Lincoln University — Missouri S&T

General Engineering

Transfer Guide Effective as of Fall 2025

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

Students are not required to complete all courses on this guide before transferring to Missouri S&T.

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>Seme</u>	<u>ster</u>	Missouri S&T		
MAT 123	Calculus I	5	MATH 1214	Calculus I Grade of C or better is required.		4
MAT 203	Calculus II	5	MATH 1215	Calculus II Grade of C or better is required.		4
MAT 304	Calculus III	5	MATH 2222	Calculus III Grade of C or better is required.		4
MAT 324	Differential Equations	3	MATH 3304	Elementary Differential Equations		3
PHY 201	General Physics I	5	PHYSICS 1135	Engineering Physics I Grade of C or better is required.		4
PHY 202	General Physics II	5	PHYSICS 2135	Engineering Physics II Grade of C or better is required.		4
ENG 101	Composition and Rhetoric I	3	ENGLISH 1120	Exposition and Argumentation		3
		Total Hours 31			Total Hours	26

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

Biomedical Engineering/Biomanufacturing or Biomaterials

Ceramic Engineering

Chemical Engineering and 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.

This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2025.
Further information or updates are available from Missouri S&T Transfer Admissions at transfer.mst.edu, transfer@mst.edu, or 800-522-0938.

	Aerospace Eng	ineerin	g Grou	ıp 2 Major F	Requirements	
	Lincoln University		Semeste	r	Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CS 237	Intro to C++ Programming	3		CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
MAT 403 or MAT 415	Linear Algebra or Mathematical Statistics	3		MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics Satisfies the Advanced Math/Comp Sci elective requirement.	3
PHI 203 or PHI 304	Ethics or Business Ethics and Society or other engineering, business, bio, social ethics approved by advisor	3		PHILOS 1130 or PHILOS 3235	How Should I Live? An Introduction to Ethics or Business Ethics or other engineering, business, bio, social ethics approved by advisor	3
	From the 6 hours Hu	options listed in manities and Fine avioral and Socia	each group be Arts from at I I Sciences fror	•	nclude es and ciplines.	
	S			o specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1212 or ENGLISH 1222 or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation 'Satisfies the State of Missouri government requirement.	6
			ral and Soci			
		Select 6 hours fro	m at least tw	o specific disciplines.		
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humanities	, Arts, and S Select 3 hou	ocial Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any hist music, theater, English and technical communication philosophy, political science, psychology, economics etymology, or foreign language.	, 3	Solder o flou	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	31 31 Total Hours 62			Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.	32 26 58

	Architectural Er	ngineerir	ıg Group 2∃	Major Re	quirements		
	Lincoln University		<u>Semester</u>		Missouri S&T		
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3	ENGLISH SPMS 118	1100 OI P	Vriting and Research or Principles of Speech pplies to degree as Gen Ed Communication requirement.	;	3
CHM 101	General Chemistry I	4	CHEM 131		Seneral Chemistry I and Lab CHEM 1310 will be substituted for CHEM 1305.		5
CET 212	Elementary Surveying	3	CIV ENG		undamentals of Surveying		3
MAT 415	Mathematical Statistics	3	STAT 311: Sciences General Edu		Engineering Statistics Will be substituted for STAT 3113.		3
	6 hours H	Humanities and Fine chavioral and Social STORY 1200, 1300		ecific disciplines and o specific disciplines.	of Missouri government requirement.		
			inities and Fine Arts m at least two specific di	isciplines.			
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature 1865 or Survey of American Literature 1865-Present or United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6	ENGLISH ENGLISH ENGLISH ENGLISH HISTORY HISTORY ART 1180 MUSIC 11	1212 or B 1221 or A 1222 or A 1300* or A 1310* or A or A	British Literature I: The Beginnings to 1800 or stritish Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877*	(6
			ral and Social Sciences				
		s from at least two	specific disciplines to in				
HIS 102*	World Civilization II* *Satisfies the State of Missouri government requirement.	3	HISTORY		Modern Western Civilization* Satisfies the State of Missouri Government requirement.	;	3
PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	3	PHILOS 1 POL SCI 1 PSYCH 11 ECON 110 ECON 120 Foreign La	1200* or A 101 or G 00 or P 00 or P anguage E	Self and World: Intro to Philosophy or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Celementary or Intermediate Foreign Language Satisfies the State of Missouri government requirement.	:	3
	No free electives applied to the degree.	0		N	Maximum Free Electives	(0
	Group 2 Major Requirements Group 1 Core Requirements	25 31			Group 2 Major Requirements Group 1 Core Requirements	2	26 26
		Total Hours 56			T s&T advisor permission is required to transfer more than 69 credits toward rchitectural Engineering degree.		52

