Central Methodist University — Missouri S&T

General Engineering

Transfer Guide Effective as of Fall 2025

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

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

Group 1 - Core Requirements: All Majors Take All Courses

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

	Central Methodist University	Sei	mester_	Missouri S&T		
MA 118	Calculus and Analytical Geometry I	5	MATH 1214	Calculus I Grade of C or better is required.		4
MA 209	Calculus and Analytical Geometry II	5	MATH 1215	Calculus II Grade of C or better is required.		4
MA 308	Calculus and Analytical Geometry III	5	MATH 2222	Calculus III Grade of C or better is required.		4
MA 315	Differential Equations	3	MATH 3304	Elementary Differential Equations		3
PH 205, 205L	Calculus Physics I and Lab	5	PHYSICS 1135	Engineering Physics I Grade of C or better is required.		4
PH 206, 206L	Calculus Physics II and Lab	5	PHYSICS 2135	Engineering Physics II Grade of C or better is required.		4
EN 110	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

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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 Engin	eering	g Grou	ıp 2 Major R	Requirements	
	Central Methodist University		Semeste	r	Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking	3		ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	4		CHEM 1310*, 1319	General Chemistry I* and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CS 172 MA 318	.NET1 Matrices and Linear Algebra	3		CS 1971, 1981 MATH 3108	Intro to Programming Method and Lab (C++) (3) Linear Algebra I Satisfies the Advanced Math/Comp Sci elective requirement.	3
PL 306	Ethics and the Professions 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 option of the following Human	ons listed in on lities and Fine ral and Socia	each group be Arts from at I I Sciences fror	eneral Education Requelow, select 15 hours to in east two specific discipline in at least two specific disc L SCI 1200 to satisfy the	clude s and iplines.	
		Huma	anities and F	ine Arts	3	
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	Select British Literature I or British Literature II or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	t 6 hours fro	m at least tw	o specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			ral and Soci			
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	t 6 hours fro	m at least two	o specific disciplines. HISTORY 1100 or HISTORY 1200* or PHILOS 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 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, and S Select 3 hou	ocial Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, a music, theater, English and technical communication, philosophy, political science, psychology, economics, etymor foreign language.	3		HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Tota	0 31 31 Hours 62			Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.	0 32 26 58

	Architectural En	gineer	ing Gro	oup 2 Major	Requirements	
	Central Methodist University		Semeste	r	Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking		3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab		4	CHEM 1310*, 1319	General Chemistry I* and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
GL 105	Exploring Geology		3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the 6 hours Hu	options listed imanities and F avioral and So	in each group b ine Arts from at cial Sciences fro	eneral Education Requi elow, select 12 hours to inc least two specific disciplines m at least two specific disci L SCI 1200 to satisfy the S	clude s and plines.	
			manities and F		·	
		Select 6 hours	from at least tw	o specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			vioral and Soci			
	Select 6 hours	from at least	two specific dis	ciplines to include HISTO	RY 1200.	
HI 102*	World History II* *Satisfies the State of Missouri Government requirement.		3	HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		3	PHILOS 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		22		Group 2 Major Requirements	23
	Group 1 Core Requirements	-	31 53		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 49

			ing-Biomanufa Requirements		
	Central Methodist University	Sem	ester	Missouri S&T	
CT 101	Public Speaking	3	SP&MS 1185	Principles of Speech	3
CH 111, 111L	General Chemistry and Lab	4	CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
CH 114, 114L	General Chemistry II and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)	3
CH 341, 341L	Organic Chemistry and Lab	4	CHEM 2210, 2219	*CHEM 1510 is not a degree requirement, transfers as general elective credit. Organic Chemistry I and Lab	4
CH 342, 342L or BI 101, 101L	Organic Chemistry II and Lab or General Biology I and Lab	4	CHEM 2220, 2229 or B SCI 1113, 1219	Organia Chamiatry II and I ab ar	4
CS 378 or CS 172	Data Structures & Algorithms or .NET1	3	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) "Will be substituted for CS 1500.	3
	6 hours Hu	3 hours Behavioral ORY 1200, 1300, 1310,	om at least two specific disciplines and Social Sciences. or POL SCI 1200 to satisfy the S and Fine Arts		
		elect 6 hours from at le	ast two specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation 'Satisfies the State of Missouri government requirement.	6
			Social Sciences		
HI 101 or HI 102* or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select	3 hours. HISTORY 1100 or HISTORY 1200* or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* 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
			and Social Sciences 3560 required.		
EN 306	Technical Writing	3	ENGLISH 3560	Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 34 31 otal Hours 65		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours *S8T advisor permission is required to transfer more than 69 credit hours toward the degree.	0 34 26 s* 60

