Cottey 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.

	Cottey College	<u>Semest</u>	<u>er</u>	Missouri S&T		
MAT 210	Calculus I	4	MATH 1214	Calculus I Grade of C or better is required.		4
MAT 220	Calculus II	4	MATH 1215	Calculus II Grade of C or better is required.		4
PHY 205	General Physics I and Lab	4	PHYSICS 1135	Engineering Physics I Grade of C or better is required.		4
PHY 206	General Physics II and Lab	4	PHYSICS 2135	Engineering Physics II Grade of C or better is required.		4
FWS 101	First-Year Writing Seminar	3	ENGLISH 1120	Exposition and Argumentation		3
		Total Hours 10			Total Hours	10

Group 2 - Major Requirements: Take All Courses for Major of Choice

Engineering students take all Group 1 - Core Requirements (above) and Group 2 - Major Requirements for chosen major from list below. See course requirements on following pages.

Aerospace Engineering

Architectural Engineering

Biomedical Engineering/Biomanufacturing or Biomaterials

Ceramic Engineering

Chemical Engineering and Biochemistry Emphasis

Civil Engineering

Computer Engineering

Electrical Engineering

Engineering Management

Environmental Engineering

Geological Engineering

Mechanical Engineering

Metallurgical Engineering

Mining Engineering

Nuclear Engineering

Petroleum Engineering

Engineering Major Requirements are detailed on the following pages.

Free Electives: Some programs allow Free Electives as indicated within each major. Free Electives should be selected in consultation with your advisor and may not include remedial/deficiency courses, algebra, trigonometry, pre-calculus, or extra credits in required courses.

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

	Aerospace Eng	ineering	Group 2 Major	Requirements	
	Cottey College		Semester	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech	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
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
MATH 260 or MATH 320	Linear Algebra or Probability and Statistics	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics Satisfies the Advanced Math/Comp Sci elective requirement.	3
PHI 205	Ethics or other engineering, business, bio, social ethics approved by advisor	3	PHILOS 1130	How Should I Live? An Introduction to Ethics or other engineering, business, bio, social ethics approved by advisor	3
	From the 6 hours Hu	options listed in eaumanities and Fine Anavioral and Social S	Sciences General Education R ach group below, select 15 hours Arts from at least two specific discipciences from at least two specific 1310, or POL SCI 1200 to satisfy	to include olines and disciplines.	
			nities and Fine Arts	• • • • • • • • • • • • • • • • • • • •	
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6 Behaviora	n at least two 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 at and Social Sciences of at least two specific disciplines HISTORY 1100 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfes the State of Missouri government requirement.	6	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	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 Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
			Arts, and Social Sciences Select 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any hist music, theater, English and technical communication 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 28 19 Total Hours 47		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hour: *S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.	0 29 19 s* 48

	Architectural E	ngineer	ing Gro	up 2 Major F	Requirements	
	Cottey College		Semeste	<u>r</u>	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech		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
CHE 210, 211	General Chemistry 1 and Lab		4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
STAT 320	Probability and Statistics		3	STAT 3115*	Engineering Statistics* *Will be substituted for STAT 3113.	3
	From the first of	he options listed Humanities and I Behavioral and So HISTORY 1200, 1	in each group b ine Arts from at l cial Sciences fro	•	ude and ines.	
		Select 6 hours	from at least tw	o specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US History Since 1877* or Art 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
			vioral and Soci			
		urs from at least	two specific dis-	ciplines to include HISTOR		
HIS 132*	World History Since 1500* *Satisfies the State of Missouri Government requirement.		3	HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: 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		22 19 41		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 Architectural Engineering degree.	23 19 42