			ring-Biomanufa r Requirements	- The state of the		
	Lincoln University	<u>Sei</u>	<u>mester</u>	Missouri S&T		
SPT 206	Fundamentals of Speech	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	i
CHM 101	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5	i
CHM 102	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3	5
CHM 301, 303L	Organic Chemistry I and Lab	4	CHEM 2210, 2219	Organic Chemistry I and Lab	4	ļ
CHM 302, 304 or BIO 103, 104L or BIO 310	Organic Chemistry II and Lab or Principles of Biology and Lab or General Genetics	4	CHEM 2220, 2229 or BIO SCI 1113, 1219 or BIO SCI 2223	Organic Chemistry II and Lab or General Biology and Lab or General Genetics Applies to degree as Track Elective.	2	Ė
BIO 312	Molecular Biology of the Cell	4	BIO SCI 2213, 2219	Cell Biology and Lab	4	
BIO 208, 209L	Human Anatomy and Physiology and Lab	5	BIO SCI 3333, 3359	Anatomy and Physiology I and Lab	4	,
CS 338 or CS 237*	Object-Oriented Programming Using C++ or Intro to C++ Programming	3	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3	
	*At least one course must be selected from HIST	3 hours Behaviora ORY 1200, 1300, 1310 Humanitie	from at least two specific disciplines al and Social Sciences. I, or POL SCI 1200 to satisfy the S s and Fine Arts east two specific disciplines.			
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation 'Satisfies the State of Missouri government requirement.	E	í
			nd Social Sciences of 3 hours.			
HIS 101 or HIS 102* or GEO 200 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	,
	No free electives applied to the degree.	0		Maximum Free Electives	C	
	Group 2 Major Requirements Group 1 Core Requirements	40 31 Fotal Hours 71		Group 2 Major Requirements Group 1 Core Requirements Tota *S&T advisor permission is required to transfer more than 69 credit hours towa degree.	3! 20 al Hours* 6: ard the	6

		_	ineering-Biomate jor Requirements			
	Lincoln University		<u>Semester</u>	Missouri S&T		
SPT 206	Fundamentals of Speech	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CHM 101	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
CHM 102	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3	
CHM 301, 303L	Organic Chemistry I and Lab	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	4	
CHM 302, 304	Organic Chemistry II and Lab	4	CHEM 2220, 2229*	Organic Chemistry II and Lab* CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).	4	
BIO 103, 104L	Principles of Biology and Lab	4	BIO SCI 1113*, 1219*	General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4	
BIO 312 BIO 208, 209L	Molecular Biology of the Cell Human Anatomy and Physiology and Lab	4 5	BIO SCI 2213, 2219 BIO SCI 3333, 3359	Cell Biology and Lab Human Anatomy and Physiology I and Lab	4	
CS 338 or CS 237*	Object-Oriented Programming Using C++ or Intro to C++ Programming	3	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3	
		umanities and Fine A 3 hours Beha TORY 1200, 1300,	•	and		
	9		nities and Fine Arts at least two specific disciplines.			
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
			al and Social Sciences Select 3 hours.			
HIS 101 or HIS 102* or GEO 200 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	
	No free electives applied to the degree.	0		Maximum Free Electives	0	
	Group 2 Major Requirements	44		Group 2 Major Requirements	43	
	Group 1 Core Requirements	31 Total Hours 75		Group 1 Core Requirements Total H *S&T advisor permission is required to transfer more than 69 credits toward the S& Biomedical Engineering degree.		