			_	ing-Biomate equirements		
	Central Methodist University		Semeste	<u>.</u>	Missouri S&T	
CT 101	Public Speaking	3		SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CH 114, 114L	General Chemistry II and Lab	4		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CH 341, 341L	Organic Chemistry and Lab	4		CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	4
CH 342, 342L	Organic Chemistry II and Lab	4		CHEM 2220, 2229*	Organic Chemistry II and Lab* CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).	4
BI 101, 101L	General Biology I and Lab	4		BIO SCI 1113*, 1219*	General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4
CS 378 or CS 172	Data Structures & Algorithms or .NET1	3		CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
	From the opti	ons listed in entities and Fine 3 hours Bel	each group be Arts from at I havioral and S	eneral Education Requitelow, select 12 hours to include ast two specific disciplines ocial Sciences. L SCI 1200 to satisfy the S	lude and	
			anities and F	ine Arts o specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature I or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation Statisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation 'Satisfies the State of Missouri government requirement.	6
			ral and Soci Select 3 hou			
HI 101 or HI 102* or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	25,600 0 1100	HISTORY 1100 or HISTORY 1200* or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language 'Satisfies the State of Missourj government requirement.	3
			, Arts, and S GLISH 3560 re	ocial Sciences equired.		
EN 306	Technical Writing	3		ENGLISH 3560	Technical Writing	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	38 31			Group 2 Major Requirements Group 1 Core Requirements	38 26
	Tota	l Hours 69			Total Hours *S&T advisor permission is required to transfer more than 69 credits toward the S&T Biomedical Engineering degree.	* 64

	Ceramic Engine	ering	Grou	o 2 Major Re	equirements	
	Central Methodist University		Semeste	er	Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking	3		ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Apples to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	4		CHEM 1310, 1319	General Chemistry I and Lab	5
CH 114, 114L	General Chemistry with Qualitative Analysis and Lab	4		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CH 341, 341L	Organic Chemistry and Lab	4		CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) Satisfies the advanced themistly elective requirement. *The lab is not a degree requirement, transfers as general elective credit.	3
PH 307	Modern Physics	3		PHYS 2305	Intro to Modern Physics	3
	From the option 6 hours Humanit	ns listed in e ies and Fine al and Social	each group be Arts from at Sciences fro	General Education Requipelow, select 15 hours to in least two specific discipline mat least two specific disc	nclude es and ciplines.	
	Actions one course must be selected from the Force		anities and	•	otate of missouri government requirement.	
	Select			vo specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature I or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
				ial Sciences		
		6 hours fro	m at least tv	vo specific disciplines.		
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 1100 or HISTORY 1200* or PHILOS 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 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
	Н	lumanities		Social Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art music, theater, English and technical communication, philosophy, political science, psychology, economics, etymoor foreign language.	3	Select 3 ho	urs. HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements Total I	33 31 Hours 64			Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	32 26 58

	Ch Chemical Engineerii			ineering or	poring Emphasis	
	_			Requirements	· · · · · · · · · · · · · · · · · · ·	
	Central Methodist University		Semest		Missouri S&T	
CT 101	Public Speaking		3	SP&MS 1185	Principles of Speech	3
CH 111, 111L	General Chemistry and Lab		4	CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
CH 114, 114L	General Chemistry II and Lab		4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CH 341, 341L	Organic Chemistry and Lab		4	CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) 'CHEM 2210 is a degree requirement. CHEM 2219 applies to the degree as 1 of 9 required science elective credits See note below.	4
CH 342, 342L	Organic Chemistry II and Lab		4	CHEM 2220, 2229*	Organic Chemistry II (3) and Lab* Applies to the degree as required science elective credits. Select up to 9 hours from these options or CHEM 2219 Organic Chemistry Lab **CHEM 2229 is not a degree requirement; transfers as general elective credit.	8
CS 378 or CS 172	Data Structures & Algorithms or .NET1		3	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) "Will be substituted for CS 1500.	3
	From the opt 6 hours Huma	ions listed anities and l oral and So	in each group Fine Arts from a ocial Sciences f	General Education Requi below, select 15 hours to in at least two specific discipline from at least two specific disci OL SCI 1200 to satisfy the	clude s and iplines.	
	0.1		umanities and			
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature I or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Sattsfies the State of Missouri government requirement.		6	kwo specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1222 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
				cial Sciences		
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		from at least	two specific disciplines. HISTORY 1100 or HISTORY 1200* or PHILOS 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 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 *Satisfes the State of Missouri government requirement.	6
				Social Sciences		
EN 306	Technical Writing		ENGLISH 3560 3	required. ENGLISH 3560	Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Tota	;	0 37 31 68		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Chemical Engineering degree.	0 41 26 67