				-Biomanufac equirements	cturing	
	Cottey College		Semester		Missouri S&T	
SPE 101	Fundamentals of Speech	:	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHE 210, 211	General Chemistry 1 and Lab		4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 212, 213	General Chemistry II (3) and Lab (1)		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	Introductory Biology with Lab (4)		4	BIO SCI 1113, 1219	General Biology and Lab Applies to degree as Track Elective.	4
BIO 211 and BIO 212	Human Anatomy and Physiology 1 (4) and Human Anatomy and Physiology 2 (4) Both courses are required to receive full transfer credit.	;	8	BIO SCI 3333, 3339* and BIO SCI 3343*, 3349*	Anatomy and Physiology I and Lab* and Anatomy and Physiology II* and Lab* The combination of Cottey BIO 211 and 212 is equivalent to the combination of S&T BIO SCI 3333, 3339, 3343, and 3349. "BIO SCI 3333 is a degree requirement. BIO SCI 3339, 3343, and 3349 transfer as general elective credit.	3
CSC 212	Data Structures	:	3	COMP SCI 1500	Computational Problem Solving	3
	From t	the options listed s Humanities and F 3 hours l	in each group be ine Arts from at le Behavioral and Se		de nd	
			manities and F	ine Arts o specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US 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
		Behav	ioral and Socia			
HIS 131 or HIS 132* or ENV 125 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		Select 3 hou	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 *statisfies the State of Missouri government requirement.	3
			es, Arts, and S NGLISH 3560 re			
WRI 292	Professional Writing		3	ENGLISH 3560	Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	3	0 88 9 67		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hour: *S&T advisor permission is required to transfer more than 69 credit hours toward the degree.	0 33 19 s* 52

	Biome	dical Engin	eering-Biomateı	rials	
	Gr	oup 2 Majo	r Requirements		
	Cottey College	Sen	nester	Missouri S&T	
SPE 101	Fundamentals of Speech	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	
CHE 212, 213	General Chemistry II (3) and Lab (1)	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)	
BIO 101	Introductory Biology with Lab (4)	4	BIO SCI 1113*, 1219*	*CHEM 1510 is not a degree requirement, transfers as general elective credit. General Biology* and Lab* Applies to degree as Track Elective (Non-engineering).	
BIO 211 and BIO 212	Human Anatomy and Physiology 1 (4) and Human Anatomy and Physiology 2 (4) Both courses are required to receive full transfer credit.	8	BIO SCI 3333, 3339* and BIO SCI 3343*, 3349*	Anatomy and Physiology I and Lab* and Anatomy and Physiology II* and Lab* The combination of Cottey Blo 211 and 212 is equivalent to the combination of S&T BIO SCI 3333, 3339, 3343, and 3349. *BIO SCI 3333, 3339, 3343, and 3349. *BIO SCI 3333 is a degree requirement. BIO SCI 3339, 3343, and 3349 transfer as general elective credit.	
SC 212	Data Structures	3	COMP SCI 1500	Computational Problem Solving	
	Humanities,	Arts, and Social Scien	nces General Education Require	ments	
		lumanities and Fine Arts fi 3 hours Behaviora	roup below, select 12 hours to inclurom at least two specific disciplines all and Social Sciences. or POL SCI 1200 to satisfy the States.	nd	
	At load time coulde must be selected from the		and Fine Arts	ac or missouri government requirement.	
			east two specific disciplines.		
ENG 201 or ENG 202 or IG 205 or ENG 206 or IIS 111* or IIS 112* or RRT 101 or AUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US 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.	
			d Social Sciences		
IIS 131 or IIS 132* or ENV 125 or OL 101* or SSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500° or World Regional Geography or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Selection Select	t 3 hours. 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.	
			and Social Sciences 3560 required.		
VRI 292	Professional Writing	3	ENGLISH 3560	Technical Writing	
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 38 19 Total Hours 57		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	*

	Ceramic Engir	neering Gro	oup 2 Major Re	equirements	
	Cottey College	Sem	<u>ester</u>	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech	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
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 212	General Chemistry 2	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
	From the 6 6 hours Hu	options listed in each grananities and Fine Arts fro avioral and Social Science	ces General Education Requipment below, select 15 hours to in at least two specific discipline es from at least two specific discor POL SCI 1200 to satisfy the	irements clude s and iplines.	
			and Fine Arts		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	elect 6 nours from at lea	ast two specific disciplines. 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
			Social Sciences		
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	ast two specific disciplines. HISTORY 1100 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
			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.	ory, 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	0 26 19 otal Hours 45		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hour *S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	0 26 19 rs* 45