	Ceramic Engi	neering	Group	2 Major Re	quirements	
	Lincoln University		Semester		Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 102	General Chemistry II	4		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 301, 303L	Organic Chemistry I and Lab	4		CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) CHEM 2210 will satisfy the advanced chemistry elective requirement. *CHEM 2219 is not an S&T degree requirement, will transfer as general elective credit.	3
MAT 415	Mathematical Statistics	3		STAT 3115	Engineering Statistics or any statistics course 3000-level or higher. Satisfies statistics elective requirement.	3
PHY 320	Modern Physics	3		PHYS 2305	Intro to Modern Physics	3
	Humanities,	Arts, and Socia	al Sciences G	eneral Education Requi	rements	
	6 hours Hu 6 hours Bel *At least one course must be selected from HIS	umanities and Fir navioral and Soci TORY 1200, 130 Hun	ne Arts from at least sciences from 0, 1310, or POI nanities and F	ine Arts	s and plines.	
ENG 210 or	Survey of English Literature I or	select 6 nours if	om at least two	specific disciplines. ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or United States History I* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6		ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150	British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1805 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
		Behavi	oral and Socia	al Sciences		
	S	Select 6 hours fr	om at least two	specific disciplines.		
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 1100 or HISTORY 1200° or HISTORY 2110 or PHILOS 1105 or POL SCI 1200° or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humanitie	s, Arts, and S Select 3 hou	ocial Sciences rs.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any hist music, theater, English and technical communication philosophy, political science, psychology, economics etymology, or foreign language.	۱, ع		HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	36 31 Total Hours 67			Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	35 26 61

	Chemical Engineer	ing - Bic	chem			
	Gro	up 2 Ma	jor Re	quirements		
	Lincoln University		Semester		Missouri S&T	
SPT 206	Fundamentals of Speech	3		SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 102	General Chemistry II	4		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 301, 303L	Organic Chemistry I and Lab	4		CHEM 2210, 2219*	Organic Chemistry I and Lab* "CHEM 2210 is a degree requirement. CHEM 2219 applies to the degree as 1 of 9 required science elective credits See note below.	4
CHM 302 or BIO 407	Organic Chemistry II (3) or Molecular Biology of the Cell (4)	7		CHEM 2220 or BIO SCI 2213, 2219	Organic Chemistry II (3) or Cell Biology and Lab (4) Will partially satisfy the 9-hour science elective requirement.	7
CS 338 or CS 237*	Object-Oriented Programming Using C++ or Intro to C++ Programming	3		CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
MAT 415	Mathematical Statistics	3		STAT 3115	Engineering Statistics* *Will be substituted for STAT 3113.	3
	6 hours Hun	nanities and Fine A vioral and Social S	Arts from at le Sciences from	low, select 12 hours to inc ast two specific disciplines at least two specific disciplines SCI 1200 to satisfy the S	s and plines.	
	Se		nities and Fi	ne Arts specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *	6
	Se		al and Social at least two	Sciences specific disciplines.		
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements To	40 31 otal Hours 71			Group 2 Major Requirements Group 1 Core Requirements Total Hour *S&T advisor permission is required to transfer more than 68 credits toward the S&T Chemical Engineering degree.	40 26 s* 66

	Civil Enginee	ring G	roup 2	Major Requ	uirements	
	Lincoln University		Semester		Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as 6en Ed Communication requirement.	3
CHM 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CET 212	Elementary Surveying	3		CIV ENG 2401	Fundamentals of Surveying	3
MAT 415	Mathematical Statistics	3		STAT 3115	Engineering Statistics* *Will be substituted for STAT 3113.	3
	From the op 6 hours Hum	tions listed in anities and Fin- ioral and Socia	each group be e Arts from at le al Sciences fron	eneral Education Requi elow, select 15 hours to in- east two specific disciplines in at least two specific disci L SCI 1200 to satisfy the	clude s and plines.	
		Hum	anities and F	ine Arts	·	
		ect 6 hours fro	om at least two	o specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *	6
			oral and Socia			
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	6		o specific disciplines. HISTORY 1100 or HISTORY 2100* or HISTORY 2110 or PHILOS 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humanities	s, Arts, and Select 3 hou	ocial Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	/, art, 3	Select 3 HOU	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements To	0 28 31 tal Hours 59			Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.	0 29 26 55

