Lincoln Land Community College — 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.

	Lincoln Land Community College	9	<u>Semester</u>	Missouri S&T	
MAT 131	Calculus and Analytic Geometry I	5	MATH 1214	Calculus I Grade of C or better is required.	4
MAT 132	Calculus and Analytic Geometry II	5	MATH 1215	Calculus II Grade of C or better is required.	4
MAT 233	Calculus and Analytic Geometry III	4	MATH 2222	Calculus III Grade of C or better is required.	4
MAT 235	Differential Equations	4	MATH 3304	Elementary Differential Equations	3
PHY 201 and PHY 202	Physics I and Physics II Both courses must be taken to receive full transfer credit.	8	PHYSICS 1135 and PHYSICS 2135	Engineering Physics I and Engineering Physics II Grade of C or better is required. The combination of LLCC PHY 201 and 202 is equivalent to the combination of S&T PHYSIGS 1135 and 2135. Both LLCC courses must be taken to receive full transfer cred	8 lit.
EGL 101	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
		Total Hours 29		Total Hou	rs 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 Engine	erin	g Grou	p 2 Major Re	equirements	
	Lincoln Land Community College		Semester		Missouri S&T	
EGL 102 or CMN 101	Composition II or Fundamentals of Speech	3	_	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHE 101	General Chemistry I	4		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
ENG 270	Circuit Analysis	3		ELEC ENG 2800	Electrical Circuits	3
ENG 220	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 240	Mechanics of Materials	4		CIV ENG 2210	Mechanics of Materials	3
MAT 215	Intro to Linear Algebra	3		MATH 3108	Linear Algebra I Satisfies the Advanced Math/Comp Sci elective requirement.	3
Ethics	Ethics Elective Any engineering, business, bio, social ethics approved by advisor.	3		Ethics	Ethics Elective Any engineering, business, bio, social ethics approved by advisor.	3
		d Socia	l Sciences G	eneral Education Require		
	6 hours Humanities	and Fin nd Socia 00, 1300	e Arts from at leal Sciences from 0, 1310, or POI	•	and ines.	
	0-1		anities and F	ine Arts o specific disciplines.		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation *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
			oral and Socia			
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 201 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	Select 6 I History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Politics* or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	ours fro	om at least two	o specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 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 Logic and Reasoning: An Introduction 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
	Hur	nanities	s, Arts, and S Select 3 hou	ocial Sciences		
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		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 Total Ho	38 29 ırs 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 Aerospace Engineering degree.	38 26 64

	Architectural Eng	jineeri	ng Gro	oup 2 Major	Requirements	
	Lincoln Land Community College		Semeste	r	Missouri S&T	
EGL 102 or CMN 101	Composition II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHE 101	General Chemistry I	4		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
ENG 220	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 221	Dynamics	3		MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENG 240	Mechanics of Materials	4		CIV ENG 2210	Mechanics of Materials	3
BDM 120	Surveying and Building Layout	3		CIV ENG 2401	Fundamentals of Surveying	3
GEO 101	Physical Geology	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	6 hours Behav *At least one course must be selected from HISTO	rioral and Soc RY 1200, 130 Hui	ial Sciences from 10, 1310, or PO manities and F	ine Arts	ciplines.	
		ect 6 hours f	rom at least tw	o specific disciplines.		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature or Survey of British Literature or Survey of American Literature: Colonial Era to Civil Wal Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation 'Satisfies the State of Missouri government requirement.	r or 6		ENGLISH 1211 or ENGLISH 1221 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
			ioral and Soci			
		om at least t	wo specific disc	ciplines to include HISTO		
HIS 102*	History of Western Civilization II* *Satisfies the State of Missouri Government requirement.	3		HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 204 or PHI 201 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3		PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction 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 Tol	30 29 tal Hours 69	9		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *\$&T advisor permission is required to transfer more than 69 credits toward the S&T Architectural Engineering degree.	34 26 60