	Chemical Engineering or Chemical Engineering - Biochemical Engineering Emphasis Group 2 Major Requirements									
	G	roup 2 Major	Requirement	S						
	Cottey College	<u>Sem</u>	<u>ester</u>	Missouri S&T						
SPE 101	Fundamentals of Speech	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3					
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5					
CHE 212, 213	General Chemistry II (3) and Lab (1)	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					
CSC 212	Data Structures	3	COMP SCI 1500	Computational Problem Solving	3					
STAT 320	Probability and Statistics	3	STAT 3115*	Engineering Statistics* *Will be substituted for STAT 3113.	3					
	From t 6 hours	he options listed in each gro Humanities and Fine Arts fro Behavioral and Social Science	es General Education Requoup below, select 15 hours to in mat least two specific disciplines from at least two specific discorr POL SCI 1200 to satisfy the	nclude es and ciplines.						
			and Fine Arts ust two specific disciplines.							
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US 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					
			Social Sciences							
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select 6 hours from at lea	ist two specific disciplines. HISTORY 1100 or HISTORY 2200* 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					
			and Social Sciences 560 required.							
WRI 292	Professional Writing	3	ENGLISH 3560	Technical Writing	3					
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 32 19 Total Hours 51		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements **St advisor permission is required to transfer more than 68 credits toward the S&T Chemical Engineering degree.	0 32 19 * 51					

		<u> </u>	o 2 Major Requ		
	Cottey College	<u>Seme</u>	<u>ester</u>	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech	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
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
STAT 320	Probability and Statistics	3	STAT 3115*	Engineering Statistics* *Will be substituted for STAT 3113.	3
	From the c 6 hours Hu	ptions listed in each gro manities and Fine Arts from vioral and Social Sciences ORY 1200, 1300, 1310, o	•	clude s and iplines.	
	S.	Humanities a	ind Fine Arts st two specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 110 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US 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: 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
	_	Behavioral and			
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics II: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	st two specific disciplines. HISTORY 1100 or HISTORY 2200* or HISTORY 2210 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
		Humanities, Arts, an Select 3			
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histo music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.		HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 25 19 otal Hours 44		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 19 45

	Computer En	gineering	Group 2	Major Ro	equirements		
	Cottey College		Semester		Missouri S&T		
SPE 101	Fundamentals of Speech	3		S 1185	Principles of Speech		3
CHE 210, 211	General Chemistry 1 and Lab	4	CHE	M 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab		5
				P SCI 1200	Discrete Math for Computer Science		3
CSC 212	Data Structures	3		P SCI 1500	Computational Problem Solving Linear Algebra or		3
MATH 260 or MATH 310	Linear Algebra or Foundations of Mathematics	3		H 3108 or H 3109	Foundations of Mathematics Satisfies a required math elective.		3
STAT 320	Probability and Statistics	3	STAT	3115*	Engineering Statistics* *Will be substituted for STAT 3117.		3
	From the 6 hours	ne options listed in e Humanities and Fine ehavioral and Social ISTORY 1200, 1300,	Sciences General each group below, s Arts from at least tw Sciences from at lea 1310, or POL SCI 1 anities and Fine Ar	elect 15 hours to inco o specific disciplines st two specific discip 200 to satisfy the S	lude and blines.		
		Select 6 hours from	m at least two speci	ific disciplines.			
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 1112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation	6	ENGI ENGI ENGI HIST HIST ART	LISH 1211 or LISH 1212 or LISH 1221 or LISH 1222 or ORY 1300* or ORY 1310* or 1180 or IC 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
	*Satisfies the State of Missouri government requirement.				*Satisfies the State of Missouri government requirement.		
			ral and Social Scie m at least two speci				
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics II: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HIST HIST HIST PHIL PHIL POL PSYY ECOI	ORY 1100 or ORY 1200* or ORY 2110 or OS 1105 or OS 1115 or SCI 1200* or N 1100 or N 1200 or gn 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
		Humanities,	Arts, and Social S Select 3 hours.	Sciences			
WRI 102 or WRI 292	College Writing or Professional Writing	3		LISH 1160 or LISH 3560	Writing and Research or Technical Writing		3
Electives	Maximum Free Electives	3	Elect	ives	Maximum Free Electives		3
	Group 2 Major Requirements Group 1 Core Requirements	34 19 Total Hours 53			Group 2 Major Requirements Group 1 Core Requirements *S&T advisor permission is required to transfer more than 68 credits to Computer Engineering degree.	Total Hours* ward the S&T	38 19 57

