Mineral Area 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.

	Mineral Area College	Semest	<u>er</u>	Missouri S&T		
MAT 1650	Analytical Geometry and Calculus I	5	MATH 1214	Calculus I Grade of C or better is required.		4
MAT 2150	Analytical Geometry and Calculus II	5	MATH 1215	Calculus II Grade of C or better is required.		4
MAT 2250	Analytical Geometry and Calculus III	5	MATH 2222	Calculus III Grade of C or better is required.		4
MAT 2330	Differential Equations	3	MATH 3304	Elementary Differential Equations		3
ENG 1330	English Composition I	3	ENGLISH 1120	Exposition and Argumentation		3
		Total Hours 21			Total Hours	18

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	gineeri	ng	Group 2 Major R	Requirements	
	Minorel Avec College			Samaatan .	Missouri S&T	
TEO 4000 I	Mineral Area College		<u>s</u>	<u>Semester</u>	WISSOURI 5&I	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development		3	MECH ENG 1720	Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition 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
PHS 1350	General Chemistry I		5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
PHI 142	Intro to 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 H	options listed umanities and l havioral and So	in ead Fine Al ocial So	ciences General Education Requi ch group below, select 15 hours to in rts from at least two specific discipliner ciences from at least two specific disci 310, or POL SCI 1200 to satisfy the	clude s and iplines.	
				ities and Fine Arts		
		Select 6 hours	from	at least two specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or	English Literature I or English Literature II or American Literature I or American Literature II or American History I* or		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* 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	6
HIS 1240* or ART 1490 or MUS 1630 or THE 1000	American History II* or History of Art I or Appreciation of Music or Intro to Theatre *Satisfies the State of Missouri government requirement.			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.	
				l and Social Sciences		
LUC 4420		Select 6 nours	trom	at least two specific disciplines.	Fault Mastaus Civilization on	
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Uanif	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
		Humanit		arts, and Social Sciences elect 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.		0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements		29 21 50		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.	29 18 47

	Architectural E	ngineerir	ng Gro	up 2 Major	Requirements	
	Mineral Area College		Semester		Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3		MECH ENG 1720	Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition 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
PHS 1350	General Chemistry I	5		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
PHS 2410	Physical Geology MOTR GEOL 100	5		GEOLOGY 1110 (GEO ENG 1150)	Physical and Env Geology MOTR GEOL 100	3
	From t 6 hours	he options listed in a Humanities and Fine Behavioral and Social	each group be Arts from at le Sciences from	eneral Education Requi elow, select 12 hours to in east two specific discipline in at least two specific disci L SCI 1200 to satisfy the	clude s and iplines.	
			anities and F	•	3	
		Select 6 hours fro	m at least two	specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre "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 or THEATRE 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1805 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Behavio	ral and Socia	I Sciences		
	Select 6 ho	urs from at least two	specific disc	iplines to include HISTO	PRY 1200.	
HIS 1140*	Western Civilization II* *Satisfies the State of Missouri Government requirement.	3		HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Intro to Philosophy or American Political Systems* or General Psychology I 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	28 21 Total Hours 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 Architectural Engineering degree.	26 18 44

			ering-Biomanufa or Requirements		
	Mineral Area College	Se	mester	Missouri S&T	
ENG 1440	Public Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 1390	General Chemistry II	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 1150	General Biology	5	BIO SCI 1113, 1219	General Biology and Lab Applies to degree as Track Elective.	4
CSC 1100	Programming Logic	3	CS 1500	Computational Problem Solving	3
	Fro 6 ho 6 ho	m the options listed in each urs Humanities and Fine Arts rs Behavioral and Social Scie	ences General Education Requi group below, select 9 hours to inc from at least two specific disciplines ences from at least two specific discip 0, or POL SCI 1200 to satisfy the 5	lude s and	
			es and Fine Arts least two specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature I or American Literature II or American History II* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
			nd Social Sciences ect 3 hours.		
HIS 1130 or HIS 1140* or GEO 1130 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or American Political Systems* or General Psychology I 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 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	30 21 Total Hours 51		Group 2 Major Requirements Group 1 Core Requirements Total F *S&T advisor permission is required to transfer more than 69 credit hours toward the degree.	

