Lindenwood 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.

	Lindenwood University	<u>Semes</u>	<u>ter</u>	Missouri S&T		
MTH 27100	Calculus I	5	MATH 1214	Calculus I Grade of C or better is required.		4
MTH 27200	Calculus II	5	MATH 1215	Calculus II Grade of C or better is required.		4
MTH 30300	Calculus III	5	MATH 2222	Calculus III Grade of C or better is required.		4
MTH 31100	Differential Equations	3	MATH 3304	Elementary Differential Equations		3
PHY 30100	General Physics I	4	PHYSICS 1135	Engineering Physics I Grade of C or better is required.		4
PHY 30200	General Physics II	4	PHYSICS 2135	Engineering Physics II Grade of C or better is required.		4
ENGL 15000	Composition I	3	ENGLISH 1120	Exposition and Argumentation		3
		Total Hours 29			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

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 Engi	neerinç	g Grou	p 2 Major R	equirements	
	Lindenwood University		Semester	•	Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3		ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CSC 14400 EGR 36100	Computer Science I Circuit Theory I	4 3		CS 1971, 1981 ELEC ENG 2800	Intro to Programming Method and Lab (C++) Electrical Circuits	3
MTH 31500	Linear Algebra I	3		MATH 3108	Linear Algebra I Satisfies the Advanced Math/Comp Sci elective requirement.	3
Ethics	Ethics Elective or other engineering, business, bio, social ethics approved by advisor	3		Ethics	Ethics Elective or other engineering, business, bio, social ethics approved by advisor	3
	From the op 6 hours Huma	tions listed in e anities and Fine ioral and Social	each group be Arts from at le Sciences fror	eneral Education Requi elow, select 15 hours to in- east two specific disciplines n at least two specific disci L SCI 1200 to satisfy the	clude s and plines.	
			anities and F			
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *satisfies the State of Missouri government requirement.	ect 6 hours fro	m at least two	o specific disciplines. ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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
			ral and Socia		• • • • • • • • • • • • • • • • • • • •	
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		o specific disciplines. HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
			, Arts, and S Select 3 hou	ocial Sciences rs.		
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		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 Tot	0 35 29 tal Hours 64			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 Aerospace Engineering degree.	0 35 26 61

	Architectural Eng	ineering	Group 2 Major	Requirements		
	Lindenwood University	<u>Se</u>	<u>mester</u>	Missouri S&T		
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.		3
CHM 23100, 24100	General Chemistry II and Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.		5
ESC 10000	Physical Geology with Lab	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology		3
	From the op	otions listed in each anities and Fine Arts 3 hours Behavior RY 1200, 1300, 131	•	lude s and		
	Sel·		es and Fine Arts least two specific disciplines.			
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	6	ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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
			nd Social Sciences ect 3 hours.			
PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	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	20 29 tal Hours 49		Group 2 Major Requirements Group 1 Core Requirements *S&T advisor permission is required to transfer more than 69 credits to Architectural Engineering degree.	Total Hours*	20 26 46

				iomanufa ıirements		
	Lindenwood University		Semester		Missouri S&T	
COM 11000	Fundamentals of Oral Communication	3	SP&	MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4	CHE	M 1310, 1319	General Chemistry I and Lab	5
CHM 23200, 24200	General Chemistry III and Lab	4	CHE	M 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 36100	Organic Chemistry I	4	CHE	M 2210, 2219	Organic Chemistry I and Lab	4
CHM 36200 or BSC 10000 or BSC 24400 or BSC 40800	Organic Chemistry II or Concepts in Biology or Intro to Cellular and Molecular Biology or Genetics	4	BIO BIO	M 2220, 2229 or SCI 1113, 1219 or SCI 1213*, 1219 or SCI 2223	Organic Chemistry II and Lab or General Biology and Lab or Principles of Biology* or General Genetics Applies to degree as Track Elective. *BIO SCI 1213 will be substituted for 1113.	4
BSC 40400	Cell Biology	4	BIO	SCI 2213, 2219	Cell Biology and Lab	4
DSCI 11000 or CSC 10011 or CSC 24400 or CSC 36000 or CSC 14400*	Intro to Data Science (3) or Intro to Computer Science: Python (3) or Computer Science II (4) or Data Structures and Algorithms (3) or Computer Science I* (4)	3		500 or 971,1981*	Computational Problem Solving (3) or Intro to Programming Methodology and Lab* C++) "Will be substituted for CS 1500.	3
				Education Require		
	6 hours	Humanities and Fine Behavioral and Social ISTORY 1200, 1300	Arts from at least tw Sciences from at least 1310, or POL SCI	•	and lines.	
			anities and Fine A m at least two spec			
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature Statisfies the State of Missouri government requirement.	6	LITE HIST HIST ART	LISH 1222 or RATURE or 'ORY 1300* or 'ORY 1310* or 1180 or IIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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 Scie			
DUDI 24202		urs from at least tw 3		es to include PHILOS		3
PHRL 21202 GEO 10100 or GEO 11500 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23020 or Foreign Language	Bioethics World Regional Geography or Physical Geography or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HIST HIST POL PSY ECO ECO	OS 3223 ORY 2110 or ORY 2110 or SCI 1200* or CH 1101 or N 1100 or N 1200 or ign Language	Bioethics World Regional Geography 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
			Arts, and Social			
ENGL 31200	Technical Writing	ENG 3	LISH 3560 required	1. LISH 3560	Technical Writing	3
222 01200	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 41 29 Total Hours 70	ENC		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements *SAT advisor permission is required to transfer more than 69 credit hours toward the degree.	0 41 26