			_	-Biomanufa equirements		
	Lincoln Land Community College		Semester		Missouri S&T	
CMN 101	Fundamentals of Speech	3		SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHE 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 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
CHE 201	Organic Chemistry I	5		CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHE 202 or BIO 101 or BIO 111	Organic Chemistry II (5) or General Biology (4) or Principles of Biology I (4)	4		CHEM 2220, 2229 or BIO SCI 1113, 1219	Organic Chemistry II and Lab or General Biology and Lab Applies to degree as Track Elective.	4
MAT 161	Computer Programming and Applications for Engineer	s 4		CS 1500	Computational Problem Solving	3
	From the c	ptions listed in nanities and Fin 3 hours Be	each group be Arts from at le havioral and So		ude and	
			anities and F			
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil Wasurvey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.		om at least (we	o specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1222 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 *Satisfies the State of Missouri government requirement.	6
		Behavio	oral and Social Select 3 hour			
HIS 101 or HIS 102* or GEG 102 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	Colect o Hour	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 Group 1 Core Requirements	33 29 otal Hours 62			Group 2 Major Requirements Group 1 Core Requirements Total F *S&T advisor permission is required to transfer more than 69 credit hours toward the degree.	31 26 Hours* 57

				ing-Biomater equirements	rials	
	Lincoln Land Community College		Semeste	r	Missouri S&T	
CMN 101	Fundamentals of Speech	3	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHE 101	General Chemistry I	4	L	CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 102	General Chemistry II	4	ļ	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHE 201	Organic Chemistry I	5	i	CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	4
CHE 202	Organic Chemistry II	5	5	CHEM 2220, 2229*	Organic Chemistry II and Lab* CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).	4
BIO 101 or BIO 111	General Biology (4) or Principles of Biology I (4)	4	l .	BIO SCI 1113*, 1219*	General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4
MAT 161	Computer Programming and Applications for Engineers	4		CS 1500	Computational Problem Solving	3
ENG 220	Statics	3	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 270	Circuit Analysis	3	3	ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for ELEC ENG 2100. Applies to the degree as a Track Elective (Engineering).	4
	Humanities, Arts, ar	nd Soci	ial Sciences G	eneral Education Require	ments	
	6 hours Humanitie: 3	s and Fi hours E	ine Arts from at I Behavioral and S		nd	
	*At least one course must be selected from HISTORY 12		manities and F	-	tte of Missouri government requirement.	
	Select 6			o specific disciplines.		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation 'Satisfies the State of Missouri government requirement.	€	3	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
		Behav	ioral and Soci			
LIC 101 or	History of Western Civilization Lor		Select 3 hou		Forty Western Civilization or	
HIS 102° or GEG 102° or POS 101° or PSY 101 or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	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.	C			Maximum Free Electives	0
	Group 2 Major Requirements	4			Group 2 Major Requirements	42
	Group 1 Core Requirements Total Ho	ours 7			Group 1 Core Requirements Total Hours* '\$&T advisor permission is required to transfer more than 69 credits toward the \$&T Biomedical Engineering degree.	26 68

	Ceramic Engineer	ring	Group	2 Major Req	uirements	
	Lincoln Land Community College		Semester		Missouri S&T	
EGL 102 or CMN 101	Composition II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
ENG 220	Applied Mechanics (Statics)	3		CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 240	Mechanics of Materials	4		CIV ENG 2210	Mechanics of Materials	3
CHE 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 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
CHE 201	Organic Chemistry I	5		CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) Satisfies the advanced chemistry elective requirement. **The lab is not a degree requirement, transfers as general elective credit.	3
	Humanities, Arts, an	d Social	Sciences G	eneral Education Require		
	6 hours Humanities	and Fine	Arts from at le	elow, select 15 hours to inclu east two specific disciplines a n at least two specific disciplir	ind	
	*At least one course must be selected from HISTORY 12	200, 1300	, 1310, or POI	SCI 1200 to satisfy the Sta	ate of Missouri government requirement.	
	0.1.40		anities and F			
EGL 201 or EGL 202 or EGL 210 or EGL 210 or EGL 211 or HIS 112* or ART 101 or MUS 104 HIS 102* or GEG 102 or PHI 204 or PHI 204 or PHI 201 or POS 101* or ECO 131 or ECO 132 or Foreign Language	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation "satisfies the State of Missouri government requirement. Select 6 I History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language	6 Behavio	ral and Socia	o specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 al Sciences o specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	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. Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Microeconomics or Elementary or Intermediate Foreign Language	6
	*Satisfies the State of Missouri government requirement. Hur	nanities	, Arts, and S	ocial Sciences	*Satisfies the State of Missouri government requirement.	
			Select 3 hou	rs.		
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		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 Total Hor	0 38 29 urs 67			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 Ceramic Engineering degree.	0 35 26 61