	Electrical En	gineering Gro	oup 2 Major R	equirements	
	Cottey College	Sem	ester	Missouri S&T	
SPE 101	Fundamentals of Speech	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 212	Data Structures	3	COMP SCI 1500	Computational Problem Solving	3
MATH 260	Linear Algebra	3	MATH 3108	Linear Algebra	3
STAT 320	Probability and Statistics	3	STAT 3115*	Engineering Statistics* *Will be substituted for STAT 3117.	3
	From the first term of the fir	ne options listed in each gro Humanities and Fine Arts fro Behavioral and Social Science	es General Education Requipment below, select 15 hours to in mat least two specific discipline from at least two specific discor POL SCI 1200 to satisfy the	clude s and iplines.	
			and Fine Arts		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 2 or American Literature 2 or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	Select 6 hours from at lea	ENGLISH 1211 or ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1800 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
		Behavioral and Select 6 hours from at lea	Social Sciences		
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 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
			and Social Sciences 3 hours.		
WRI 102 or WRI 292	College Writing or Professional Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
Electives	Maximum Free Electives	6	Electives	Maximum Free Electives	6
	Group 2 Major Requirements Group 1 Core Requirements	37 19 Total Hours 56		Group 2 Major Requirements Group 1 Core Requirements *S&T advisor permission is required to transfer more than 68 credits Electrical Engineering degree.	38 19 Total Hours* 57

	Engineering Ma	nagen	ner	nt Gro	up 2 Major	Requirements	
	Cottey College		Semester Missouri S&T		Missouri S&T		
SPE 101	Fundamentals of Speech		3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHE 210, 211	General Chemistry 1 and Lab		4		CHEM 1310, 1319	General Chemistry I and Lab	5
STAT 320	Probability and Statistics		3		STAT 3115	Engineering Statistics	3
	From the 6 hours	e options listed Humanities and ehavioral and S STORY 1200,	d in ea Fine a locial S 1300,	ach group be Arts from at le Sciences fror	•	nclude es and ciplines.	
		Select 6 hour	s fron	n at least two	o specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US 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 Sciences		
		urs from at lea		specific dis	sciplines to include PSYO		
PSY 101	General Psychology		3		PSYCH 1101	General Psychology Required	3
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or Principles of Economics II: Microeconomics or Principles of Economics I: 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
		Humani		Arts, and S Select 3 hou	ocial Sciences rs.		
WRI 102 or WRI 292	College Writing or Professional Writing		3		ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	Total Hours	0 25 19 44		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 26 19 61

	Environmental E	ngine	eri	ng Group 2 Majoı	Requirements	
	Cottey College			<u>Semester</u>	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech		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
CHE 210, 211	General Chemistry 1 and Lab		4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHE 212	General Chemistry 2		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	Introductory Biology and Lab		4	BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) *The lab is not a degree requirement, transfers as general elective credit.	3
STAT 320	Probability and Statistics		3	STAT 3115*	Engineering Statistics* *Will be substituted for STAT 3113.	3
	Humanities,	Arts, and S	ocial	Sciences General Education Requ	irements	
	6 hours H	umanities and havioral and S	d Fine Social	ach group below, select 12 hours to in Arts from at least two specific discipline Sciences from at least two specific disc 1310, or POL SCI 1200 to satisfy the	es and ciplines.	
		ı	Huma	nities and Fine Arts		
		Select 6 hou	rs fron	n at least two specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US 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
	0.1.101			al and Social Sciences	2007	
		s from at lea	st two	specific disciplines to include HISTO		
HIS 132*	World History Since 1500* *Satisfies the State of Missouri Government requirement.		3	HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: 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 Hours	30 19 49		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.	29 19 48

