

# Lincoln University — Missouri S&T

## General Engineering Transfer Guide

Effective as of Fall 2017

Complete Group 1 - Core Requirements and Group 2 - Major Requirements for major of choice.

### Group 1 - Core Requirements: All Majors Take All Courses

Engineering students take all Group 1 - Core Requirements and Group 2 - Major Requirements for major of choice. Math prerequisites: While they are not part of Missouri S&T engineering degree requirements, algebra and trigonometry skills are critical to success in calculus. To prepare for entry into calculus, students should follow math placement testing and advising recommendations at their college.

<u>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
MAT 123	Calculus I	5	MATH 1214	Calculus for Engineers I <small>Grade of C or better is required.</small>	4
MAT 203	Calculus II	5	MATH 1215	Calculus for Engineers II <small>Grade of C or better is required.</small>	4
MAT 304	Calculus III	5	MATH 2222	Calculus with Analytic Geometry III <small>Grade of C or better is required.</small>	4
MAT 324	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHY 201	General Physics I	5	PHYSICS 1135	Engineering Physics I <small>Grade of C or better is required.</small>	4
PHY 202	General Physics II	5	PHYSICS 2135	Engineering Physics II <small>Grade of C or better is required.</small>	4
CHM 101	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
ENG 101	Composition and Rhetoric	3	ENGLISH 1120	Exposition and Argumentation	3
ECO 202 or ECO 201	Principles of Economics II (Micro) or Principles of Economics I (Macro)	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours		38	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](http://ugs.mst.edu). Your campus may have additional acceptable options. Consult with your advisor or email [transfer@mst.edu](mailto:transfer@mst.edu) with questions.

## Aerospace Engineering Group 2 Major Requirements

<u>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
ENG 102 or SPT 206 or GT 400	Composition and Rhetoric II or Fundamentals of Speech or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing
CS 237 or CS 338	Intro to C++ Programming or Object Oriented Programming using C++	3	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)
TEC 104E	AC/DC Circuit Analysis	3	EE 2800	Circuit Analysis I
MAT 403 or MAT 415	Linear Algebra or Mathematical Statistics	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics <small>(Will satisfy the Advanced Math/Comp Sci elective requirement.)</small>
<i>See your advisor for course options.</i>				Literature Elective
<i>See your advisor for course options.</i>				Ethics Elective
<i>No free electives applied to the degree.</i>				Maximum Free Electives
Group 2 Major Requirements		15	Group 2 Major Requirements	
Group 1 Core Requirements		38	Group 1 Core Requirements	
Total Hours		53	Total Hours*	
			21	
			34	
			55	

\*S&T advisor permission is required to transfer more than 66 credits toward the S&T Aerospace Engineering degree.

## Architectural Engineering Group 2 Major Requirements

<u>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
HIS 102 or HIS 205 or HIS 206	World Civilization or American History I or American History II	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>
BE 212	Elementary Surveying	3	CIV ENG 2401	Fundamentals of Surveying
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics <small>(Will be substituted for STAT 3113.)</small>
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	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 105 or PHY 320	Intro to Astronomy or Modern Physics		PHYSICS 1505 or PHYSICS 2305	Introductory Astronomy or Intro to Modern Physics (or other chemistry, geology, biology, physics, or astronomy course that is not otherwise required for the degree) <span style="float: right;"><small>Applies to the degree as a basic science elective</small></span>
<i>No free electives applied to the degree.</i>				Maximum Free Electives
Group 2 Major Requirements		12	Group 2 Major Requirements	
Group 1 Core Requirements		38	Group 1 Core Requirements	
Total Hours		50	Total Hours*	
			15	
			34	
			49	

\*S&T advisor permission is required to transfer more than 66 credits toward the S&T Architectural Engineering degree.

## Ceramic Engineering Group 2 Major Requirements

<u>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
CHM 301, 303	Organic Chemistry I and Lab	4	CHEM 2210/2219	Organic Chemistry I and Lab (Not a specific requirement. Will satisfy technical elective requirement.)	5
CHM 102	General Chemistry II	4	CHEM 1320	General Chemistry II	3
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics	3
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	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, Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Maximum Free Electives	3
<i>No free electives applied to the degree.</i>				Maximum Free Electives	0
Group 2 Major Requirements		17	Group 2 Major Requirements		20
Group 1 Core Requirements		38	Group 1 Core Requirements		34
Total Hours		55	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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
ENG 102 or GT 400	Composition and Rhetoric II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
CHM 102	General Chemistry II	4	CHEM 1320	General Chemistry II	5
CHM 301, 303	Organic Chemistry I and Lab	4	CHEM 2210	Organic Chemistry I	3
CHM 302, 304	Organic Chemistry II and Lab	4	CHEM 2220	Organic Chemistry II (Will satisfy science elective requirement.)	3
CS 237 or CS 338	Intro to C++ Programming or Object Oriented Programming using C++	3	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)	3
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)	3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective	3
<i>No free electives applied to the degree.</i>				Maximum Free Electives	0
Group 2 Major Requirements		24	Group 2 Major Requirements		29
Group 1 Core Requirements		38	Group 1 Core Requirements		34
Total Hours		62	Total Hours*		63