	Biomed	dical Engin	eering-Biomate	rials	
			r Requirements		
	Lindenwood University		mester	Missouri S&T	
COM 11000	Fundamentals of Oral Communication	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4	CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
CHM 23200, 24200	General Chemistry III and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)	3
CHM 36100	Organic Chemistry I	4	CHEM 2210, 2219*	*CHEM 1510 is not a degree requirement, transfers as general elective credit. Organic Chemistry I and Lab* *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	4
CHM 36200	Organic Chemistry II	4	CHEM 2220, 2229*	Organic Chemistry II and Lab* CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).	4
BSC 10000 or BSC 24400	Concepts in Biology or Intro to Cellular and Molecular Biology	4	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* Applies to degree as Track Elective (non-engineering). *BIO SCI 1213 will be substituted for 1113.	4
BSC 40400	Cell Biology	4	BIO SCI 2213, 2219	Cell Biology and Lab	4
DSCI 11000 or CSC 10011 or CSC 24400 or CSC 36000 or CSC 14400*	Intro to Data Science (3) or Intro to Computer Science: Python (3) or Computer Science II (4) or Data Structures and Algorithms (3) or Computer Science I* (4)	3	CS 1500 or CS 1971,1981*	Computational Problem Solving (3) or Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
EGR 36100	Circuit Theory I	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
	*At least one course must be selected from HIS	TORY 1200, 1300, 1310	nces from at least two specific discipled, or POL SCI 1200 to satisfy the State and Fine Arts		
	:		least two specific disciplines.		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	6	ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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
			nd Social Sciences		
PHRL 21202	Bioethics	Select 6 nours from at 1	least two specific disciplines. PHILOS 3223	Bioethics	3
GEO 10100 or GEO 11500 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 2110 or HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography 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
			s, and Social Sciences I 3560 required.		
ENGL 31200	Technical Writing	3	ENGLISH 3560	Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 48 29 Total Hours 77		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours' *SAT advisor permission is required to transfer more than 69 credits toward the S&T Biomedical Engineering degree.	0 49 26 * 75

	Ceramic Engir	neering	Group	2 Major Re	quirements	
	Lindenwood University		Semeste	<u>r</u>	Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3		ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 23200, 24200	General Chemistry III and Lab	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 36100 or CHM 44000	Organic Chemistry I (4) or Inorganic Chemistry (4)	4		CHEM 2210, 2219* or CHEM 3310	Organic Chemistry I (3) and Lab* (1) or Inorganic Chemistry I (3) Satisfies the advanced chemistry elective requirement. *The lab is not a degree requirement, transfers as general elective credit.	3
PHY 30300	Modern Physics	3		PHYSICS 2311*	Modern Physics I* *Will be substituted for PHYSICS 2305.	3
	Humanities. A	rts. and Socia	l Sciences G	eneral Education Requir		
	From the 6 hours Hu	options listed in manities and Fir avioral and Soci	each group be le Arts from at I al Sciences fror	elow, select 15 hours to incl east two specific disciplines n at least two specific discip	ude and lines.	
	74.1040.0110.004100.11140.20.00100.00		nanities and F	•		
	S			o specific disciplines.		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature '\$attsfets the State of Missouri government requirement.	6		ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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
	Cataline the Cate of Misseall government requirement.	Behavi	oral and Soci	al Sciences	Catalia the Catalia of Missouri goronimora requirements	
	S	elect 6 hours fr	om at least tw	o specific disciplines.		
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
		Humanitie	s, Arts, and S Select 3 hou	ocial Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histomusic, theater, English and technical communication philosophy, political science, psychology, economics, etymology, or foreign language.	3	Select 3 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	33 29 otal 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 Ceramic Engineering degree.	32 26 58