	Computer Eng	gineerinç	g Grou	ıp 2 Major Re	equirements		
	Lincoln University		Semeste	r	Missouri S&T		
SPT 206	Fundamentals of Speech	3		SPMS 1185	Principles of Speech		3
CHM 101	General Chemistry I	4		CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab		5
CS 338 or	Object-Oriented Programming Using C++ or			COMP SCI 1500 or	Computational Problem Solving or		
CS 237*	Intro to C++ Programming	3		COMP SCI 1971,1981*	Intro to Programming Methodology and Lab* "Will be substituted for COMP SCI 1500.		3
PHY 320 or	Modern Physics (3) or			PHYSICS 2305 or	Intro to Modern Physics or Organic Chemistry I or		
CHM 301 or BIO 407 or	Organic Chemistry I (3) or Molecular Biology (4) or	3		CHEM 2210 or BIO SCI 2213 or	Cell Biology or		3
BIO 310	General Genetics (4)			BIO SCI 2213 01	General Genetics		
MAT 403 or	Lincon Alachae en			MATH 3108 or	Satisfies a required engineering/science elective. Linear Algebra or		
MAT 315	Linear Algebra or Techniques of Mathematical Proofs	3		MATH 3108 of	Foundations of Mathematics		3
MAT 415	Mathematical Statistics	3		STAT 3115	Will satisfy a required math elective. Engineering Statistics Will be substituted for STAT 3117.		3
100			Sciences G	Seneral Education Require	0 0		Ü
		ehavioral and Socia STORY 1200, 1300	Sciences fro , 1310, or PC	•	lines.		
			anities and lome at least two	o specific disciplines.			
ENG 210 or	Survey of English Literature I or			ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or		
ENG 211 or ENG 207 or	Survey of English Literature II or Survey of American Literature Through 1865 or			ENGLISH 1212 or ENGLISH 1221 or	British Literature II: 1800 to Present American Literature: 1600 to 1865 or		
ENG 207 of ENG 208 or	Survey of American Literature 1865-Present or			ENGLISH 1221 or	American Literature: 1865 to Present or		
HIS 205* or	United States History I* or	6		HISTORY 1300* or	American History to 1877* or		6
HIS 206* or	United States History II* or			HISTORY 1310* or	American History Since 1877* or		
ART 100 or	Intro to Art or			ART 1180 or	Art Appreciation or		
MUS 200	The World of Music *Satisfies the State of Missouri government requirement.			MUSIC 1150	Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.		
				ial Sciences o specific disciplines.			
HIS 101 or	World Civilization I or	Select o flours in	iii at ieast tv	HISTORY 1100 or	Early Western Civilization or		
HIS 102* or	World Civilization II* or			HISTORY 1200* or	Modern Western Civilization* or		
GEO 200 or	World Geography or			HISTORY 2110 or	World Regional Geography or		
PHI 102 or PSC 203* or	Intro to Philosophy or			PHILOS 1105 or	Self and World: Intro to Philosophy or		
PSC 203 or PSY 101 or	American National Government* or General Psychology or	6		POL SCI 1200* or PSYCH 1101 or	American Government*or General Psychology or		6
ECO 202 or	Microeconomics or			ECON 1100 or	Principles of Microeconomics or		
ECO 201 or	Macroeconomics or			ECON 1200 or	Principles of Macroeconomics or		
Foreign Language	Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.			Foreign Language	Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		
	<u> </u>	Humanities		Social Sciences			
ENG 102	Composition and Rhetoric II	3	Select 3 hor	urs. ENGLISH 1160	Writing and Research		3
Electives	Maximum Free Electives	3		Electives	Maximum Free Electives		3
	Group 2 Major Requirements	37			Group 2 Major Requirements		38
	Group 1 Core Requirements	31			Group 1 Core Requirements		26
		Total Hours 68			*S&T advisor permission is required to transfer more than 68 credits to Computer Engineering degree.	Total Hours* vard the S&T	64