					neering or	.	
	Chemical Engineerin	\sim			iical Engined equirements	ering Emphasis	
		μZΙ			-	м: :00Т	
	Lincoln Land Community College			<u>mester</u>		Missouri S&T Principles of Speech	
CMN 101	Fundamentals of Speech		3		SP&MS 1185	Applies to degree as Gen Ed Communication requirement.	3
CHE 101	General Chemistry I		4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 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
CHE 201	Organic Chemistry I		5		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
CHE 202	Organic Chemistry II		5		CHEM 2220	Organic Chemistry II (3) CHEM 2220 will apply to the degree as 3 of 9 required science elective credits. CHEM 2229 is not an S&T degree requirement, will transfer as general elective credit.	8
MAT 161	Computer Programming and Applications for Engineers		4		CS 1500	Computational Problem Solving	3
	· · · · · · · · · · · · · · · · · · ·				neral Education Require		
					low, select 12 hours to inclu		
					east two specific disciplines a at least two specific discipli		
	*At least one course must be selected from HISTOR						
				s and Fi	•	·	
	Selec	t 6 hours	from at	least two	specific disciplines.		
EGL 201 or	Survey of British Literature I or				ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
EGL 202 or EGL 210 or	Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War o	_			ENGLISH 1212 or ENGLISH 1221 or	British Literature II: 1800 to Present American Literature: 1600 to 1865 or	
EGL 210 or	Survey of American Literature: Colonial Era to Civil War of Survey of American Literature: Civil War to Present or	ľ			ENGLISH 1221 or	American Literature: 1865 to Present or	
HIS 111* or	United States History to 1877* or		6		HISTORY 1300* or	American History to 1877* or	6
HIS 112* or	United States History Since 1877* or				HISTORY 1310* or	American History Since 1877* or	
ART 101 or	Art Appreciation or				ART 1180 or	Art Appreciation or	
MUS 104	Music Appreciation *Satisfies the State of Missouri government requirement.				MUSIC 1150	Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	
	Satisfies the State of Missouri government requirement.	Beha	vioral ar	nd Socia	l Sciences	Sausiles the State of Missouri government requirement.	
	Selec	t 6 hours	from at	least two	specific disciplines.		
HIS 101 or	History of Western Civilization I or				HISTORY 1100 or	Early Western Civilization or	
HIS 102* or	History of Western Civilization II* or				HISTORY 1200* or	Modern Western Civilization* or	
GEG 102 or	World Regional Geography or				HISTORY 2110 or	World Regional Geography or	
PHI 204 or PHI 201 or	Intro to Philosophy or Intro to Logic or				PHILOS 1105 or PHILOS 1115 or	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or	
POS 101* or	American Politics* or		6		POL SCI 1200* or	American Government*or	6
PSY 101 or	Intro to Psychology or		_		PSYCH 1101 or	General Psychology or	-
ECO 131 or	Principles of Economics I (Microeconomics) or				ECON 1100 or	Principles of Microeconomics or	
ECO 132 or	Principles of Economics II (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.	
	No free electives applied to the degree.		0			Maximum Free Electives	0
	Group 2 Major Requirements		37			Group 2 Major Requirements	38
	Group 1 Core Requirements		29			Group 1 Core Requirements	26
	Total	Hours	66			Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Chemical Engineering degree.	64