	C Chemical Engineer		Engineering or Themical Engine	ering Emphasis	
			or Requirements		
	Lindenwood University		mester	Missouri S&T	
COM 11000	Fundamentals of Oral Communication	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 23200, 24200	General Chemistry III and Lab	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 36100	Organic Chemistry I	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 36200 or BSC 40400 or BSC 35300	Organic Chemistry II or Cell Biology or Microbiology	4	CHEM 2220 or BIO SCI 2213, 2219 or BIO SCI 3313, 3319	Organic Chemistry II (3) or Cell Biology and Lab (4) or Microbiology and Lab (5) Applies to the degree as required science elective credits. Select up to 9 hours from these options or CHEM 2219 Organic Chemistry Lab.	8
DSCI 11000 or CSC 10011 or CSC 24400 or CSC 36000 or CSC 14400*	Intro to Data Science (3) or Intro to Computer Science: Python (3) or Computer Science II (4) or Data Structures and Algorithms (3) or Computer Science I* (4)	3	COMP SCI 1500 or COMP SCI 1971,1981* o COMP SCI 1570, 1580* o COMP SCI 1972, 1982	0 0 0; ()()	3
	6 hours Hu	manities and Fine Arts avioral and Social Scie ORY 1200, 1300, 131	group below, select 15 hours to inc from at least two specific disciplines inces from at least two specific discip 0, or POL SCI 1200 to satisfy the S as and Fine Arts	and lines.	
	S		least two specific disciplines.		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature 'Satisfies the State of Missouri government requirement.	6	ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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
			nd Social Sciences		
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	least two specific disciplines. HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200° or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
		,	s, and Social Sciences 1 3560 required.		
ENGL 31200	Technical Writing	3	ENGLISH 3560	Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 37 29 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 Chemical Engineering degree.	0 41 26 67

	Civil Enginee	ring Gro	oup 2 Major Requ	uirements	
	Lindenwood University	9	Semester .	Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Apples to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
ESC 10000	Physical Geology with Lab	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the opt 6 hours Huma	ions listed in eac nities and Fine Ar oral and Social So RY 1200, 1300, 13	•	elude and olines.	
	Sele		ities and Fine Arts at least two specific disciplines.		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature 'Satisfies the State of Missouri government requirement.	6	ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *statisfies the State of Missouri government requirement.	6
	Cala		and Social Sciences		
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500° or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	ct 6 nours from	at least two specific disciplines. HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200° or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
			arts, and Social Sciences elect 3 hours.		
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	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 Tota	0 26 29 al Hours 55		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 26 26 52

	Computer Engin	eering	g Grou	p 2 Major Re	quirements	
	Lindenwood University		Semeste	<u>r</u>	Missouri S&T	
COM 11000	Fundamentals of Oral Communication	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100 DSCI 11000 or	General Chemistry II and Lab Intro to Data Science (3) or	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 10011 or CSC 24400 or CSC 36000 or CSC 14400*	Intro to Computer Science: Python (3) or Computer Science II (4) or Data Structures and Algorithms (3) or Computer Science I* (4)	3		COMP SCI 1500 or COMP SCI 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* *Will be substituted for COMP SCI 1500.	3
EGR 33500 or PHY 30300 or CHM 36100 or BSC 40400 or BSC 40800	Engineering Mechanics -Statics and Dynamics (3) or Modern Physics (3) or Organic Chemistry I (4) or Cell Biology n or Genetics (4)	3		MECH ENG 2340 or PHYSICS 2311 or CHEM 2210, 2219* or BIO SCI 2213 or BIO SCI 2223	Statics and Dynamics (3) or Modern Physics I (3) Organic Chemistry I (3) and Lab* (1) or Cell Biology (3) or General Genetics (3) Satisfas a required engineering/science elective. CHEM 2219 is not an S&T degree requirement, will transfer as general elective credit.	3
EGR 36100	Circuit Theory I	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
MTH 31500	Linear Algebra I	3		MATH 3108	Linear Algebra Satisfies a required math elective.	3
	*At least one course must be selected from HISTOF Sele	RY 1200, 130 Hum	<mark>0, 1310, or PO</mark> anities and F	ine Arts o specific disciplines.	ate of Missouri government requirement.	
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	6		ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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			
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	ct 6 nours in	om at least tw	o specific disciplines. HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
		Humanities	s, Arts, and S Select 3 hou	ocial Sciences		
ENGL 17000 or ENGL 31200	Composition II or Technical Writing	3	35.550 0 1100	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
Electives	Maximum Free Electives	3		Electives	Maximum Free Electives	3
	Group 2 Major Requirements Group 1 Core Requirements Tota	37 29 al Hours 66			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 Computer Engineering degree.	39 26 * 65