	Civil Enginee	ring (Group 2	Major Requ			
	Central Methodist University	<u>Semester</u>			Missouri S&T		
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking	;	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CH 111, 111L	General Chemistry and Lab	4	4	CHEM 1310, 1319	General Chemistry I and Lab	5	
GL 105	Exploring Geology	;	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3	
	From the op 6 hours Hum	otions listed i anities and F vioral and So	in each group be ine Arts from at le cial Sciences fron	eneral Education Require elow, select 15 hours to inclu- east two specific disciplines a n at least two specific discipl L SCI 1200 to satisfy the St	ude and ines.		
			manities and F				
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or	Sel British Literature I or British Literature II or American Literature I or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or		from at least two	o specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300° or HISTORY 1310° or ART 1180 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or	6	
MU 318	Music Appreciation *Satisfies the State of Missouri government requirement.			MUSIC 1150	Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.		
	Sel		vioral and Social	al Sciences o specific disciplines.			
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	(3	HISTORY 1100 or HISTORY 1200* or PHILOS 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 Self and Words: 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	
		Humaniti	es, Arts, and Se Select 3 hour				
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history music, theater, English and technical communication, philosophy, political science, psychology, economics, et or foreign language.		3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	
	No free electives applied to the degree.		0		Maximum Free Electives	0	
	Group 2 Major Requirements Group 1 Core Requirements To		25 11 66		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.	26 26 52	

	Computer Eng	ineering	g Grou	p 2 Major R	Requirements	
	Central Methodist University		Semeste	r	Missouri S&T	
CT 101	Public Speaking	3		SPMS 1185	Principles of Speech	3
CH 111, 111L	General Chemistry and Lab	4		CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
CS 378 or CS 172	Data Structures & Algorithms or .NET1	3		CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
PH 307 or CH 341, 341L	Modern Physics (3) or Organic Chemistry and Lab (4)	3		PHYSICS 2305 or CHEM 2210, 2219*	Intro to Modern Physics (3) or Organic Chemistry I (3) and Lab* (1) PHYSICS 2304 or CHEM 2210 satisfies a required engineering/science elective. *CHEM 2219 is not a degree requirement; transfers as general elective credit.	3
MA 318	Matrices and Linear Algebra	3		MATH 3108	Linear Algebra Satisfies a required math elective.	3
	From the 6 hours Hu	options listed in a smanities and Fine avioral and Socia	each group be Arts from at I I Sciences from , 1310, or PO	•	nclude es and ciplines.	
	S		anities and F	ine Arts o specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature I or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	in at least tw	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1800 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation "Satisfies the State of Missouri government requirement.	6
	•		ral and Soci			
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	elect 6 hours fro	m at least tw	o specific disciplines. HISTORY 1100 or HISTORY 1200* or PHILOS 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 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, and S Select 3 hou	ocial Sciences		
EN 110 or EN 306	Expository Writing or Technical Writing	3	Ociect o flou	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
Electives	Maximum Free Electives	3		Electives	Maximum Free Electives	3
	Group 2 Major Requirements Group 1 Core Requirements -	34 31 Total Hours 65			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.	35 26 61

	Electrical Engi	neering	Group 2 Major Ro	equirements	
	Central Methodist University		Semester	Missouri S&T	
CT 101	Public Speaking	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CS 378 or CS 172	Data Structures & Algorithms or .NET1	3	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* C++) *Will be substituted for CS 1500.	3
PH 307 or CH 114	Modern Physics or Organic Chemistry	3	PHYSICS 2305 or CHEM 2210	Intro to Modern Physics or Organic Chemistry I	3
MA 318	Matrices and Linear Algebra	3	MATH 3108	Linear Algebra	3
	From the 6 hours Hu	options listed in ea imanities and Fine avioral and Social FORY 1200, 1300,	•	clude s and iplines.	
	S		nities and Fine Arts n at least two specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature I or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1800 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			al and Social Sciences		
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	elect 6 hours fron	n at least two specific disciplines. HISTORY 1100 or HISTORY 1200° or PHILOS 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 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 Select 3 hours.		
EN 110 or EN 306	Expository Writing or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
Electives	Maximum Free Electives	6	Electives	Maximum Free Electives	6
	Group 2 Major Requirements Group 1 Core Requirements	37 31 Total Hours 68		Group 2 Major Requirements Group 1 Core Requirements *S&T advisor permission is required to transfer more than 68 credits tow Electrical Engineering degree.	38 26 Total Hours* 64 ard the S&T

