## State Fair Community College — Missouri S&T General Engineering

Transfer Guide Effective as of Fall 2025

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

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

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

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

	State Fair Community College	Ser	<u>mester</u>	Missouri S&T		
MATH 130	Calculus and Analytic Geometry I	5	MATH 1214	Calculus I Grade of C or better is required.		4
MATH 131	Calculus and Analytic Geometry II	5	MATH 1215	Calculus II Grade of C or better is required.		4
MATH 132	Calculus and Analytic Geometry III	5	MATH 2222	Calculus III Grade of C or better is required.		4
MATH 134	Differential Equations	3	MATH 3304	Elementary Differential Equations		3
PHYS 211	Engineering Physics I with Lab	5	PHYSICS 1135	Engineering Physics I Grade of C or better is required.		4
PHYS 212	Engineering Physics II with Lab	5	PHYSICS 2135	Engineering Physics II Grade of C or better is required.		4
ENGL 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation		3
		Total Hours 31			Total Hours	26

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

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

Aerospace Engineering

**Architectural Engineering** 

Biomedical Engineering/Biomanufacturing or Biomaterials

**Ceramic Engineering** 

**Chemical Engineering and Biochemistry Emphasis** 

Civil Engineering

**Computer Engineering** 

**Electrical Engineering** 

**Engineering Management** 

**Environmental Engineering** 

**Geological Engineering** 

**Mechanical Engineering** 

Metallurgical Engineering

Mining Engineering

**Nuclear Engineering** 

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 En	gineering Gr	oup 2 Major R	Requirements	
	State Fair Community College	Seme	ster_	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
PHYS 235	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHIL 102	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 first of	ne options listed in each gro Humanities and Fine Arts from Behavioral and Social Sciences	es General Education Requi up below, select 15 hours to in a at least two specific discipline is from at least two specific disci POL SCI 1200 to satisfy the	clude s and iplines.	
		Humanities a		·	
LIT 109 or LIT 107 or LIT 112 or	British Literature or American Literature or World Literature or	Select 6 hours from at least	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or	
HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	6	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Behavioral and Select 6 hours from at least			
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government* or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
		Humanities, Arts, a Select 3			
HASS Elective	Humanities, Arts, Social Sciences Elective: Any h music, theater, English and technical communicat philosophy, political science, psychology, econom etymology, or foreign language.	ion,	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 28 31 Total Hours 59		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hour  *\$&T advisor permission is required to transfer more than 68 credits toward the \$&T Aerospace Engineering degree.	0 29 26 rs* 55

	Architectural E	ngineerir	ng Gro	up 2 Major	Requirements	
	State Fair Community College		Semester		Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
PHYS 235	Engineering Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
EASC 118	Environmental Geology	3		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the first term of the fir	he options listed in a Humanities and Fine Behavioral and Social IISTORY 1200, 1300	each group be Arts from at le Sciences fron , 1310, or POL	•	clude s and plines.	
			anities and F	ine Arts o specific disciplines.		
LIT 109 or LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre "Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1221 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature: 18eginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
	0.1.401		ral and Socia		DV 4000	
HIST 109*	World Civilization After 1500* *Satisfies the State of Missouri Government requirement.	urs from at least two	specific disc	iplines to include HISTO HISTORY 1200*	MOdern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	Intro to Philosophy or  American/National 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		PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or  American Government* or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 25 31 Total Hours 56			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 Architectural Engineering degree.	0 26 26 52

			_	-Biomanufa equirements		
	State Fair Community College		Semester	[	Missouri S&T	
COM 101	Public Speaking	3		SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 124	General Chemistry II with Lab	5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)	3
CHEM 221	Organic Chemistry I with Lab	5		CHEM 2210, 2219	*CHEM 1510 is not a degree requirement, transfers as general elective credit.  Organic Chemistry I and Lab	4
CHEM 222 or BIO 112 or BIO 125 or BIO 210	Organic Chemistry II with Lab (5) or Intro to Biology with Lab (5) or Biology I with Lab (5) or Principles of Genetics with Lab (4)	4		CHEM 2220, 2229 or BIO SCI 1113, 1219 or BIO SCI 1213*, 1219 or BIO SCI 2223	Organic Chemistry II and Lab or General Biology and Lab or Principles of Biology* and Lab or General Genetics Applies to degree as Track Elective. *BIO SCI 1213 will be substituted for BIO SCI 1113.	4
CIS 120 or CIS155	Programming in Python or Programming in C#	3		COMP SCI 1500	Computational Problem Solving	3
LIT 109 or		Humanities and Fin 3hours Be STORY 1200, 1300 Hum	e Arts from at le havioral and So J, 1310, or POI anities and F	L SCI 1200 to satisfy the St	and	
LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	American Literature or World Literature or WS History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	6		ENGLISH 1221 or ENGLISH 1221 or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150 or THEATRE 1150	American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change **Satisfies the State of Missouri government requirement.	6
		Behavio	ral and Socia			
HIST 108 or HIST 109* or GEOG 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or American/National 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	Select 3 hou	IS. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	33 31 Total Hours 64			Group 2 Major Requirements Group 1 Core Requirements  Total Hours  *S&T advisor permission is required to transfer more than 69 credit hours toward the degree.	31 26