	Electrical Engi	neering	g Grou	p 2 Major Re	quirements	
	Lindenwood University		Semeste	<u>r</u>	Missouri S&T	
COM 11000	Fundamentals of Oral Communication	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
DSCI 11000 or CSC 10011 or CSC 24400 or CSC 36000 or CSC 14400*	Intro to Data Science (3) or Intro to Computer Science: Python (3) or Computer Science II (4) or Data Structures and Algorithms (3) or Computer Science I* (4)	3		CS 1500 or CS 1971,1981*	Computational Problem Solving (3) or Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
EGR 33500 or PHY 30300 or CHM 36100 or BSC 40400 or BSC 40800	Engineering Mechanics -Statics and Dynamics (3) or Modern Physics (3) or Organic Chemistry I (4) or Cell Biology n or Genetics (4)	3		MECH ENG 2340 or PHYSICS 2311 or CHEM 2210, 2219* or BIO SCI 2213 or BIO SCI 2223	Statics and Dynamics (3) or Modern Physics I (3) Organic Chemistry I (3) and Lab* (1) or Cell Biology (3) or General Genetics (3) Satisfies a required engineering/science elective. CHEM 2219 is not an S&T degree requirement, will transfer as general elective credit.	3
EGR 36100	Circuit Theory I	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
MTH 31500	Linear Algebra I	3		MATH 3108	Linear Algebra	3
	*At least one course must be selected from HISTO	ORY 1200, 130 Hum	<mark>0, 1310, or PO</mark> nanities and F	Fine Arts o specific disciplines.	ate of Missouri government requirement.	
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	6		ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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			
CEO 40400		lect 6 hours fr	om at least tw	o specific disciplines.	Madd Davieral Coassessity on	
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
		Humanitie	s, Arts, and S Select 3 hou	Social Sciences		
ENGL 17000 or ENGL 31200	Composition II or Technical Writing	3	23,000 0 1100	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Ti	6 40 29 otal Hours 69		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 Ma	nagem	ent Gro	up 2 Major F	Requirements	
	Lindenwood University		Semeste	<u>r</u>	Missouri S&T	
COM 11000	Fundamentals of Oral Communication	;	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4	1	CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 14400	Computer Science I	4	1	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
EGR 36100	Circuit Theory I	3	3	ELEC ENG 2800	Electrical Circuits	3
	From the 6 hours H	options listed i umanities and F havioral and So	n each group b ine Arts from at I cial Sciences fror	eneral Education Require elow, select 15 hours to include ast two specific disciplines at m at least two specific disciplines at the SCI 1200 to satisfy the SCI	ude and ines.	
	At least one course must be selected from mis		manities and F	•	ate of Missouri government requirement.	
				o specific disciplines.		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	e e e e e e e e e e e e e e e e e e e		ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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
	Soloat 6 hour		rioral and Soci	al Sciences sciplines to include PSYCH	1101	
BOV 40000				•		
PSY 10000	Principles of Psychology		3	PSYCH 1101	General Psychology Required	3
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	;		HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200° or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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.	3
		Humaniti	es, Arts, and S Select 3 hou	ocial Sciences		
ENGL 17000 or ENGL 31200	Composition II or Technical Writing	3		ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
	No free electives applied to the degree.	()	Electives	Maximum Free Electives	0
	Group 2 Major Requirements	2			Group 2 Major Requirements	29
	Group 1 Core Requirements	Total Hours 5			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.	26 61