	Civil Engineerir	ng C	Froup 2	Major Requi	rements	
	Lincoln Land Community College		Semeste	•	Missouri S&T	
EGL 102 or CMN 101	Composition II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHE 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
GEO 101	Physical Geology	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
ENG 220	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 221	Dynamics	3		MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENG 240	Mechanics of Materials	4		CIV ENG 2210	Mechanics of Materials	3
BDM 120	Surveying and Building Layout	3		CIV ENG 2401	Fundamentals of Surveying	3
	From the options 6 hours Humanitie	listed in s and Fi and Soc	n each group b ne Arts from at l ial Sciences fro	eneral Education Requirer elow, select 15 hours to include east two specific disciplines and at least two specific disciplint I SCI 1200 to satisfy the Sta	de nd nes.	
	At least one course must be selected from mo force in		nanities and F	•	te of missouri government requirement.	
	Select 6			o specific disciplines.		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation '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
	3	Behav	ioral and Soci	al Sciences		
	Select 6	hours f	rom at least tw	o specific disciplines.		
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 201 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (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 PHILOS 1115 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 Logic and Reasoning: An Introduction 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
	Hu	manitie		ocial Sciences		
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	Select 3 hou	rs. 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	3	9		Group 2 Major Requirements	37
	Group 1 Core Requirements Total Ho	29 ours 6			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.	26 63

	Computer Enginee	ring	g Grou	p 2 Major Re	quirements	
	Lincoln Land Community College		Semeste	r	Missouri S&T	
CMN 101	Fundamentals of Speech	3		SPMS 1185	Principles of Speech	3
CHE 101	General Chemistry I	4		CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
MAT 220	Discrete Structures	3		COMP SCI 1200	Discrete Math for Computer Science	3
MAT 161	Computer Programming and Applications for Engineers	4		COMP SCI 1500	Computational Problem Solving	3
ENG 220 or ENG 221 or CHE 201	Statics or Dynamics or Organic Chemistry I (5)	3		CIV ENG 2200 or MECH ENG 2350 or CHEM 2210, 2219*	Engineering Mechanics-Statics (3) or Engineering Mechanics-Dynamics (2) or Organic Chemistry I (3) and Lab* (1) Satisfies a required engineering/science elective. 'CHEM 2219 is not an S&T degree requirement, will transfer as general elective credit.	3
ENG 270	Circuit Analysis	3		ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missoun S&T EE Advancement Exam I is required to receive credit for ELEC ENG 2104.	4
MAT 215	Intro to Linear Algebra	3		MATH 3108	Linear Algebra Satisfies a required math elective.	3
	6 hours Humanities 6 hours Behavioral a *At least one course must be selected from HISTORY 12	and Fin nd Socia 00, 130 Hum	e Arts from at al Sciences fro 0, 1310, or PO nanities and I	ine Arts	and ines.	
	Select 6 h	nours fr	om at least tw	o specific disciplines.		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation '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
			oral and Soci			
		nours fr	om at least tw	o specific disciplines.	5 1 111 1 20 77 17	
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 201 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (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 PHILOS 1115 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 Logic and Reasoning: An Introduction 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
	Hun	nanities	s, Arts, and S Select 3 hou	Social Sciences		
EGL 102	Composition II	3	231001 0 1100	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	3		Electives	Maximum Free Electives	3
	Group 2 Major Requirements	41			Group 2 Major Requirements	42
	Group 1 Core Requirements Total Hot	29			Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Computer Engineering degree.	26