	Engineering Mar	nagen	nent	Group 2 Major R	Requirements	
	Central Methodist University		Se	mester_	Missouri S&T	
CT 101	Public Speaking		3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab		4	CHEM 1310, 1319	General Chemistry I and Lab	5
CS 172	.NET1		3	CS 1971, 1981	Intro to Programming Method and Lab (C++) (3)	3
	From the c 6 hours Hu	options liste manities and avioral and S	d in each d Fine Arts Social Scie	ences General Education Require group below, select 15 hours to inclifrom at least two specific disciplines nces from at least two specific discipl 0, or POL SCI 1200 to satisfy the SI	ude and ines.	
		H	Humanitie	es and Fine Arts		
	S	elect 6 hou	rs from at	least two specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
				nd Social Sciences		
		from at lea		ecific disciplines to include PSYCH		
PY 101	General Psychology		3	PSYCH 1101	General Psychology Required	3
HI 101 or HI 102* or PL 106 or PS 101* or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		6	HISTORY 1100 or HISTORY 1200* or PHILOS 1105 or POL SCI 1200* or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* 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
		Human		s, and Social Sciences ect 3 hours.		
EN 110 or EN 306	Expository Writing or Technical Writing		3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	otal Hours	0 28 31 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 26 26 61

	Environmental En	nginee	ring Gr	oup 2 Major	Requirements	
	Central Methodist University		Semeste	<u>r</u>	Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking		3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
GL 105	Exploring Geology		3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CH 111, 111L	General Chemistry and Lab		4	CHEM 1310, 1319	General Chemistry I and Lab	5
CH 114, 114L	General Chemistry II and Lab		4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
BI 101, 101L	General Biology I and Lab		4	BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) *The lab is not a degree requirement, transfers as general elective credit.	3
	From the 6 hours Hu	options listed manities and F avioral and So ORY 1200, 13	in each group b Fine Arts from at l cial Sciences from 800, 1310, or PO	•	ide and ines.	
	S		Imanities and F from at least tw	o specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature I or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1800 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			vioral and Soci			
		from at least	two specific dis	ciplines to include HISTOR		
HI 102*	World History II* *Satisfies the State of Missouri Government requirement.		3	HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.		3	PHILOS 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 -	;	30 31 51		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 69 credits toward the S&T Environmental Engineering degree.	29 26 55

	Geological Engin	eering	g Group 2 Majo	or Requirements	
	Central Methodist University		<u>Semester</u>	Missouri S&T	
EN 306	Technical Writing	3	ENGLISH 3560	Technical Writing Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	4	CHEM 1310, 13		5
CS 378 or CS 172	Data Structures & Algorithms or .NET1	3	CS 1500 or CS 1971, 1981	Computational Problem Solving or Intro to Programming Methodology and Lab	3
GL 105	Exploring Geology	3	GEO ENG 1150 (GEOLOGY 111	0) Physical and Environmental Geology	3
	From the option 6 hours Human	ons listed in e lities and Fine ral and Social	Sciences General Education each group below, select 15 ho Arts from at least two specific d Sciences from at least two spec	urs to include isciplines and ific disciplines.	
	At least one course must be selected from moron		nities and Fine Arts	sty the otate of Missouri government requirement.	
	Selec		m at least two specific discipli	nes.	
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 ENGLISH 1212 ENGLISH 1222 ENGLISH 1222 HISTORY 1300' HISTORY 1310' ART 1180 or MUSIC 1150	or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or or American Literature: 1865 to Present or or American History to 1877* or	6
			ral and Social Sciences		
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	6	m at least two specific disciplin HISTORY 1100 HISTORY 1200' PHILOS 1105 or POL SCI 1200' PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Languag	or Early Western Civilization or or Modern Western Civilization* or Self and World: Intro to Philosophy or or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or	6
		Humanities	Arts, and Social Sciences Select 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, a music, theater, English and technical communication, philosophy, political science, psychology, economics, etym or foreign language.	. 3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0			0
	Group 2 Major Requirements Group 1 Core Requirements Tota	28 31 Hours 59		Group 1 Core Requirements	29 26 55