			neering-Biomate or Requirements		
	State Fair Community College	Se	mester_	Missouri S&T	
COM 101	Public Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 124	General Chemistry II with Lab	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)  *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHEM 221	Organic Chemistry I with Lab	5	CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	4
CHEM 222	Organic Chemistry II with Lab	5	CHEM 2220, 2229*	Organic Chemistry II and Lab* CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).	4
BIO 112 or BIO 125	Intro to Biology with Lab (5) or Biology I with Lab (5)	4	BIO SCI 1113*, 1219*	General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4
CIS 120 or CIS155	Programming in Python or Programming in C#	3	COMP SCI 1500	Computational Problem Solving	3
PHYS 235	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
LIT 109 or LIT 107 or LIT 112 or <b>HIST 101*</b> or <b>HIST 102*</b> or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre		us and Fine Arts least two specific disciplines. ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1221 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change	6
	*Satisfies the State of Missouri government requirement.	Behavioral a	nd Social Sciences	*Satisfies the State of Missouri government requirement.	
HIST 108 or HIST 109* or GEOG 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500° or World Regional Geography or American/National 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.	Sele	ct 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.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	41 31 Total Hours 72		Group 2 Major Requirements Group 1 Core Requirements Total Hour *S&T advisor permission is required to transfer more than 69 credits toward the S&T Biomedical Engineering degree.	38 26 s* 64

	Ceramic Eng	ineering Gı	roup 2 Major Re	equirements	
	State Fair Community College	Se	mester	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
PHYS 235	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHEM 123	General Chemistry I with Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 124	General Chemistry II with Lab	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHEM 221	Organic Chemistry I with Lab	5	CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) Satisfies the advanced chemistry elective requirement.  *The lab is not a degree requirement, transfers as general elective credit.	3
	From th	e options listed in each Humanities and Fine Arts	ences General Education Requi group below, select 15 hours to in from at least two specific discipline ences from at least two specific disci	irements clude s and	
	*At least one course must be selected from HI	STORY 1200, 1300, 131	0, or POL SCI 1200 to satisfy the	State of Missouri government requirement.	
			es and Fine Arts		
LIT 109 or	British Literature or	Select 6 nours from at	least two specific disciplines.  ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
LIT 109 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	American Literature or World Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150 or THEATRE 1150	American Literature: 1600 to 1865 or World Literature: 1600 to 1865 or World Literature: 1869 to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
			nd Social Sciences		
		Select 6 hours from at	least two specific disciplines.		
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government* or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  "Satisfies the State of Missouri government requirement.	6
			s, and Social Sciences ect 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any h music, theater, English and technical communicati philosophy, political science, psychology, economi etymology, or foreign language.	istory, art, on,	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	35 31 Total Hours 66		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.	32 26 rs* 58

	Chemical Enginee	ering - Bi	ochen			
	Gr	roup 2 M	ajor Re	equirements		
	State Fair Community College		Semester		Missouri S&T	
COM 101	Public Speaking	3		SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 124	General Chemistry II with Lab	5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHEM 221	Organic Chemistry I with Lab	5		CHEM 2210, 2219*	Organic Chemistry I and Lab*  *CHEM 2210 is a degree requirement. CHEM 2219 applies to the degree as 1 of 9 required science elective credits See note below.	4
CHEM 222	Organic Chemistry II with Lab	5		CHEM 2220, 2229	Organic Chemistry II (3) and Lab (1) CHEM 2220 will apply to the degree as 3 of the 9 science elective credits. CHEM 2229 is not required for the S&T degree, will transfer as general elective credit.	3
CIS 120 or CIS155	Programming in Python or Programming in C#	3		COMP SCI 1500	Computational Problem Solving	3
		ehavioral and Socia STORY 1200, 1300 Hum	I Sciences from , 1310, or POI anities and F	•	plines.	
LIT 109 or LIT 107 or LIT 112 or <b>HIST 101*</b> or <b>HIST 102*</b> or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change  *Satisfies the State of Missouri government requirement.	6
			ral and Socia			
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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.	Select 6 hours fro	om at least two	o specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	37 31 Total Hours 68			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.	33 26 59