\*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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
ENG 102 or GT 400	Composition and Rhetoric II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
CHM 102	General Chemistry II	4	CHEM 1320	General Chemistry II	5
CHM 301, 303	Organic Chemistry I and Lab	4	CHEM 2210	Organic Chemistry I	3
CHM 302, 304	Organic Chemistry II and Lab	4	CHEM 2220	Organic Chemistry II (Will satisfy science elective requirement.)	3
CS 237 or CS 338	Intro to C++ Programming or Object Oriented Programming using C++	3	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)	3
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)	3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective	3
<i>No free electives applied to the degree.</i>				Maximum Free Electives	0
Group 2 Major Requirements		24	Group 2 Major Requirements		29
Group 1 Core Requirements		38	Group 1 Core Requirements		34
Total Hours		62	Total Hours*		63

\*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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
ENG 102 or SPT 206 or GT 400	Composition and Rhetoric II or Fundamentals of Speech or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
BE 212	Elementary Surveying	3	CIV ENG 2401	Fundamentals of Surveying
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
<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		12	Group 2 Major Requirements	
Group 1 Core Requirements		38	Group 1 Core Requirements	
Total Hours		50	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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
SPT 206	Fundamentals of Speech	3	SPMS 1185	Public Speaking
ENG 102 or GT 400	Composition and Rhetoric II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
CS 338	Object Oriented Programming using C++	3	CS 1570, 1580	Intro to Programming and Lab (C++)
TEC 104E	AC/DC Circuit Analysis	3	EE 2100**	Circuits I **A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 2100.
MAT 403	Linear Algebra	3	MATH 3108	Linear Algebra (Will satisfy a required math elective.)
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3117.)
<i>See your advisor for course options.</i>			Humanities/Social Science Elective	
<i>See your advisor for course options.</i>			Maximum Free Electives	
Group 2 Major Requirements		21	Group 2 Major Requirements	
Group 1 Core Requirements		38	Group 1 Core Requirements	
Total Hours		59	Total Hours*	
			62	

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

## Electrical Engineering Group 2 Major Requirements

<u>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
SPT 206	Fundamentals of Speech	3	SPMS 1185	Public Speaking
ENG 102 or GT 400	Composition and Rhetoric II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
CS 338	Object Oriented Programming using C++	3	CS 1570, 1580	Intro to Programming and Lab (C++)
TEC 104E	AC/DC Circuit Analysis	3	EE 2100**	Circuits I **A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 2100.
MAT 403	Linear Algebra	3	MATH 3108	Linear Algebra
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3117.)
<i>See your advisor for course options.</i>			Humanities/Social Science Elective	
<i>See your advisor for course options.</i>			Maximum Free Electives	
Group 2 Major Requirements		21	Group 2 Major Requirements	
Group 1 Core Requirements		38	Group 1 Core Requirements	
Total Hours		59	Total Hours*	
			62	

\*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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
PSY 101	General Psychology	3	PSYCH 1101	General Psychology	3
HIS 205 or	American History I or		HISTORY 1300 or	American History to 1877 or	
HIS 206 or	American History II or		HISTORY 1310 or	American History since 1877 or	
HIS 102 or	World Civilization or	3	HISTORY 1200 or	Modern Western Civilization or	3
PSC 203	American National Government		POL SCI 1200	American Government	
ENG 102 or	Composition and Rhetoric II or		ENGLISH 1160 or	Writing and Research or	
SPT 206 or	Fundamentals of Speech or	3	SPMS 1185 or	Principles of Speech or	3
GT 400	Technical Writing		ENGLISH 3560	Technical Writing	
TEC 104E	AC/DC Circuit Analysis	3	EE 2800	Circuit Analysis I	3
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Maximum Free Electives	3
	Group 2 Major Requirements	15		Group 2 Major Requirements	21
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	53		Total Hours*	55