					ing-Biomate equirements		
	Mineral Area College			Semeste	<u>r</u>	Missouri S&T	
ENG 1440	Public Speaking		3		SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
PHS 1350	General Chemistry I		5		CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 1390	General Chemistry II		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 1150	General Biology		5		BIO SCI 1113*, 1219*	General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4
CSC 1100	Programming Logic		3		CS 1500	Computational Problem Solving	3
	Fron 6 hou	the options listers Humanities and S Behavioral and S HISTORY 1200,	ed in e I Fine Social 1300, Huma	each group be Arts from at I Sciences from 1310, or PO Inities and F	ine Arts	lude s and plines.	
ENC 2220	Frantish Literatura Lau	Select 6 hour	's fror	m at least tw	o specific disciplines.	Dritish Literature I. The Devices in the 1000 or	
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230° or HIS 1240° or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature I or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre '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 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Beh		ral and Soci			
HIS 1130 or	Western Civilization I or			Select 3 hou		Forth Mantage Of different on	
HIS 1130 or HIS 1140* or GEO 1130 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization II* or Regional World Geography or American Political Systems* or General Psychology I 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 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		30			Group 2 Major Requirements	27
	Group 1 Core Requirements	Total Hours	21 51			Group 1 Core Requirements Total Hou *\$&T advisor permission is required to transfer more than 69 credits toward the \$&T Biomedical Engineering degree.	18 rs* 45

	Ceramic Engine	ering	Group	2 Major Re	quirements	
	Mineral Area College		Semester		Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3		MECH ENG 1720	Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition 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
PHS 1350	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 1390	General Chemistry II	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
	From the option of the following from the following	ons listed in e nities and Fine ral and Social	ach group be Arts from at le Sciences fron	eneral Education Requirelow, select 15 hours to incleast two specific disciplines in at least two specific disciplines. SCI 1200 to satisfy the S	ude and lines.	
		Huma	nities and F	ine Arts		
	Selec	ct 6 hours from	n at least two	specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or 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 or Theatre for Social Change *Satisfies the State of Missourj government requirement.	6
	Satisfies the State of Missouri government requirement.	Rehavior	al and Socia	al Sciences	Satisfies the State of Missouri government requirement.	
	Selec			specific disciplines.		
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I 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
				ocial Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.		Select 3 hou	rs. HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Tota	0 31 21 I Hours 52			Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours*	0 29 18 47
					*S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	

			Engineering or			
			chemical Engine or Requirements	eering Emphasis		
	Mineral Area College		emester	Missouri S&T		
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3	MECH ENG 1720	Intro to Engineering Design		3
ENG 1440	Public Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.		3
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab		5
PHS 1390	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* *CHEM 1510 is not a degree requirement, transfers as general elective		3
CSC 1100	Programming Logic	3	CS 1500	Computational Problem Solving	credit.	3
	Humani	ties, Arts, and Social Sci	iences General Education Requi	irements		
	6 hou	urs Humanities and Fine Art is Behavioral and Social Sci	n group below, select 12 hours to inc s from at least two specific disciplines ences from at least two specific disci 10, or POL SCI 1200 to satisfy the	s and		
			ies and Fine Arts			
		Select 6 hours from a	t least two specific disciplines.			
ENG 2330 or ENG 2340 or ENG 2440 or ENG 2440 or HIS 1230° or HIS 1240° or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missour government requirement.		6
			and Social Sciences			
		Select 6 hours from a	t least two specific disciplines.			
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I 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
	No free electives applied to the degree.	0		Maximum Free Electives		0
	Group 2 Major Requirements	31		Group 2 Major Requirements		29
	Group 1 Core Requirements	21 Total Hours 52		Group 1 Core Requirements *S&T advisor permission is required to transfer more than 68 credits to Chemical Engineering degree.	Total Hours* ward the S&T	18 47