	Electrical Enginee	ring	Group	o 2 Major Red	quirements	
	Lincoln Land Community College		Semester	•	Missouri S&T	
CMN 101	Fundamentals of Speech	3		SPMS 1185	Principles of Speech	3
CHE 101	General Chemistry I	4		CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
MAT 161	Computer Programming and Applications for Engineers	4		CS 1500	Computational Problem Solving	3
ENG 220 and ENG 221 BOTH of the courses above or ONE of the courses below. OR CHE 201	Applied Mechanics (Statics) (3) and Dynamics (3)) Both courses above combined or any one of the following courses will satisfy a required engineering science elective. OR Organic Chemistry I (5)	5		CIV ENG 2200 and MECH ENG 2350 BOTH of the courses above or ONE of the courses below. OR CHEM 2210, 2219	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2) Both courses above combined or any one of the following courses will satisfy a required engineering science elective. OR Organic Chemistry I and Lab (4)	3
ENG 270	Circuit Analysis	3		ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for ELEC ENG 2100.	4
MAT 215	Intro to Linear Algebra	3		MATH 3108	Linear Algebra	3
	6 hours Humanities	and Fine nd Social	Arts from at le Sciences from	elow, select 15 hours to include east two specific disciplines ar n at least two specific disciplin . SCI 1200 to satisfy the Stat	nd es.	
		Huma	nities and F	ine Arts		
		ours fro	m at least two	specific disciplines.		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation *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 Socia			
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 201 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	Select 6 f History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government.	iours froi	n at least two	o specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 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 Logic and Reasoning: An Introduction 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.	6
	Hun		Arts, and So Select 3 hour	ocial Sciences		
EGL 102	Composition II	3		ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hou	6 43 29 Irs 72		Electives	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 Electrical Engineering degree.	6 42 26 68

	Engineering Man	ageme	nt Gro	up 2 Major	Requirements	
	Lincoln Land Community College		Semester		Missouri S&T	
CMN 101	Fundamentals of Speech	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHE 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
ENG 270	Circuit Analysis	3		ELEC ENG 2800	Electrical Circuits	3
ENG 220	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 221	Dynamics	3		MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENG 240	Mechanics of Materials		l Scioncos Go	CIV ENG 2210 eneral Education Requi	Mechanics of Materials	3
	From the op 6 hours Hum	otions listed in anities and Find vioral and Social PRY 1200, 1300	each group be e Arts from at le d Sciences fron 0, 1310, or POL	elow, select 15 hours to in east two specific discipline n at least two specific disci L SCI 1200 to satisfy the	clude s and plines.	
			anities and F			
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil Wa Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.		om at least (wc	o specific disciplines. 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
	Collect Charmed		ral and Socia		11 4404	
PSY 101	Intro to Psychology	rom at least to	wo specific dis	ciplines to include PSYC PSYCH 1101	General Psychology Required	3
HIS 101 or HIS 102* or GEG 102 or PHI 204 or POS 101* or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Principles of Economics I (Microeconomics) or Principles of Economics II (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 PHILOS 1115 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 Logic and Reasoning: An Introduction 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
		Humanities	s, Arts, and So Select 3 hour	ocial Sciences		
EGL 102	Composition II	3	_ 5.00. 0 .1001	ENGLISH 1160	Writing and Research	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements To	0 35 29 tal Hours 64		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 34 26 61

	Environmental Engin	eeri	ing Gr	oup 2 Major I	Requirements	
	Lincoln Land Community College		Semeste	r	Missouri S&T	
EGL 102 or CMN 101	Composition II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
GEO 101	Physical Geology	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CHE 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 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 101	General Biology	4		BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) *The lab is not a degree requirement, transfers as general elective credit.	3
ENG 220	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 221	Dynamics	3		MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENG 240	Mechanics of Materials	4		CIV ENG 2210	Mechanics of Materials	3
	6 hours Humanities	and Fine d Socia 0, 1300	e Arts from at I Il Sciences fror	•	and nes.	
	Select 6 h			o specific disciplines.		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation '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
			ral and Soci			
		east tw	o specific dis	ciplines to include HISTOR		
HIS 102*	History of Western Civilization II* *Satisfies the State of Missouri Government requirement.	3		HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 204 or PHI 201 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	3		PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction 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 Total Hou	41 29 rs 70			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 Environmental Engineering degree.	37 26 63

	Geological Engine	erinç	g Group 2 Major Re	equirements	
	Lincoln Land Community College		<u>Semester</u>	Missouri S&T	
CHE 101	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
MAT 161	Computer Programming and Applications for Engineers	4	CS 1500	Computational Problem Solving	3
GEO 101	Physical Geology	4	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
ENG 220	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 221	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENG 240	Mechanics of Materials	4	CIV ENG 2210	Mechanics of Materials	3
	From the options 6 hours Humanities	listed in e s and Fine and Social	Sciences General Education Require each group below, select 15 hours to inclu- Arts from at least two specific disciplines a Sciences from at least two specific disciplination 1310, or POL SCI 1200 to satisfy the Str	rde and nes.	
			anities and Fine Arts		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Select 6 Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	nours fro	m at least two specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1222 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
		Behavio	ral and Social Sciences		
		hours fro	m at least two specific disciplines.		
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 204 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (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 PHILOS 1115 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 Logic and Reasoning: An Introduction 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
	Hui		, Arts, and Social Sciences Select 3 hours.		
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	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 Total Ho	37 29 ours 66		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 65 credits toward the S&T Geological Engineering degree.	34 26 60