	Electrical Eng	ineering	Group 2 Major l	Requirements	
	Lincoln University		Semester	Missouri S&T	
SPT 206	Fundamentals of Speech	3	SPMS 1185	Principles of Speech	3
CHM 101	General Chemistry I	4	CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
CS 338 or CS 237*	Object-Oriented Programming Using C++ or Intro to C++ Programming	3	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) "Will be substituted for CS 1500.	3
PHY 320 or CHM 301 or BIO 407 or BIO 310	Modern Physics (3) or Organic Chemistry I (3) or Molecular Biology (4) or General Genetics (4)	3	PHYSICS 2305 or CHEM 2210 or BIO SCI 2213 or BIO SCI 2223	Intro to Modern Physics or Organic Chemistry I or Cell Biology or General Genetics Satisfies a required engineering/science elective.	3
MAT 403	Linear Algebra	3	MATH 3108	Linear Algebra	3
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics Will be substituted for STAT 3117.	3
		ehavioral and Social STORY 1200, 1300,	Arts from at least two specific discip Sciences from at least two specific of 1310, or POL SCI 1200 to satisfy the Inities and Fine Arts	disciplines.	
		Select 6 hours fro	m at least two specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation satisfies the State of Missouri government requirement.	6
			ral and Social Sciences		
		Select 6 hours from	m at least two specific disciplines.		
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humanities,	Arts, and Social Sciences Select 3 hours.		
ENG 102	Composition and Rhetoric II	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	6	Electives	Maximum Free Electives	6
	Group 2 Major Requirements	40		Group 2 Major Requirements	41
	Group 1 Core Requirements	Total Hours 71		Group 1 Core Requirements *S&T advisor permission is required to transfer more than 68 credits tov Electrical Engineering degree.	26 Total Hours* 67 vard the S&T

	Engineering Ma	nagen	ner	nt Group 2 Major R	equirements	
	Lincoln University			Semester	Missouri S&T	
SPT 206	Fundamentals of Speech		3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 101	General Chemistry I		4	CHEM 1310, 1319	General Chemistry I and Lab	5
CS 237	Intro to C++ Programming		3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
MAT 415	Mathematical Statistics		3	STAT 3115	Engineering Statistics	3
	From the 6 hours H	e options lister dumanities and sehavioral and S	d in ea I Fine / Social S 1300,	•	de nd es.	
		-		nities and Fine Arts at least two specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or Intro to Art or	GOIGGE O HOUR	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or	6
MUS 200	The World of Music *Satisfies the State of Missouri government requirement.			MUSIC 1150	Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	
				al and Social Sciences		
	Select 6 hou	urs from at lea		specific disciplines to include PSYCH 1	1101.	
PSY 101	General Psychology		3	PSYCH 1101	General Psychology Required	3
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or POL SCI 1200* or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
		Human		Arts, and Social Sciences Select 3 hours.		
ENG 102	Composition and Rhetoric II		3	ENGLISH 1160	Writing and Research	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	Total Hours	0 28 31 59	Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours* "S&T advisor permission is required to transfer more than 61 credits toward the S&T Engineering Management degree.	0 29 26 61

	Environmental Er	igineer	ing Gro	oup 2 Major	Requirements	
	Lincoln University		Semester		Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 102	General Chemistry II	4		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
BIO 103	Principles of Biology	3		BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) *The lab is not a degree requirement, transfers as general elective credit.	3
MAT 415	Mathematical Statistics	3		STAT 3115	Engineering Statistics* *Will be substituted for STAT 3113.	3
	Humanities, A	rts, and Socia	l Sciences Ge	eneral Education Require	ements	
	6 hours Hui	nanities and Fin	e Arts from at le	elow, select 12 hours to incleast two specific disciplines at least two specific disciplines. SCI 1200 to satisfy the Si	and ines.	
	At least one course must be selected from thor		anities and F	•	tate of missouri government requirement.	
	Se			specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1805 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation 'Satisfies the State of Missouri government requirement.	6
		Behavio	ral and Socia	I Sciences		
	Select 6 hours	from at least tv	o specific disc	ciplines to include HISTOR	RY 1200	
HIS 102*	World Civilization II* *Satisfies the State of Missouri government requirement.	3		HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3		PHILOS 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements T	29 31 otal Hours 60			Group 2 Major Requirements Group 1 Core Requirements Total Hours*	29 26 55
					*S&T advisor permission is required to transfer more than 69 credits toward the S&T Environmental Engineering degree.	