	Civil Engine	ering Grou	o 2 Major Req	uirements	
	State Fair Community College	Sem	ester	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
EASC 118	Environmental Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
PHYS 235	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From the 6 hours H	options listed in each gro umanities and Fine Arts fro havioral and Social Science	es General Education Requeup below, select 15 hours to in mat least two specific discipline is from at least two specific discipline is From at least two specific discipline in POL SCI 1200 to satisfy the	nclude es and ciplines.	
			and Fine Arts		
LIT 109 or LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre "Satisfies the State of Missouri government requirement.	Select 6 nours from at lea	st two specific disciplines.  ENGLISH 1211 or  ENGLISH 1221 or  ENGLISH 1231 or  HISTORY 1300* or  HISTORY 1310* or  ART 1180 or  MUSIC 1150 or  THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature: Beginnings to the Renaissance or American History to 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change 'Satisfies the State of Missour government requirement.	6
			Social Sciences		
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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	st two specific disciplines.  HISTORY 1100 or  HISTORY 2110 or  PHIL 1105 or  POL SCI 1200* or  PSYCH 1101 or  ECON 1100 or  ECON 1200 or  Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government* or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
		Humanities, Arts, a Select	nd Social Sciences 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any his music, theater, English and technical communicatio philosophy, political science, psychology, economic etymology, or foreign language.	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 28 31 Total Hours 59		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hour  *S&T advisor permission is required to transfer more than 69 credits toward the S&T Civ Engineering degree.	

	Computer Er	ngineering	g Grou	p 2 Major R	equirements	
	State Fair Community College		Semester		Missouri S&T	
COM 101		2	Semester	SPMS 1185	Principles of Speech	2
	Public Speaking	3			Applies to degree as Gen Ed Communication requirement.	3
CHEM 123 CIS 120 or	General Chemistry I with Lab Programming in Python or	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CIS 120 01 CIS155	Programming in Fythori of	3		COMP SCI 1500	Computational Problem Solving	3
PHYS 235 or	Engineering Statics or			CIV ENG 2200 or	Engineering Mechanics-Statics (3) or	
CHEM 221 or	Organic Chemistry I with Lab or	3		CHEM 2210 or	Organic Chemistry I (3) or	3
BIO 210	Principles of Genetics with Lab			BIO SCI 2223	General Genetics (3) Satisfies a required engineering/science elective.	
	From 6 hou	the options listed in or services Humanities and Fines Behavioral and Social HISTORY 1200, 1300	each group be Arts from at le Sciences from , 1310, or POL	•	clude s and plines.	
			anities and Fi			
LIT 109 or	British Literature or	Select 6 nours fro	m at least two	specific disciplines.  ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
LIT 109 of LIT 107 or	American Literature or			ENGLISH 1211 or	American Literature: 1600 to 1865 or	
LIT 112 or	World Literature or			ENGLISH 1231 or	World Literature I: Beginnings to the Renaissance or	
HIST 101* or	US History Before 1877* or			HISTORY 1300* or	American History to 1877* or	
HIST 102* or	US History Since 1877* or	6		HISTORY 1310* or	American History Since 1877* or	6
ART 101 or	Art Appreciation or			ART 1180 or	Art Appreciation or	
MUS 101 or THEA 107	Music Appreciation or Intro to Theatre			MUSIC 1150 or THEATRE 1150	Music Understanding and Appreciation or Theatre for Social Change	
TILA 107	*Satisfies the State of Missouri government requirement.			THEATRE 1100	*Satisfies the State of Missouri government requirement.	
			ral and Socia			
		Select 6 hours fro	m at least two	specific disciplines.		
HIST 108 or HIST 109* or	World Civilization Before 1500 or			HISTORY 1100 or HISTORY 1200* or	Early Western Civilization or	
GEOG 101 or	World Civilization After 1500* or World Regional Geography or			HISTORY 2110 or	Modern Western Civilization* or World Regional Geography or	
PHL 101 or	Intro to Philosophy or			PHIL 1105 or	Self and World: Intro to Philosophy or	
POLS 101* or	American/National Government* or	6		POL SCI 1200* or	American Government*or	6
PSY 101 or	General Psychology or	U		PSYCH 1101 or	General Psychology or	U
ECON 102 or	Principles of Microeconomics or			ECON 1100 or	Principles of Microeconomics or	
ECON 101 or	Principles of Macroeconomics or			ECON 1200 or	Principles of Macroeconomics or	
Foreign Language	Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.			Foreign Language	Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	
		Humanities	, <b>Arts</b> , <b>and So</b> Select 3 hour	ocial Sciences s.		
ENG 102	English Composition II	3		ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	3		Electives	Maximum Free Electives	3
	Group 2 Major Requirements	31			Group 2 Major Requirements	32
	Group 1 Core Requirements	31			Group 1 Core Requirements	26
		Total Hours 62			Total Hours*  *S&T advisor permission is required to transfer more than 68 credits toward the S&T  Computer Engineering degree.	58