	Civil Engin	eering Gro	oup 2 Major Re	equirements	
	Mineral Area College	9	Semester	Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Cen Ed Communication requirement.	3
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 2410	Physical Geology MOTR GEOL 100	5	GEOLOGY 1110 (GEO ENG 1150)	Physical and Env Geology MOTR GEOL 100	3
	From th 6 hours H 6 hours Be	e options listed in ear dumanities and Fine A chavioral and Social S	ciences General Education R ch group below, select 15 hours vits from at least two specific disci ciences from at least two specific 310, or POL SCI 1200 to satisfy	to include plines and	
			ities and Fine Arts		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *Satisfies the State of Missouri government requirement.	Select 6 hours from	at least two specific disciplines ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1220 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Behaviora	I and Social Sciences		
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I 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 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
			Arts, and Social Sciences elect 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any hi music, theater, English and technical communication philosophy, political science, psychology, economic 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.	t, 3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 31 21 Total Hours 52		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hc *S&T advisor permission is required to transfer more than 69 credits toward the S&T Engineering degree.	

	Computer En	gineerir	ng Gr	oup 2 Major Ro	equirements	
	Mineral Area College		Sem	ester	Missouri S&T	
ENG 1440	Public Speaking		3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
PHS 1350	General Chemistry I		5	CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 1100	Programming Logic		3	CS 1500	Computational Problem Solving	3
	From the 6 hours	ne options listed Humanities and l Behavioral and So	in each gro Fine Arts fro ocial Science	es General Education Requi pup below, select 15 hours to inc m at least two specific disciplines es from at least two specific discip or POL SCI 1200 to satisfy the S	clude s and plines.	
				and Fine Arts		
		Select 6 hours	from at lea	st two specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature I or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre '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 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Beha	vioral and	Social Sciences		
		Select 6 hours	from at lea	st two specific disciplines.		
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I 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
		Humanit		ind Social Sciences		
ENG 1340	English Composition		Select 3	3 hours. ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements		3 29 21 50	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 Computer Engineering degree.	3 29 18 47

	Electrical Eng	jineering Gro	oup 2 Major R	equirements	
	Mineral Area College	Seme	ster	Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 1440	Public Speaking	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 1100	Programming Logic	3	CS 1500	Computational Problem Solving	3
	From the 6 hours	e options listed in each gro Humanities and Fine Arts fror ehavioral and Social Sciences STORY 1200, 1300, 1310, o		nclude es and ciplines.	
		Humanities a Select 6 hours from at least			
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Behavioral and			
HIS 1130 or HIS 1140* or GEO 1130 or	Western Civilization I or Western Civilization II* or Regional World Geography or	Select 6 hours from at least	two specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or	Early Western Civilization or Modern Western Civilization* or World Regional Geography or	
PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Intro to Philosophy or American Political Systems* or General Psychology I or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	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 *statisfies the State of Missouri government requirement.	6
		Humanities, Arts, a Select 3			
ENG 1340	English Composition	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements	6 35 21 Total Hours 56	Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours' "\$&T advisor permission is required to transfer more than 68 credits toward the S&T Electrical Engineering degree.	6 35 18 * 53

	Engineering Ma	nageme	nt Group 2 Majo	or Requirements	
	Mineral Area College	·	Semester	Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 1440	Public Speaking	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
	From the 6 hours H 6 hours Be	options listed in e umanities and Fine havioral and Social	Sciences General Education Re ach group below, select 15 hours in Arts from at least two specific discip. Sciences from at least two specific 1310, or POL SCI 1200 to satisfy	to include blines and	
		Huma	nities and Fine Arts		
		Select 6 hours from	n at least two specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2440 or ENG 2440 or HIS 1230° or HIS 1240° or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre "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 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Behavior	al and Social Sciences		
	Select 6 hou	rs from at least tw	o specific disciplines to include P	SYCH 1101.	
PSY 1130	General Psychology I	3	PSYCH 1101	General Psychology Required	3
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* 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,	Arts, and Social Sciences	· · · · · · · · · · · · · · · · · · ·	
			Select 3 hours.		
ENG 1340	English Composition	3	ENGLISH 1160	Writing and Research	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 26 21 Total Hours 47	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 18 6* 44