	Geological Eng	ineering G	roup 2 Major R	Requirements	
	Cottey College	<u>Sen</u>	<u>nester</u>	Missouri S&T	
WRI 292	Professional Writing		ENGLISH 3560	Technical Writing Applies to degree as Gen Ed Communication requirement.	3
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 212	Data Structures	3	COMP SCI 1500	Computational Problem Solving	3
STAT 320	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
	From the c 6 hours Hu	options listed in each g manities and Fine Arts fr avioral and Social Science	ces General Education Requiroup below, select 15 hours to in om at least two specific discipline ses from at least two specific discipline or POL SCI 1200 to satisfy the	iclude is and iplines.	
		Humanities	and Fine Arts		
		elect 6 hours from at le	east two specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US History Since 1877* or	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or	6
MUS 101	Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	Police Scorel co	MUSIC 1150	Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	
	S		d Social Sciences east two specific disciplines.		
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: 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
			and Social Sciences t 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	25 19 otal Hours 44		Group 2 Major Requirements Group 1 Core Requirements Total Hour *S&T advisor permission is required to transfer more than 65 credits toward the S&T Geological Engineering degree.	29 19 s* 48

	Mechanical En	gineering G	iroup 2 Major F	Requirements	
	Cottey College	Sen	nester	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech	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
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
MATH 260 or MATH 320	Linear Algebra or Probability and Statistics	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics Satisfies the Advanced Math/Comp Sci elective requirement.	3
	From the 6 hours H	e options listed in each g lumanities and Fine Arts fi havioral and Social Scien	ices General Education Requiroup below, select 15 hours to inform at least two specific disciplinedes from at least two specific disciplinedes from at least two specific disciplinedes from at least two specific disciplinedes.	irements clude s and iplines.	
			and Fine Arts east two specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1800 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			d Social Sciences east two specific disciplines.		
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: 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 Word: 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
			and Social Sciences t 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any his music, theater, English and technical communicatic philosophy, political science, psychology, economic etymology, or foreign language.	story, art, n, 3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 25 19 Total Hours 44		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours' "S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.	0 26 19 * 45

	Metallurgical E	naineerina C	Froup 2 Maior	Requirements	
WRI 102 or WRI 292 or SPE 101	Cottey College College Writing or Professional Writing or Fundamentals of Speech	Semo	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Missouri S&T Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
MATH 320 CHE 210, 211	Probability and Statistics General Chemistry 1 and Lab	3 4	STAT 3115 CHEM 1310, 1319	Engineering Statistics General Chemistry I and Lab	3 5
CHE 212, 213	General Chemistry II (3) and Lab (1)	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
	From the first term of the fir	he options listed in each gro Humanities and Fine Arts fro Behavioral and Social Science	es General Education Requipup below, select 15 hours to in mat least two specific discipline se from at least two specific discour POL SCI 1200 to satisfy the	clude s and iplines.	
	71.1000 010 000100 11001 20 001000 11011	Humanities a	and Fine Arts		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	Select 6 hours from at lea	st two specific disciplines. 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 3	6
			Social Sciences		
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select 6 hours from at lea	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
		Select	ind Social Sciences 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any I music, theater, English and technical communical philosophy, political science, psychology, econom etymology, or foreign language.	tion,	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	3 32 19 Total Hours 51		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hour: *S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.	3 32 19 s* 51