	Environmental Er	ngineeı	ing Gr	oup 2 Major	Requirements	
	Lindenwood University		Semeste	<u>er</u>	Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3		ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
ESC 10000	Physical Geology with Lab	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CHM 23100, 24100	General Chemistry II and Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 23200, 24200	General Chemistry III and Lab	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
BSC 10000 or BSC 24400	Concepts in Biology or Intro to Cellular and Molecular Biology	4		BIO SCI 1113, 1219* or BIO SCI 1213*, 1219*	General Biology and Lab* or Principles of Biology* and Lab* *BIO SCI 1213 will be substituted for 1113. BIO SCI 1219 is not a degree requirement, transfers as general elective credit.	3
	From the	options listed i manities and Fi 3 hours B	n each group l ne Arts from at ehavioral and S	General Education Require below, select 9 hours to inclu- least two specific disciplines a Social Sciences. DL SCI 1200 to satisfy the St	de and	
	0.		nanities and			
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	elect 6 nours i		vo specific disciplines. ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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 Soc			
PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	Select 3 hou	urs. PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	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. Group 2 Major Requirements Group 1 Core Requirements T	0 28 29 otal Hours 57	3		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 Environmental Engineering degree.	0 26 26 52

	Geological Engi	neerin	g Gro	up 2 Major F	Requirements	
	Lindenwood University		Semeste	ar	Missouri S&T	
ENO. 04000		•	Ocineste		Technical Writing	0
ENGL 31200	Technical Writing	3		ENGLISH 3560	Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100 DSCI 11000 or CSC 10011 or CSC 24400 or CSC 36000 or CSC 14400*	General Chemistry II and Lab Intro to Data Science (3) or Intro to Computer Science: Python (3) or Computer Science II (4) or Data Structures and Algorithms (3) or Computer Science I* (4)	3		CHEM 1310, 1319 CS 1500 or CS 1971, 1981	General Chemistry I and Lab Computational Problem Solving or Intro to Programming Methodology and Lab	3
ESC 10000	Physical Geology with Lab	4		GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
	From the op 6 hours Hum	tions listed ir anities and Fir ioral and Soci	each group be ne Arts from at al Sciences fro	General Education Requipelow, select 15 hours to it least two specific disciplinim at least two specific discount to SCI 1200 to satisfy the	nclude es and ciplines.	
			nanities and			
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	ect 6 nours fi	om at least tv	vo specific disciplines. ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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 Soc	ial Sciences	•	
		ect 6 hours fr	om at least tv	vo specific disciplines.		
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
		Humanitie	s, Arts, and Select 3 ho	Social Sciences urs.		
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		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	29			Group 2 Major Requirements	29
	Group 1 Core Requirements To	29 tal Hours 58			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.	26 55

	Mechanical Engir	eering (Group 2 Major R	Requirements	
	Lindenwood University	Se	emester	Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CSC 14400 EGR 36100	Computer Science I Circuit Theory I	4 3	CS 1971, 1981 EE 2800	Intro to Programming Method and Lab (C++) Electrical Circuits	3
MTH 31500	Linear Algebra I	3	MATH 3108	Linear Algebra I Will satisfy the Advanced Math/Statistics elective requirement.	3
	From the option 6 hours Human	ons listed in each ities and Fine Arts ral and Social Scie	ences General Education Requi group below, select 15 hours to inc. from at least two specific disciplines ences from at least two specific disciplines 0, or POL SCI 1200 to satisfy the S	clude s and plines.	
			es and Fine Arts		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	t 6 hours from at	least two specific disciplines. ENGLISH 1222 or LITERATURE or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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
			nd Social Sciences		
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	least two specific disciplines. HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
			s, and Social Sciences ect 3 hours.		
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	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 Tota	32 29 Hours 61		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.	32 26 58

	Metallurgical Engi	neerin	g Gro	up 2 Major	Requirements	
	Lindenwood University		Semester		Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3		ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 23200, 24200	General Chemistry III and Lab	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 36100 or PHY 30300 or EGR 36100	Organic Chemistry I (4) or Modern Physics (3) or Circuit Theory I (3)	3		CHEM 2210 or PHYSICS 2311 or EE 2800	Organic Chemistry I (4) or Modern Physics I (3) or Electrical Circuits (3) Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.	3
	·	•		eneral Education Requ		
	6 hours Huma	nities and Fine	Arts from at le	elow, select 15 hours to in east two specific discipline at least two specific disc	s and	
	*At least one course must be selected from HISTOR	RY 1200, 1300,	, 1310, or POL	SCI 1200 to satisfy the	State of Missouri government requirement.	
	Sele		anities and Fi m at least two	ine Arts specific disciplines.		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	6		ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature or American History to 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfes the State of Missouri government requirement.	6
		Behavio	ral and Socia	I Sciences		
		ct 6 hours fro	m at least two	specific disciplines.		
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200° or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
		Humanities,	, Arts, and So Select 3 hour	ocial Sciences 's.		
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		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 Tota	32 29 al Hours 61			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.	32 26 58