	Environmental B	Engineeri	ng Gro	oup 2 Major	Requirements	
	Mineral Area College		Semester		Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3		MECH ENG 1720	Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition 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
PHS 2410	Physical Geology MOTR GEOL 100	5		GEOLOGY 1110 (GEO ENG 1150)	Physical and Env Geology MOTR GEOL 100	3
PHS 1350	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 1390	General Chemistry II	4		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
BIO 1150	General Biology	5		BIO SCI 1113, 1219* neral Education Requir	General Biology (3) and Lab* (1) *The lab is not a degree requirement, transfers as general elective credit.	3
	6 hours	Humanities and Fine Behavioral and Social ISTORY 1200, 1300,	Arts from at le Sciences from	•	and blines.	
		Select 6 hours from	n at least two	specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature I or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1865 to Present or American Literature: 1865 to Present 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
			al and Socia			
HIS 1140*	Select 6 no Western Civilization II* *Satisfies the State of Missouri Government requirement.	urs from at least two 3	specific disc	iplines to include HISTOR HISTORY 1200*	TY 1200 Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Intro to Philosophy or American Political Systems* or General Psychology I 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	37 21 Total Hours 58			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.	32 18 * 50

	Geological Eng	ineering	Group 2 Major I	Requirements	
	Mineral Area College		Semester	Missouri S&T	
TEC 1300 and	Computer Aided Design and Drafting and	3	MECH ENG 1720	Intro to Engineering Design	3
TEC 2050	Engineering Design & Development				
PHS 1350 CSC 1100	General Chemistry I Programming Logic	5 3	CHEM 1310, 1319 CS 1500	General Chemistry I and Lab Computational Problem Solving	5 3
PHS 2410	Physical Geology MOTR GEOL 100	5	GEOLOGY 1110	Physical and Env Geology MOTR GEOL 100	3
	Humanities A	rts and Social S	(GEO ENG 1150) Sciences General Education Reg	uirements	
	From the 6 6 hours Hu 6 hours Beh	options listed in ea manities and Fine a avioral and Social	ach group below, select 15 hours to Arts from at least two specific disciplin Sciences from at least two specific dis	include nes and sciplines.	
	*At least one course must be selected from HIST		•	e State of Missouri government requirement.	
	S		nities and Fine Arts n at least two specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1865 to Present or American Literature: 1865 to Present 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
	• • • • • • • • • • • • • • • • • • •	Behaviora	al and Social Sciences	3	
		elect 6 hours fron	n at least two specific disciplines.		
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I 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 PSVCH 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
			Arts, and Social Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histomusic, theater, English and technical communication philosophy, political science, psychology, economics, etymology, or foreign language.	ory, art,	Select 3 hours. HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	31		Group 2 Major Requirements	29
	Group 1 Core Requirements	21 Total Hours 52		Group 1 Core Requirements Total Hours *S&T advisor permission is required to transfer more than 65 credits toward the S&T Geological Engineering degree.	18 s* 47

	Mechanical Er	ngineering	Group 2 Major R	Requirements	
	Mineral Area College	<u>s</u>	emester	Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition 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
PHS 1350	General Chemistry I	5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
	From to 6 hours	the options listed in eac Humanities and Fine Art Behavioral and Social Sc	iences General Education Requi h group below, select 15 hours to ind ts from at least two specific disciplines iences from at least two specific discip- 110, or POL SCI 1200 to satisfy the	clude s and plines.	
	7.1.100.00.00.00.00.00.00.00.00.00.00.00.		ties and Fine Arts		
			at least two specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230° or HIS 1240° or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missourj government requirement.	6
		Behavioral	and Social Sciences		
		Select 6 hours from a	at least two specific disciplines.		
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I 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
			rts, and Social Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any music, theater, English and technical communica philosophy, political science, psychology, econon etymology, or foreign language.	history, art, tion,	lect 3 hours. HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	26 21 Total Hours 47		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.	26 18 s* 44

	Metallurgical En	gineering G	Group 2 Major		
	Mineral Area College	Seme	<u>ester</u>	Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition 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
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 1390	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
	From the 6 hours Hi	options listed in each groumanities and Fine Arts fro navioral and Social Science	es General Education Requipup below, select 15 hours to in mat least two specific discipline from at least two specific disciprometres from at least two specific discort POL SCI 1200 to satisfy the	clude s and plines.	
			and Fine Arts		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre "Satisfies the State of Missouri government requirement.	6	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 or THEATRE 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 or Theatre for Social Change "Satisfies the State of Missouri government requirement.	6
	,		Social Sciences		
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I 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 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
		Humanities, Arts, a Select	nd Social Sciences 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any his music, theater, English and technical communicatior philosophy, political science, psychology, economics etymology, or foreign language.	ory, art,	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements	3 33 21 Total Hours 54		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements **SAT advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.	3 32 18 ss* 50