	Mining Eng	ineerin	g G	roup	2 Major Red	quirements	
	Cottey College			Semester	·	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech		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
MATH 320	Probability and Statistics		3		STAT 3115	Engineering Statistics	3
CHE 210, 211	General Chemistry 1 and Lab		4		CHEM 1310, 1319	General Chemistry I and Lab	5
	From 6 hour	the options liste s Humanities and Behavioral and S	ed in ea d Fine a Social S	ach group be Arts from at le Sciences from	eneral Education Requi low, select 12 hours to in- east two specific disciplines at least two specific disci SCI 1200 to satisfy the	clude s and plines.	
				nities and Fi			
ENG 201 or ENG 202 or	English Literature 1 or English Literature 2 or	Select 6 hou	rs fron	n at least two	specific disciplines. ENGLISH 1211 or ENGLISH 1212 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present	
NG 205 or ENG 205 or HIS 111* or HIS 112* or ART 101 or	American Literature 1 or American Literature 2 or US History to 1877* or US History Since 1877* or Art Appreciation or		6		ENGLISH 1220 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or	American Literature: 1600 to 14865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or	6
MUS 101	Music Appreciation *Satisfies the State of Missouri government requirement.				MUSIC 1150	Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	
				al and Socia			
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics II: Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select 6 hou	6	a at least two	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 1100 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
	No free electives applied to the degree.		0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	Total Hours	22 19 41			Group 2 Major Requirements Group 1 Core Requirements Total Hou *S&T advisor permission is required to transfer more than 68 credits toward the S&T Mining Engineering degree.	23 19 rs* 42

	Nuclear Engin	eering Gro	oup 2 Major Re	quirements	
	Cottey College	Sem	<u>ester</u>	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech	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
CHE 210, 211 MATH 260 or	General Chemistry 1 and Lab Linear Algebra or	4	CHEM 1310, 1319 MATH 3108 or	General Chemistry I and Lab Linear Algebra or	5
MATH 310	Foundations of Mathematics	3	MATH 3109	Foundations of Mathematics	3
STAT 320	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
	From the c 6 hours Hu	ptions listed in each gr manities and Fine Arts fro vioral and Social Science	ces General Education Requipment below, select 15 hours to in the least two specific discipline the from at least two specific discorpropers from at least two specific discorpropers or POL SCI 1200 to satisfy the	clude s and iplines.	
		Humanities	and Fine Arts		
		elect 6 hours from at le	ast two specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US 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 \$\frac{4}{2}\$ steps the State of Missouri government requirement.	6
	Cationics the State of misseary government requirement.	Behavioral and	Social Sciences	Salones the Salo S. Inicosa i got annina requirement.	
	Se	elect 6 hours from at le	ast two specific disciplines.		
ECO 202 or ECO 201	Principles of Economics II: Microeconomics or Principles of Economics I: Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or 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
			and Social Sciences 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 Group 1 Core Requirements	28 19		Group 2 Major Requirements Group 1 Core Requirements	29 19
		otal Hours 47		Total Hours *S&T advisor permission is required to transfer more than 69 credits toward the S&T Nuclear Engineering degree.	* 48

	Petroleum Engin	eering Gı	roup 2 Major R	equirements	
	Cottey College	Sem	<u>iester</u>	Missouri S&T	
WRI 102 or WRI 292 or SPE 101	College Writing or Professional Writing or Fundamentals of Speech	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
CHE 210, 211	General Chemistry 1 and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 212	Data Structures	3	COMP SCI 1500	Computational Problem Solving	3
	From the option 6 hours Human	ons listed in each gr ities and Fine Arts fr al and Social Scienc	ces General Education Requi roup below, select 15 hours to in- om at least two specific discipline- tes from at least two specific disci or POL SCI 1200 to satisfy the	clude s and iplines.	
		Humanities	and Fine Arts		
		t 6 hours from at le	ast two specific disciplines.		
ENG 201 or ENG 202 or NG 205 or ENG 206 or HIS 111* or HIS 112* or ART 101 or MUS 101	English Literature 1 or English Literature 2 or American Literature 1 or American Literature 2 or US History to 1877* or US 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
			l Social Sciences		
		t 6 hours from at le	ast two specific disciplines.		
HIS 131 or HIS 132* or ENV 125 or PHI 101 or PHI 200 or POL 101* or PSY 101 or ECO 202 or ECO 201 or Foreign Language	World History to 1500 or World History Since 1500* or World Regional Geography or Intro to Philosophy or Logic and Critical Thinking or United States Government* or General Psychology or Principles of Economics II: Microeconomics or Principles of Economics I: 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
			and Social Sciences 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.		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	25 19 Hours 44		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.	26 19 45