\*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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
ENG 102 or	Composition and Rhetoric II or		ENGLISH 1160 or	Writing and Research or	
SPT 206 or	Fundamentals of Speech or	3	SPMS 1185 or	Public Speaking or	3
GT 400	Technical Writing		ENGLISH 3560	Technical Writing	
HIS 205 or	American History I or		HISTORY 1300 or	American History to 1877 (preferred) or	
HIS 206 or	American History II or	3	HISTORY 1310 or	American History since 1877 (preferred) or	3
HIS 102	World Civilization		HISTORY 1200	Modern Western Civilization	
CHM 102	General Chemistry II	4	CHEM 1320	General Chemistry II	3
BIO 103, 104L	Principles of Biology and Lab	4	BIO SCI 1113	General Biology	4
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	17		Group 2 Major Requirements	19
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	55		Total Hours*	53

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

## Geological Engineering Group 2 Major Requirements

<u>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
ENG 102 or	Composition and Rhetoric II or		ENGLISH 1160 or	Writing and Research or	
SPT 206 or	Fundamentals of Speech or	3	SPMS 1185 or	Public Speaking or	3
GT 400	Technical Writing		ENGLISH 3560	Technical Writing	
HIS 205 or	American History I or		HISTORY 1300 or	American History to 1877 or	
HIS 206 or	American History II or	3	HISTORY 1310 or	American History since 1877 or	3
HIS 102 or	World Civilization or		HISTORY 1200 or	Modern Western Civilization or	
PSC 203	American National Government		POL SCI 1200	American Government	
BIO 103, 104L	Principles of Biology and Lab or		BIO SCI 1113 or	General Biology or	
or CHM 102 or	General Chemistry II or	4	CHEM 1320 or	General Chemistry II or	
CHM 301, 303	Organic Chemistry I and Lab		CHEM 2210	Organic Chemistry I	
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	10		Group 2 Major Requirements	12
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	48		Total Hours*	46

\*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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
ENG 102 or SPT 206 or GT 400	Composition and Rhetoric II or Fundamentals of Speech or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing
CS 237 or CS 338	Intro to C++ Programming or Object Oriented Programming using C++	3	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)
TEC 104E	AC/DC Circuit Analysis	3	EE 2800	Circuit Analysis I
MAT 403 or MAT 415	Linear Algebra or Mathematical Statistics	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics <small>(Will satisfy the Advanced Math/Comp Sci elective requirement.)</small>
BE 330	Engineering Materials	3	MET ENG 2110	Metallurgy for Engineers
				Literature Elective
	<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	9		Group 2 Major Requirements
	Group 1 Core Requirements	38		Group 1 Core Requirements
	Total Hours	47		Total Hours*
				15
				34
				49

\*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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>	
ENG 102 or SPT 206 or GT 400	Composition and Rhetoric II or Fundamentals of Speech or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics
BE 330	Engineering Materials	3	MET ENG 2110	Metallurgy for Engineers
CHM 102	General Chemistry II	4	CHEM 1320	General Chemistry II
CHM 301, 303 or TEC 104E	Organic Chemistry I and Lab or AC/DC Circuit Analysis	4	CHEM 2210 or EE 2800	Organic Chemistry I or Electrical Circuits <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>			Humanities/Social Science Elective
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective
	<i>See your advisor for course options.</i>			Maximum Free Electives
	Group 2 Major Requirements	20		Group 2 Major Requirements
	Group 1 Core Requirements	38		Group 1 Core Requirements
	Total Hours	58		Total Hours*
				29
				34
				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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
ENG 102 or GT 400	Composition and Rhetoric II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	9		Group 2 Major Requirements	15
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	47		Total Hours*	49

\*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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
ENG 102 or GT 400	Composition and Rhetoric II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
CS 237 or CS 338	Intro to C++ Programming or Object Oriented Programming using C++	3	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)	3 4
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics	3
BE 330	Engineering Materials	3	MET ENG 2110	Metallurgy for Engineers	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Maximum Free Electives	6
	Group 2 Major Requirements	15		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	53		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>Lincoln University</u>		<u>Semester</u>	<u>Missouri S&amp;T</u>		
ENG 102 or GT 400	Composition and Rhetoric II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIS 205 or HIS 206 or HIS 102 or PSC 203	American History I or American History II or World Civilization or American National Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>			Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>			Maximum Free Electives	0
	Group 2 Major Requirements	0		Group 2 Major Requirements	6
	Group 1 Core Requirements	38		Group 1 Core Requirements	34
	Total Hours	38		Total Hours*	40

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