	Mechanical Engin	eeri	ng Gro	up 2 Major F	Requirements	
	Lincoln Land Community College		Semeste	ar	Missouri S&T	
EGL 102 or	Composition II or			ENGLISH 1160 or	Writing and Research or	
CMN 101	Fundamentals of Speech		3	SPMS 1185	Principles of Speech	3
CHE 101	General Chemistry I		4	CHEM 1310*, 1319	General Chemistry I and Lab	5
ENG 270	Circuit Analysis		3	ELEC ENG 2800	*CHEM 1310 will be substituted for CHEM 1305. Electrical Circuits	3
ENG 270 ENG 220	Statics		3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 240	Mechanics of Materials		4	CIV ENG 2210	Mechanics of Materials	3
MAT 215	Intro to Linear Algebra		3	MATH 3108	Linear Algebra I	3
	, and the second	and Sa		Seneral Education Requ	Satisfies the Advanced Math/Statistics elective requirement.	
	From the optior 6 hours Humanit	is listed es and Il and So	in each group b Fine Arts from at ocial Sciences fro	pelow, select 15 hours to in least two specific discipline im at least two specific disc	iclude is and iplines.	
			umanities and	•	otato of microan government requirement	
	Select			vo specific disciplines.		
EGL 201 or	Survey of British Literature I or			ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
EGL 202 or	Survey of British Literature I or			ENGLISH 1212 or	British Literature II: 1800 to Present	
EGL 210 or	Survey of American Literature: Colonial Era to Civil War or			ENGLISH 1221 or	American Literature: 1600 to 1865 or	
EGL 211 or	Survey of American Literature: Civil War to Present or		6	ENGLISH 1222 or	American Literature: 1865 to Present or	_
HIS 111* or HIS 112* or	United States History to 1877* or		6	HISTORY 1300* or HISTORY 1310* or	American History to 1877* or	6
ART 101 or	United States History Since 1877* or Art Appreciation or			ART 1180 or	American History Since 1877* or Art Appreciation or	
MUS 104	Music Appreciation *Satisfies the State of Missouri government requirement.			MUSIC 1150	At Appreciation of Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	
			vioral and Soc			
		6 hours	from at least tw	vo specific disciplines.		
HIS 101 or	History of Western Civilization I or			HISTORY 1100 or	Early Western Civilization or	
HIS 102* or	History of Western Civilization II* or			HISTORY 1200* or	Modern Western Civilization* or	
GEG 102 or PHI 204 or	World Regional Geography or Intro to Philosophy or			HISTORY 2110 or PHILOS 1105 or	World Regional Geography or Self and World: Intro to Philosophy or	
PHI 201 or	Intro to Logic or			PHILOS 1115 or	Logic and Reasoning: An Introduction or	
POS 101* or	American Politics* or		6	POL SCI 1200* or	American Government*or	6
PSY 101 or	Intro to Psychology or			PSYCH 1101 or	General Psychology or	
ECO 131 or	Principles of Economics I (Microeconomics) or			ECON 1100 or	Principles of Microeconomics or	
ECO 132 or	Principles of Economics II (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.	
		umanit	ies. Arts. and S	Social Sciences	Gausties the State of missouri government requirement.	
	· ·		Select 3 hou			
	Humanities, Arts, Social Sciences Elective: Any history, ar	t,			Humanities, Arts, Social Sciences Elective: Any history, art,	
HASS Elective	music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.		3	HASS Elective	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		35		Group 2 Major Requirements	35
	Group 1 Core Requirements		29		Group 1 Core Requirements	26
	Total H	Hours	64		Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.	61