	Mining Engi	neering Gro	oup 2 Major Rec	quirements	
	Mineral Area College	<u>Sen</u>	<u>nester</u>	Missouri S&T	
TEC 1300 and TEC 2050	Computer Aided Design and Drafting and Engineering Design & Development	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition 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
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 2410	Physical Geology MOTR GEOL 100	5	GEOLOGY 1110 (GEO ENG 1150)	Physical and Env Geology MOTR GEOL 100	3
	From th	be options listed in each g Humanities and Fine Arts fi ehavioral and Social Scient ISTORY 1200, 1300, 1310,	•	clude s and plines.	
			s and Fine Arts east two specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1805 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
			d Social Sciences		
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select 6 hours from at le	east 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
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 28 21 Total Hours 49		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 Mining Engineering degree.	0 26 18 * 44

		neering (Group 2 Major R	<u> </u>	
TEC 1300 and TEC 2050	Mineral Area College Computer Aided Design and Drafting and Engineering Design & Development	3	Semester MECH ENG 1720	<u>Missouri S&T</u> Intro to Engineering Design	3
ENG 1340 or ENG 1440	English Composition 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
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
	From the 6 hours H	e options listed in ea lumanities and Fine A havioral and Social S	Sciences General Education Recach group below, select 15 hours to Arts from at least two specific disciplin Sciences from at least two specific distant 1310, or POL SCI 1200 to satisfy the	include nes and sciplines.	
			nities and Fine Arts at least two specific disciplines.		
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American Literature II or American History I* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 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 or Theatre for Social Change *satisfies the State of Missouri government requirement.	6
			al and Social Sciences		
BUS 2940 or BUS 2930	Principles of Microeconomics or Principles of Macroeconomics	Select 6 hours from	at least two specific disciplines. ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I 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
			Arts, and Social Sciences Select 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
	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements	0 26 21 Total Hours 47		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hot *S&T advisor permission is required to transfer more than 69 credits toward the S&T Nuclear Engineering degree.	0 26 18 urs* 44

	Petroleum En	gineering Gr	oup 2 Major R	equirements	
	Mineral Area College	<u>Seme</u>	ester_	Missouri S&T	
ENG 1340 or ENG 1440	English Composition 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
PHS 1350 CSC 1100	General Chemistry I Programming Logic	5 3	CHEM 1310, 1319 CS 1500	General Chemistry I and Lab Computational Problem Solving	5 3
PHS 2410	Physical Geology MOTR GEOL 100	5	GEOLOGY 1110 (GEO ENG 1150)	Physical and Env Geology MOTR GEOL 100	3
	From 6	he options listed in each gro Humanities and Fine Arts from Behavioral and Social Science	es General Education Requ up below, select 15 hours to in n at least two specific discipline s from at least two specific disc r POL SCI 1200 to satisfy the	clude s and iplines.	
		Humanities a			
ENG 2330 or ENG 2340 or ENG 2430 or ENG 2440 or HIS 1230* or HIS 1240* or ART 1490 or MUS 1630 or THE 1000	English Literature I or English Literature II or American Literature II or American History II* or American History II* or History of Art I or Appreciation of Music or Intro to Theatre *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 or THEATRE 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 or Theatre for Social Change *Satisfies the State of Missourl government requirement.	6
		Behavioral and			
HIS 1130 or HIS 1140* or GEO 1130 or PHI 1400 or POS 1180* or PSY 1130 or BUS 2940 or BUS 2930 or Foreign Language	Western Civilization I or Western Civilization II* or Regional World Geography or Intro to Philosophy or American Political Systems* or General Psychology I or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select 6 hours from at lea	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 music, theater, English and technical communice philosophy, political science, psychology, econon 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
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 31 21 Total Hours 52		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours' *S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.	0 29 18 47