	Electrical Enginee	ring	Group	o 2 Major Red	quirements	
	State Fair Community College		Semester		Missouri S&T	
COM 101	Public Speaking	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CIS 120 or CIS155	Programming in Python or Programming in C#	3		COMP SCI 1500	Computational Problem Solving	3
MACC PHYS 235 and S&T MECH ENG 2350 BOTH of the courses above or ONE of the courses below. OR CHEM 221 or BIO 210	MACC Engineering Statics* AND Missouri S&T Engineering Mechanics-Dynamics Both courses above combined or any one of the following courses will satisfy a required engineering science elective.  OR Organic Chemistry I with Lab or Principles of Genetics w/ Lab	3		CIV ENG 2200 and MECH ENG 2350 BOTH of the courses above or ONE of the courses below. OR CHEM 2210 or BIO SCI 2223	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2) 80th ocurses above combined or any one of the following courses satisfies a required engineering science elective.  OR  Organic Chemistry I (3) or General Genetics (3)	3
	Humanities, Arts, and	I Social	Sciences Ge	eneral Education Requirer	ments	
	6 hours Humanities	and Fine nd Social	Arts from at le Sciences from	elow, select 15 hours to include east two specific disciplines are at least two specific discipline. SCI 1200 to satisfy the State	nd es.	
	0.1.101		anities and F	ine Arts o specific disciplines.		
LIT 109 or LIT 107 or LIT 112 or <b>HIST 101*</b> or <b>HIST 102*</b> or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
	<del>-</del>		ral and Socia	al Sciences o specific disciplines.		
HIST 108 or HIST 109° or GEOG 101 or PHL 101 or POLS 101° or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or  World Civilization After 1500* or  World Regional Geography or Intro to Philosophy or American/National 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	m at reast two	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
	Hum		, Arts, and So	ocial Sciences		
ENG 102	English Composition II	3	COIOOL O HOU	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hou	6 34 31 rs 65		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 35 26 61

	Engineering Ma	nageme	nt Gro	up 2 Major	Requirements	
	State Fair Community College		Semester		Missouri S&T	
COM 101	Public Speaking	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
BSMT 108	Principles of Management	3		ENG MGT 2110	Managing Engineering and Technology	3
PHYS 235	Engineering Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
	From the 6 hours H	options listed in dumanities and Find havioral and Socia	each group be Arts from at le Sciences from	eneral Education Requi elow, select 15 hours to incest two specific disciplines at least two specific disci c. SCI 1200 to satisfy the	clude s and iplines.	
			anities and Fi	ine Arts specific disciplines.		
LIT 109 or LIT 107 or LIT 112 or <b>HIST 101*</b> or	British Literature or American Literature or World Literature or US History Before 1877* or		m at loadt two	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or	
HIST 102* or ART 101 or MUS 101 or THEA 107	US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	6		HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
			ral and Socia			
			o specific dis	ciplines to include PSYC		
PSY 101	General Psychology	3		PSYCH 1101	General Psychology	3
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National Government* or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3		HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government*or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	3
		Humanities	, <b>Arts, and So</b> Select 3 hour	ocial Sciences		
ENG 102	English Composition II	3	COICCE O FICUI	ENGLISH 1160	Writing and Research	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 28 31 Total Hours 59		Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *S&T advisor permission is required to transfer more than 61 credits toward the S&T Engineering Management degree.	0 29 26 61