	Geological En	gineering	Group 2 Major R	Requirements	
	Lincoln University	S	Semester	Missouri S&T	
CHM 101	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CS 338 or	Object-Oriented Programming Using C++ or	3	CS 1500 or	Computational Problem Solving or	3
CS 237	Intro to C++ Programming		CS 1971, 1981	Intro to Programming Methodology and Lab	-
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics	3
	From the 6 hours	ne options listed in eac Humanities and Fine Ar ehavioral and Social So	ciences General Education Requi th group below, select 15 hours to in ts from at least two specific discipline ciences from at least two specific disci cito, or POL SCI 1200 to satisfy the	clude s and iplines.	
		Humani	ties and Fine Arts		
		Select 6 hours from a	at least two specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or	
HIS 205* or HIS 206* or ART 100 or MUS 200	United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
		Behavioral	and Social Sciences	• • • • • • • • • • • • • • • • • • • •	
		Select 6 hours from a	at least two specific disciplines.		
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
			rts, and Social Sciences elect 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any h music, theater, English and technical communicati philosophy, political science, psychology, economi etymology, or foreign language.	istory, art, on,	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	25 31 Total Hours 56		Group 2 Major Requirements Group 1 Core Requirements Total Hours*	26 26 52
				*S&T advisor permission is required to transfer more than 65 credits toward the S&T Geological Engineering degree.	

	Mechanical Eng	gineerin	g Grou	ıp 2 Major I	Requirements	
	Lincoln University		Semester	i	Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab "CHEM 1310 will be substituted for CHEM 1305.	5
CS 237	Intro to C++ Programming	3		CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
MAT 403 or MAT 415	Linear Algebra or Mathematical Statistics	3		MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics Will satisfy the Advanced Math/Comp Sci elective requirement.	3
	From the 6 hours Hu	options listed in umanities and Fin navioral and Socia TORY 1200, 1300	each group be e Arts from at le al Sciences fron 0, 1310, or POI	•	nclude es and ciplines.	
	S		nanities and F	ine Arts specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6	on a load the	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1800 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation 'Satisfes the State of Missouri government requirement.	6
			oral and Socia		· ·	
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		o specific disciplines. HISTORY 1100 or HISTORY 2200° or HISTORY 2110 or PHILOS 1105 or POL SCI 1200° or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humanities	s, Arts, and S Select 3 hou	ocial Sciences rs.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any hist music, theater, English and technical communication philosophy, political science, psychology, economics etymology, or foreign language.	l, 3		HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 28 31 Total Hours 59			Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.	0 29 26 55

	Metallurgical Eng	jineering	g Group 2	2 Major R	dequirements	
	Lincoln University	,	Semester		Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3	ENGLIS SPMS 1	SH 1160 or 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
MAT 415	Mathematical Statistics	3	STAT 3	115	Engineering Statistics	3
CHM 101	General Chemistry I	4	CHEM '	1310, 1319	General Chemistry I and Lab	5
CHM 102	General Chemistry II	4	CHEM '	1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.	3
CHM 301 or CHM 401 or PHY 320	Organic Chemistry I or Physical Chemistry I or Modern Physics	3	CHEM 2 CHEM 3 PHYSIC	3410 or	Organic Chemistry I or Chemical Thermodynamics I or Intro to Modern Physics or Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.	3
	Humanities, A	rts, and Social S	ciences General Ed	ducation Requirer	ments	
	6 hours Hur	nanities and Fine A vioral and Social S	ch group below, sele arts from at least two s ciences from at least 310, or POL SCI 120	specific disciplines ar two specific disciplin	nd nes.	
			ities and Fine Arts			
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement. Se World Civilization I or World Civilization II* or	6 Behavioral	ENGLIS ENGLIS ENGLIS HISTOF HISTOF ART 11. MUSIC I and Social Scienc at least two specific HISTOF HISTOF	SH 1211 or SH 1212 or SH 1221 or SH 1222 or RY 1300* or RY 1310* or 80 or 1150 ces c disciplines. RY 1100 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1800 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement. Early Western Civilization or Modern Western Civilization* or	6
GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	PHILOS POL SC PSYCH ECON 1 ECON 1 Foreign	1200 or Language	World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
			Arts, and Social Sci elect 3 hours.	ences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histo music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	ry, art, 3	HASS E	Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements T	3 35 31 otal Hours 66			Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.	3 35 26 61