	Metallurgical En	ngineeri	ng Gr	oup 2 Major	Requirements	
	Lincoln Land Community College		Semeste	\#	Missouri S&T	
EGL 102 or CMN 101	Composition II or Fundamentals of Speech	5		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
ENG 220	Statics	3	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 240	Mechanics of Materials	4	1	CIV ENG 2210	Mechanics of Materials	3
CHE 101	General Chemistry I	4	1	CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 102	General Chemistry II	4	1	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHE 201 or ENG 270	Organic Chemistry I or Circuit Analysis	;	3	CHEM 2210, 2219 or EE 2800	Organic Chemistry I (3) and Lab (1) or Electrical Circuits (3) Not specifically required for the degree but will satisfy out-of-department technical elective requirement	3
	From the 6 hours H	e options listed in Humanities and Fe Havioral and So	n each group l ine Arts from at cial Sciences fro	General Education Requi- pelow, select 15 hours to inc least two specific disciplines om at least two specific discip DL SCI 1200 to satisfy the S	clude s and olines.	
			manities and	Fine Arts vo specific disciplines.	·	
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil Survey of American Literature: Civil War to Present United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation "Satisfies the State of Missouri government requirement.		3	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
			rioral and Soc			
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 201 or POS 101* or PCS 1031 or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	Select 6 nours		vo specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 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 Logic and Reasoning: An Introduction 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
		Humaniti	es, Arts, and Select 3 ho	Social Sciences urs.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any his music, theater, English and technical communicatic philosophy, political science, psychology, economic etymology, or foreign language.	on,	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	:	3		Maximum Free Electives	3
	Group 2 Major Requirements Group 1 Core Requirements		9		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.	38 26 64

	Mining Engin	eering (Group 2 Major	Requirements	
	Lincoln Land Community College		Semester	Missouri S&T	
EGL 102 or CMN 101	Composition II or Fundamentals of Speech	3	ENGLISH 1160 SPMS 1185	or Writing and Research or Principles of Speech	3
CHE 101	General Chemistry I	4	CHEM 1310, 13	319 General Chemistry I and Lab	5
ENG 220	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 221	Dynamics	3	MECH ENG 23	50 Engineering Mechanics-Dynamics	2
ENG 240	Mechanics of Materials	4	CIV ENG 2210	Mechanics of Materials	3
GEO 101	Physical Geology	4	GEOLOGY 111 (GEO ENG 115	Physical and Environmental Geology	3
	From the 6 hours Hu 6 hours Beh	options listed in cumanities and Fine navioral and Socia	Sciences General Education each group below, select 12 har Arts from at least two specific Sciences from at least two spec 1310, or POL SCI 1200 to safe	ours to include disciplines and	
		Huma	anities and Fine Arts		
	S	Select 6 hours fro	m at least two specific discipl	ines.	
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil V Survey of American Literature: Civil War to Present of United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	or 6	ENGLISH 1211 ENGLISH 1212 ENGLISH 1221 ENGLISH 1222 HISTORY 1300 HISTORY 1310 ART 1180 or MUSIC 1150	e or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or e or American Literature: 1865 to Present or American History to 1877* or	6
	,		ral and Social Sciences		
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 201 or POS 101* or PSY 101 or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select 6 hours fro	m at least two specific discipl HISTORY 1100 HISTORY 1200 HISTORY 2110 PHILOS 1115 c PHILOS 1115 c POL SCI 1200° PSYCH 1101 or ECON 1100 or FOR SI Langua	Dor Early Western Civilization or Modern Western Civilization* or Or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or or American Government*or r General Psychology or Principles of Microeconomics or Principles of Macroeconomics or	6
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	33 29 Total Hours 62		Group 2 Major Requirements Group 1 Core Requirements *S&T advisor permission is required to transfer more than 68 credits Mining Engineering degree.	31 26 Total Hours* 57 toward the S&T

