 or ECO 202	Principles of Microeconomics or Principles of Macroeconomics	4	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours					34
Total Hours					38

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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	Principles of Speech	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	AERO ENG 2360	Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	3
MAT 281	Linear Algebra	4	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	26		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	64		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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
S&T HISTORY 1200* (or HIS 121 or HIS 122)	Modern Western Civilization (at S&T)* (or Foundations of U.S. History or The Modern United States) <small>*S&T HISTORY 1200 is preferred; HIS 121 or 122 will also be accepted.</small>	4	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
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	3
COM 100 or HSS Elective	Fundamentals of Speech Communication or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	2	SPMS 1185 or HSS Elective	Public Speaking 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	16		Group 2 Major Requirements	15
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	54		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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	3
CHE 301	Organic Chemistry I	4	CHEM 2210	Organic Chemistry I (Not a specific requirement. Will satisfy the advanced chemistry elective requirement.)	4
CHE 122	General Chemistry II	4	CHEM 1320	General Chemistry II	3
MAT 305	Intro to Probability	4	STAT 3117	Intro to Probability and Statistics (or any statistics course 3000-level or higher. Satisfies statistics elective requirement.)	3
PHY 316	Modern Physics	4	PHYS 2305	Intro to Modern Physics	3
COM 100 or HSS Elective	Fundamentals of Speech Communication or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	2	SPMS 1185 or HSS Elective	Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	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	31		Group 2 Major Requirements	28
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	69		Total Hours*	62

*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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
CHE 122	General Chemistry II	4	CHEM 1320	General Chemistry II	3
CHE 301, 301L	Organic Chemistry I and Lab	5	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHE 302 or CHE 406 or BIO 233, 233L or BIO 321, 321L	Organic Chemistry II (4) or Instrumental Analysis (4) or Cell and Molecular Biology and Lab (5) or Microbiology and Lab (5) (Will satisfy science elective requirement. Select up to 8 hours from these options.)	8	CHEM 2220 or CHEM 2510 or BIO SCI 2213, 2219 or BIO SCI 3313, 3319	Organic Chemistry II or Analytical Chemistry (4) or Cell Biology and Lab (4) or Microbiology and Lab (5) (Will satisfy science elective requirement. Select up to 9 hours from these options.)	8
COM 100	Fundamentals of Speech Communication	2	SPMS 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	26		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	64		Total Hours*	58

*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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
CHE 122	General Chemistry II	4	CHEM 1320	General Chemistry II	3
CHE 301, 301L	Organic Chemistry I and Lab	5	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHE 302 or CHE 406 or BIO 233, 233L or BIO 321, 321L	Organic Chemistry II (4) or Instrumental Analysis (4) or Cell and Molecular Biology and Lab (5) or Microbiology and Lab (5) <small>(Will satisfy science elective requirement. Select up to 8 hours from these options.)</small>	8	CHEM 2220 or CHEM 2510 or BIO SCI 2213, 2219 or BIO SCI 3313, 3319	Organic Chemistry II or Analytical Chemistry (4) or Cell Biology and Lab (4) or Microbiology and Lab (5) <small>(Will satisfy science elective requirement. Select up to 8 hours from these options.)</small>	8
COM 100	Fundamentals of Speech Communication	2	SPMS 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	26		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	64		Total Hours*	58