	Mining Engine	ering Gro	oup 2 Major Red	quirements	
	Lincoln University	<u>Se</u>	mester	Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
MAT 415	Mathematical Statistics	3	STAT 3115	Engineering Statistics	3
CHM 101	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
	From the op 6 hours Hum	otions listed in each panities and Fine Arts vioral and Social Scie	nces General Education Requi group below, select 12 hours to in- from at least two specific discipline- nces from at least two specific disci 0, or POL SCI 1200 to satisfy the	clude s and plines.	
			s and Fine Arts		
		lect 6 hours from at	least two specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or United States History II* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
		Behavioral a	nd Social Sciences		
	Se	lect 6 hours from at	least two specific disciplines.		
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	22 31 otal Hours 53		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T	23 26 49

	Nuclear Engin	eerinç	g Group	2 Major Req	uirements	
	Lincoln University		Semester		Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	:	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 101 CS 237	General Chemistry I Intro to C++ Programming		4	CHEM 1310, 1319 CS 1971, 1981	General Chemistry I and Lab Intro to Programming Method and Lab (C++)	5 3
MAT 403 or MAT 315	Linear Algebra or Techniques of Mathematical Proofs	:	3	MATH 3108 or MATH 3109	Linear Algebra or Foundations of Mathematics	3
MAT 415 PHY 320	Mathematical Statistics Modern Physics		3	STAT 3115 PHYSICS 2305	Engineering Statistics Intro to Modern Physics	3
	Humanities, A	rts, and Soc	ial Sciences Ge	eneral Education Require	ements	
	6 hours Hun	nanities and F vioral and So	ine Arts from at le	elow, select 15 hours to incluses two specific disciplines and the least two specific disciplines. SCI 1200 to satisfy the St.	and nes.	
			manities and Fi	•		
	Se			specific disciplines.		
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation 'Satisfies the State of Missouri government requirement.	6
	Se		vioral and Socia from at least two	I Sciences specific disciplines.		
ECO 202 or ECO 201	Microeconomics or Macroeconomics	:	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HIS 101 or HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or Foreign Language	World Civilization I or World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	:	3	HISTORY 1100 or HISTORY 1200° or HISTORY 2110 or PHILOS 1105 or POL SCI 1200° or PSYCH 1101 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
		Humaniti	es, Arts, and So Select 3 hour			
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histo music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.		3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Maximum Free Electives		0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements		34 31 65		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 69 credits toward the S&T Nuclear Engineering degree.	35 26 61

	Petroleum Engi	neering	j Grouj	o 2 Major R	Requirements	
	Lincoln University		Semester		Missouri S&T	
ENG 102 or SPT 206	Composition and Rhetoric II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CS 338	Object-Oriented Programming Using C++	3		COMP SCI 1500	Computational Problem Solving	3
	From the of 6 hours Hui	options listed in e manities and Fine avioral and Social	each group be Arts from at le Sciences from	neral Education Requion, select 15 hours to in ast two specific discipline at least two specific disc SCI 1200 to satisfy the	nclude es and ciplines.	
			nities and Fi			
ENG 210 or ENG 211 or ENG 207 or ENG 208 or HIS 205* or HIS 206* or ART 100 or MUS 200	Survey of English Literature I or Survey of English Literature II or Survey of American Literature Through 1865 or Survey of American Literature 1865-Present or United States History I* or Intro to Art or The World of Music *Satisfies the State of Missouri government requirement.	6 Behavio	ral and Socia	specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150 I Sciences specific disciplines. HISTORY 1100 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement. Early Western Civilization or	6
HIS 102* or GEO 200 or PHI 102 or PSC 203* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World Civilization II* or World Geography or Intro to Philosophy or American National Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	Arte and So	HISTORY 1200* or HISTORY 2110 or PHILLOS 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Microeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		numanities	Select 3 hours			
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histo music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.			HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	25			Group 2 Major Requirements	26
	Group 1 Core Requirements	otal Hours 56			Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.	26 52