	Environmental E	nginee	ring	Group 2 Major	Requirements	
	State Fair Community College		Sen	nester_	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking		3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
EASC 118	Environmental Geology		3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CHEM 123	General Chemistry I with Lab		4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 124	General Chemistry II with Lab		5	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 112 or BIO 125	Intro to Biology with Lab or Biology I with Lab		5	BIO SCI 1113, 1219* or BIO SCI 1213*, 1219*	General Biology (3) and Lab* (1)  *The lab is not a degree requirement, transfers as general elective credit. BIO SCI 1213 will be substituted for BIO SCI 1113.	3
PHYS 235	Engineering Statics		3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From the 6 hours H	e options listed dumanities and Fehavioral and So STORY 1200, 13	in each g Fine Arts fr cial Science 300, 1310,	ices General Education Requiroup below, select 12 hours to incom at least two specific disciplines oes from at least two specific disciplines or POL SCI 1200 to satisfy the Stand Fine Arts	elude and Jines.	
				east two specific disciplines.		
LIT 109 or LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change  *Satisfies the State of Missouri government requirement.	6
	Calaat Charr			d Social Sciences	DV 4000	
HIST 109*	World Civilization After 1500*  *Satisfies the State of Missouri Government requirement.		3	ific disciplines to include HISTO HISTORY 1200*	Modern Western Civilization*  *Satisfies the State of Missouri Government requirement.	3
PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	Intro to Philosophy or  American/National 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	PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or  American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree.		0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	3	35 31 66		Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *S8T advisor permission is required to transfer more than 69 credits toward the S8T Environmental Engineering degree.	32 26

	Geological En	gineering (	Group 2 Major R	equirements	
	State Fair Community College	Se	emester emester	Missouri S&T	
CHEM 123	General Chemistry I with Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CIS 120 or CIS155	Programming in Python or Programming in C#	3	COMP SCI 1500	Computational Problem Solving	3
EASC 118	Environmental Geology	3	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
PHYS 235	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From the 6 hours	ne options listed in each Humanities and Fine Arts tehavioral and Social Scie ISTORY 1200, 1300, 131	•	clude s and plines.	
			es and Fine Arts		
LIT 109 or LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	Select 6 hours from at	least two specific disciplines. ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
			nd Social Sciences		
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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	least two specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
			s, and Social Sciences ect 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any h music, theater, English and technical communicat philosophy, political science, psychology, econom etymology, or foreign language.	ion,	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 28 31 Total Hours 59		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hot  *S&T advisor permission is required to transfer more than 65 credits toward the S&T Geological Engineering degree.	0 29 26 Irs* 55

	Mechanical En	gineering	Group 2 Major R	Requirements	
	State Fair Community College	s	emester	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4	CHEM 1310*, 1319	General Chemistry I and Lab "CHEM 1310 will be substituted for CHEM 1305.	5
PHYS 235	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From th 6 hours	e options listed in each Humanities and Fine Art ehavioral and Social Sc STORY 1200, 1300, 13	•	elude and olines.	
			ies and Fine Arts		
LIT 109 or LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	Select 6 nours from a	at least two specific disciplines.  ENGLISH 1211 or  ENGLISH 1221 or  ENGLISH 1231 or  HISTORY 1300* or  HISTORY 1310* or  ART 1180 or  MUSIC 1150 or  THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change  *Satisfies the State of Missouri government requirement.	6
			and Social Sciences		
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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	at least two specific disciplines. HISTORY 1100 or HISTORY 2100* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
			rts, and Social Sciences lect 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any h music, theater, English and technical communicati philosophy, political science, psychology, economi etymology, or foreign language.	on,	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 25 31 Total Hours 56		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 26 52

	Metallurgical En	gineering	Group 2 Major	Requirements	
	State Fair Community College	S	emester	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
PHYS 235 CHEM 123	Engineering Statics General Chemistry I with Lab	3	CIV ENG 2200 CHEM 1310, 1319	Engineering Mechanics-Statics General Chemistry I and Lab	3 5
CHEM 124	General Chemistry II with Lab	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)  *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHEM 221	Organic Chemistry I with Lab	5	CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) CHEM 2210 is not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement. "CHEM 2219 is not a degree requirement, transfers as general credit.	3
	Humanities,	Arts, and Social Sci	ences General Education Requi	rements	
	6 hours H	lumanities and Fine Art havioral and Social Sci TORY 1200, 1300, 13	•	s and iplines.	
			ies and Fine Arts t least two specific disciplines.		
LIT 109 or LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre "Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature: Beginnings to the Renaissance or American History to 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
			and Social Sciences		
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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	t least two specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
			ts, and Social Sciences ect 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any his music, theater, English and technical communicatio philosophy, political science, psychology, economic etymology, or foreign language.	tory, art, n,	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 38 31 Total Hours 69		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.	3 35 26 61