	Mining Engin	neering Grou	ıp 2 Major Red	quirements	
	Lindenwood University	Seme	ster	Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
ESC 10000	Physical Geology with Lab	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the 6 hours Hi	options listed in each grou umanities and Fine Arts fron havioral and Social Sciences TORY 1200, 1300, 1310, or		iclude is and iplines.	
	•	Humanities a Select 6 hours from at leas			
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	6	ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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 and S			
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select 6 hours from at leas	HISTORY 2110 or HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	23 29 Total Hours 52		Group 2 Major Requirements Group 1 Core Requirements *S&T advisor permission is required to transfer more than 68 credits to Mining Engineering degree.	23 26 Total Hours* 49 ward the S&T

	Nuclear Engin	eering (Group 2 Major Re	equirements	
	Lindenwood University		Semester	Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as 6en Ed Communication requirement.	3
CHM 23100, 24100	General Chemistry II and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 14400	Computer Science I	4	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
MTH 31500	Linear Algebra I	3	MATH 3108	Linear Algebra I	3
EGR 36100 PHY 30300	Circuit Theory I	3	ELEC ENG 2800 PHYSICS 2311	Electrical Circuits	3
PHY 30300	Modern Physics		Sciences General Education Requ	Modern Physics I	3
	6 hours Hur	nanities and Fine avioral and Social ORY 1200, 1300,		es and ciplines.	
	_		inities and Fine Arts		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	elect 6 hours fron	m at least two specific disciplines. ENGLISH 1222 or LITERATURE or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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		ral and Social Sciences m at least two specific disciplines.		
ECON 23020 or ECON 23030	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or Foreign Language	World Regional Geography or World Regional Geography 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
			Arts, and Social Sciences 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.	ry, art, 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	35		Group 2 Major Requirements	35
	Group 1 Core Requirements	29 otal Hours 64		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.	26 61

	Petroleum Eng	ineering G	roup 2 Major R	equirements	
	Lindenwood University	Sei	mester	Missouri S&T	
ENGL 17000 or ENGL 31200 or COM 11000	Composition II or Technical Writing or Fundamentals of Oral Communication	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 23100, 24100 DSCI 11000 or CSC 10011 or CSC 24400 or CSC 36000	General Chemistry II and Lab Intro to Data Science (3) or Intro to Computer Science: Python (3) or Computer Science II (4) or Data Structures and Algorithms (3)	3	CHEM 1310, 1319 COMP SCI 1500	General Chemistry I and Lab Computational Problem Solving	5 3
ESC 10000	Physical Geology with Lab	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the	options listed in each o	nces General Education Requigroup below, select 15 hours to in	clude	
	6 hours Bet	avioral and Social Scien	from at least two specific discipline noes from at least two specific disc	iplines.	
	*At least one course must be selected from HIS		•	State of Missouri government requirement.	
	\$		s and Fine Arts east two specific disciplines.		
ENGL 23600 or LITERATURE or HIST 11100* or HIST 11200* or ARTH 11000 or MUS 16500 or	American Literature II or Other Non-prerequisite Literature or US History: Colony to New Republic* or US History: New Republic to World Power* or Concepts in the Visual Arts or Intro to Music Literature *Satisfies the State of Missouri government requirement.	6	ENGLISH 1222 or LITERATURE or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1865 to Present or Other Non-prerequisite Literature 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 an	nd Social Sciences		
GEO 10100 or GEO 11500 or PHRL 21000 or PS 15500* or PSY 10000 or ECON 23020 or ECON 23030 or Foreign Language	World Regional Geography or Physical Geography or Practical Logic for Daily Life or American Government: The Nation* or Principles of Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	east two specific disciplines. HISTORY 2110 or HISTORY 2110 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or World Regional Geography 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
			, and Social Sciences of 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any hist music, theater, English and technical communicatior philosophy, political science, psychology, economics etymology, or foreign language.	ory, art,	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 29 29 Total Hours 58		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 Petroleum Engineering degree.	0 29 26 * 55