*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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	Principles of Speech	3
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	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	38		Group 1 Core Requirements	34
	Total Hours	57		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>William Jewell College</u>	<u>Semester</u>	<u>Missouri S&T</u>	
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	3
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	3
EGR 230 and PHY 443 (BOTH of the courses above or ONE of the courses below.)	Statics (3) and Classical Mechanics (4) (Both courses above combined or any one of the following courses will satisfy a required engineering science elective.)	4	CS 1200	3
OR	OR		CIV ENG 2200 and MECH ENG 2350 (BOTH of the courses above or ONE of the courses below.)	3
CHE 301 or BIO 233	Organic Chemistry I (4) or Cell and Molecular Biology (4)		OR	
MAT 281	Linear Algebra	4	CHEM 2210 or BIO SCI 2213	3
MAT 305	Intro to Probability	4	MATH 3108	3
	See your advisor for course options.	3	STAT 3117	3
	See your advisor for course options.	0		3
	Group 2 Major Requirements	21		3
	Group 1 Core Requirements	38		24
Total Hours		59		34
				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>William Jewell College</u>	<u>Semester</u>	<u>Missouri S&T</u>	
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	3
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	3
EGR 230 and PHY 443 (BOTH of the courses above or ONE of the courses below.)	Statics (3) and Classical Mechanics (4) (Both courses above combined or any one of the following courses will satisfy a required engineering science elective.)	4	CIV ENG 2200 and MECH ENG 2350 (BOTH of the courses above or ONE of the courses below.)	3
OR	OR		OR	
CHE 301 or BIO 233	Organic Chemistry I (4) or Cell and Molecular Biology (4)		CHEM 2210 or BIO SCI 2213	3
MAT 281	Linear Algebra	4	MATH 3108	3
MAT 305	Intro to Probability	4	STAT 3117	3
	See your advisor for course options.	3		3
	See your advisor for course options.	3		3
	Group 2 Major Requirements	24		21
	Group 1 Core Requirements	38		34
Total Hours		62		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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSY 101	Intro to Psychological Science	4	PSYCH 1101	General Psychology	3
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	Principles of Speech	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	3
MAT 305	Intro to Probability	4	STAT 3117	Intro to Probability and Statistics	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	30		Group 2 Major Requirements	27
	Group 1 Core Requirements	38		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 Engineering Management degree.

Environmental Engineering Group 2 Major Requirements

<u>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	Principles of Speech	3
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
CHE 122	General Chemistry II	4	CHEM 1320	General Chemistry II	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	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	38		Group 1 Core Requirements	34
	Total Hours	61		Total Hours*	55

*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>William Jewell College</u>	<u>Semester</u>	<u>Missouri S&T</u>			
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	Principles of Speech	3
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	3
CHE 122 or CHE 2210	General Chemistry II or Organic Chemistry I <small>or any 3-hour course in chemistry, geochemistry, or biology. Satisfies chemistry/geochemistry elective requirement.</small>	4	CHEM 1320 or CHEM 2210	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	26		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	64		Total Hours*	58

*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>William Jewell College</u>	<u>Semester</u>	<u>Missouri S&T</u>			
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	Principles of Speech	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	AERO ENG 2360	Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	3
MAT 281	Linear Algebra	4	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	26		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	64		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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COM 100	Fundamentals of Speech Communication	2	SPMS 1185	Principles of Speech	3
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	3
CHE 122	General Chemistry II	4	CHEM 1320	General Chemistry II	3
CHE 301 or PHY 316	Organic Chemistry I or Modern Physics	4	CHEM 2210 or PHYSICS 2305	Organic Chemistry I (4) or Intro to Modern Physics (3)	3
				<i>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.</i>	
	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>	5		Maximum Free Electives	5
	Group 2 Major Requirements	31		Group 2 Major Requirements	29
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	69		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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
EGR 230	Statics	3	CIV ENG 2200*	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	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	20		Group 2 Major Requirements	18
	Group 1 Core Requirements	38		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 Mining Engineering degree.

Nuclear Engineering Group 2 Major Requirements

<u>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
MAT 281	Linear Algebra	4	MATH 3108	Linear Algebra I	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	3
MAT 305	Intro to Probability	4	STAT 3117	Intro to Probability and Statistics	3
PHY 316	Modern Physics	4	PHYSICS 2305	Intro to Modern Physics	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	34		Group 2 Major Requirements	30
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	72		Total Hours*	64

*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>William Jewell College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIS 121 or HIS 122 or POL 150	Foundations of U.S. History or The Modern United States or Intro to American Government	4	HISTORY 1300 or HISTORY 1310 or POL SCI 1200	American History to 1877 or American History since 1877 or American Government	3
EGR 230	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 443	Classical Mechanics	4	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 233	Mechanics of Solids	3	CIV ENG 2210	Mechanics of Materials	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	20		Group 2 Major Requirements	18
	Group 1 Core Requirements	38		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.