	Nuclear Engineer	ing	Group	2 Major Req	uirements	
	Lincoln Land Community College		Semester		Missouri S&T	
EGL 102 or CMN 101	Composition II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHE 101	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
MAT 215 ENG 220	Intro to Linear Algebra Statics	3		MATH 3108	Linear Algebra	3
				CIV ENG 2200	Engineering Mechanics-Statics	
ENG 240 ENG 270	Mechanics of Materials	4		CIV ENG 2210 ELEC ENG 2800	Mechanics of Materials Electrical Circuits	3
ENG 270	Circuit Analysis		Sciences Go	eneral Education Require		3
	From the options I 6 hours Humanities	isted in e and Fine nd Social	each group be Arts from at le Sciences from	low, select 15 hours to inclu east two specific disciplines a n at least two specific disciplir	de nd nes.	
		Huma	anities and F	ine Arts	· .	
	Select 6 h	ours fro	m at least two	specific disciplines.		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation '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
	· · · · · · · · · · · · · · · · · · ·	Behavio	ral and Socia	I Sciences		
	Select 6 h	ours fro	m at least two	specific disciplines.		
ECO 131 or ECO 132	Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics)	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 201 or POS 101* or PSY 101 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to 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 PHILOS 1115 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 Logic and Reasoning: An Introduction or American Government*or General Psychology or Elementary or Intermediate Foreign Language 'satisfies the State of Missouri government requirement.	3
	Hum	nanities		ocial Sciences		
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	Select 3 hour	s. 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 Group 2 Major Requirements Group 1 Core Requirements Total Hou	0 35 29 ars 64			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 Nuclear Engineering degree.	0 35 26 61

	Petroleum Engine	ering	Group 2 Majo	or Requirements	
EGL 102 or CMN 101	<u>Lincoln Land Community College</u> Composition II or Fundamentals of Speech	3	Semester ENGLISH 1160 SPMS 1185	Missouri S&T or Writing and Research or Principles of Speech	3
CHE 101 MAT 161	General Chemistry I Computer Programming and Applications for Engineers	4 4	CHEM 1310, 13 CS 1500	9 General Chemistry I and Lab Computational Problem Solving	5 3
GEO 101	Physical Geology	4	GEOLOGY 1110 (GEO ENG 1150		3
ENG 220	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 221	Dynamics	3	MECH ENG 235	D Engineering Mechanics-Dynamics	2
ENG 240	Mechanics of Materials	4	CIV ENG 2210	Mechanics of Materials	3
	From the options 6 hours Humanities	listed in e and Fine and Social	Sciences General Education each group below, select 15 ho Arts from at least two specific d Sciences from at least two specific 1310, or POL SCI 1200 to sati	urs to include sciplines and ffic disciplines.	
	Colort G		inities and Fine Arts m at least two specific discipli		
EGL 201 or EGL 202 or EGL 210 or EGL 211 or HIS 111* or HIS 112* or ART 101 or MUS 104	Survey of British Literature I or Survey of British Literature I or Survey of American Literature: Colonial Era to Civil War or Survey of American Literature: Civil War to Present or United States History to 1877* or United States History Since 1877* or Art Appreciation or Music Appreciation 'Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 ENGLISH 1212 ENGLISH 1212 ENGLISH 1221 ENGLISH 1222 HISTORY 1300' HISTORY 1310' ART 1180 or MUSIC 1150	or British Literature I: The Beginnings to 1800 or or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or	6
			ral and Social Sciences		
HIS 101 or HIS 102* or GEG 102 or PHI 204 or PHI 201 or POS 101* or PCS 101* or ECO 131 or ECO 132 or Foreign Language	History of Western Civilization I or History of Western Civilization II* or World Regional Geography or Intro to Philosophy or Intro to Logic or American Politics* or Intro to Psychology or Principles of Economics I (Microeconomics) or Principles of Economics II (Macroeconomics) or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	m at least two specific disciplin HISTORY 1100 HISTORY 1200* HISTORY 2110 PHILOS 1105 or PHILOS 1115 or POL SCI 1200* PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	or Early Western Civilization or or Modern Western Civilization* or or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or	6
	Hui	manities,	Arts, and Social Sciences Select 3 hours.		
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	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 Total Ho	0 40 29 urs 69		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements *S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.	0 37 26 63