	Mining Eng	neering Grou	up 2 Major Red	quirements	
	State Fair Community College	Semo	<u> </u>	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
PHYS 235	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EASC 118	Environmental Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From t 6 hours	he options listed in each gro Humanities and Fine Arts fro Behavioral and Social Science	es General Education Requipup below, select 12 hours to in mat least two specific discipline is from at least two specific discipline from at least two specific discipline from at least two specific discipline from the second from the sec	nclude es and ciplines.	
		Humanities a Select 6 hours from at lea	and Fine Arts st two specific disciplines.		
LIT 109 or LIT 107 or LIT 112 or <b>HIST 101*</b> or <b>HIST 102*</b> or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre "Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1800 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change "Satisfies the State of Missouri government requirement.	6
		Behavioral and Select 6 hours from at lea	Social Sciences st two specific disciplines.		
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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	HISTORY 1100 or HISTORY 2100* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	25 31 Total Hours 56		Group 2 Major Requirements Group 1 Core Requirements  Tota *S&T advisor permission is required to transfer more than 68 credits toward the Mining Engineering degree.	26 26 I Hours* 52 s&t

	Nuclear Engi	neerin	g Group	2 Major Re	equirements	
	State Fair Community College		<u>Semeste</u>	<u>r</u>	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking		3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab		4	CHEM 1310, 1319	General Chemistry I and Lab	5
PHYS 235	Engineering Statics		3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From the 6 hours H	e options listed lumanities and chavioral and S	I in each group b Fine Arts from at l ocial Sciences fro	eneral Education Requelow, select 15 hours to in east two specific discipline on at least two specific disc L SCI 1200 to satisfy the	nclude es and ciplines.	
			umanities and F from at least tw	ine Arts o specific disciplines.		
LIT 109 or LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1800 to 1865 or World Literature: 1800 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
	Select 6 hours from at		vioral and Soci	al Sciences include at least one of E	CON 1100 or 1200	
ECON 102 or ECON 101	Principles of Microeconomics or Principles of Macroeconomics	loudt two open	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National Government* or General Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  American Government*or  General Psychology or  Elementary or Intermediate Foreign Language  'Satisfies the State of Missouri government requirement.	3
		Humani	ties, Arts, and S Select 3 hou			
HASS Elective	Humanities, Arts, Social Sciences Elective: Any his music, theater, English and technical communicatic philosophy, political science, psychology, economic etymology, or foreign language.	on,	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Maximum Free Electives		0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	Total Hours	25 31 56		Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *\$8T advisor permission is required to transfer more than 69 credits toward the \$8T Nuclear Engineering degree.	26 26 52

	Petroleum En	gineering G	roup 2 Major R	equirements	
	State Fair Community College	Sei	mester_	Missouri S&T	
ENGL 102 or COM 101	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 123	General Chemistry I with Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CIS 120 or CIS155	Programming in Python or Programming in C#	3	COMP SCI 1500	Computational Problem Solving	3
EASC 118	Environmental Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
PHYS 235	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From th 6 hours	e options listed in each of Humanities and Fine Arts the Behavioral and Social Scier	nces General Education Requi group below, select 15 hours to in from at least two specific discipline nces from at least two specific disci , or POL SCI 1200 to satisfy the	clude s and iplines.	
			s and Fine Arts	<b>3</b>	
		Select 6 hours from at I	east two specific disciplines.		
LIT 109 or LIT 107 or LIT 112 or HIST 101* or HIST 102* or ART 101 or MUS 101 or THEA 107	British Literature or American Literature or World Literature or US History Before 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Intro to Theatre *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Behavioral an	d Social Sciences		
		Select 6 hours from at I	east two specific disciplines.		
HIST 108 or HIST 109* or GEOG 101 or PHL 101 or POLS 101* or PSY 101 or ECON 102 or ECON 101 or Foreign Language	World Civilization Before 1500 or World Civilization After 1500* or World Regional Geography or Intro to Philosophy or American/National 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	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	6
		,	, and Social Sciences et 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any h music, theater, English and technical communicati philosophy, political science, psychology, economi etymology, or foreign language.	story, art, on,	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 31 31 Total Hours 62		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hour  *S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.	0 32 26 rs* 58