	Mechanical Eng	ineering G	roup 2 Major R	Requirements	
	Central Methodist University	Sem	ester_	Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	4	CHEM 1310*, 1319	General Chemistry I* and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CS 172	.NET1	3	CS 1971, 1981	Intro to Programming Method and Lab (C++) (3)	3
MA 318	Matrices and Linear Algebra	3	MATH 3108	Linear Algebra I Satisfies the Advanced Math/Statistics elective requirement.	3
	Humanities, A	rts, and Social Science	ces General Education Requi	·	
	6 hours Hur	manities and Fine Arts fro avioral and Social Scienc	oup below, select 15 hours to income at least two specific disciplines es from at least two specific disciplines or POL SCI 1200 to satisfy the	s and plines.	
	At least one course must be selected from his i		and Fine Arts	State of Missouri government requirement.	
	Se		ast two specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			Social Sciences		
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	ast two specific disciplines. HISTORY 1100 or HISTORY 1200* or PHILOS 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 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 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histor music, theater, English and technical communication, philosophy, political science, psychology, economics, ε or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	28 31 otal Hours 59		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.	29 26 * 55

	Metallurgical En	gineering	Group 2 Major I	Requirements	
	Central Methodist University	Sen	nester	Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CH 114, 114L	General Chemistry II and Lab	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CH 341, 341L or PH 307	Organic Chemistry with Lab (4) or Modern Physics (3)	3	CHEM 2210, 2219* or PHYSICS 2305	Organic Chemistry I (3) or Modern Physics I (3) Not specifically required for the degree but satisfies out-of-department technical elective requirement	3
	Humanities,	Arts, and Social Scien	ices General Education Requir	rements	
	6 hours Hu	umanities and Fine Arts fi	roup below, select 15 hours to include the select two specific disciplines ces from at least two specific disciplines.	and	
	*At least one course must be selected from HIS				
			and Fine Arts		
		Select 6 hours from at le	east two specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature I or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation 'satisfies the State of Missouri government requirement.	6
	3	Behavioral and	d Social Sciences		
	S	Select 6 hours from at le	east two specific disciplines.		
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or PHILOS 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 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 t 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histo music, theater, English and technical communication, philosophy, political science, psychology, economics, 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	3		Maximum Free Electives	3
	Group 2 Major Requirements Group 1 Core Requirements	32 31 Total Hours 63		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.	32 26 58

	Mining Engin	eering	Group	2 Major Red	quirements	
	Central Methodist University		Semeste	<u>r</u>	Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking	;	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	2	1	CHEM 1310, 1319	General Chemistry I and Lab	5
GL 105	Exploring Geology	3	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the c 6 hours Hui	options listed i manities and F avioral and So	n each group b ine Arts from at I cial Sciences fror	eneral Education Requi elow, select 12 hours to in east two specific discipline m at least two specific disci	clude s and iplines.	
	At least one course must be selected from thor		manities and F	•	State of Missouri government requirement.	
	Sc			o specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	(5	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation "Satisfies the State of Missouri government requirement.	6
			ioral and Soci			
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	elect 6 hours		o specific disciplines. HISTORY 1100 or HISTORY 1200* or PHILOS 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 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.	()		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements		2 1		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.	23 26 49

	Nuclear Engine	erinç	g Group	2 Major Red	_l uirements	
	Central Methodist University		Semester		Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking	:	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L CS 172 MA 318	General Chemistry and Lab .NET1 Matrices and Linear Algebra		4 3 3	CHEM 1310, 1319 CS 1971, 1981 MATH 3108	General Chemistry I and Lab Intro to Programming Method and Lab (C++) (3) Linear Algebra	5 3 3
PH 307	Modern Physics		3 vial Sciences Gr	PHYSICS 2305 eneral Education Require	Intro to Modern Physics	3
	From the opti 6 hours Human	ons listed nities and F oral and So	in each group be ine Arts from at le cial Sciences fron	elow, select 15 hours to inclue east two specific disciplines on at least two specific discipl	ude and ines.	
	Sele		manities and F	ine Arts o specific disciplines.		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318	British Literature I or British Literature II or American Literature I or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
	Sele		vioral and Social	al Sciences o specific disciplines.		
EC 202 or EC 201	Microeconomics or Macroeconomics		3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HI 101 or HI 102* or PL 106 or PS 101* or PY 101 or Foreign Language	World History I or World History II* or Intro to Western Philosophy or Intro to American National, State, Local Govt* or General Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	:	3	HISTORY 1100 or HISTORY 1200* or PHILOS 1105 or POL SCI 1200* or PSYCH 1101 or Foreign Language	Early Western Civilization or Modern Western Civilization* 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
		Humaniti	es, Arts, and Se Select 3 hour			
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, a music, theater, English and technical communication, philosophy, political science, psychology, economics, etyr or foreign language.		3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Tota	3	0 31 31 32		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 69 credits toward the S&T Nuclear Engineering degree.	0 32 26 58

	Petroleum Eng	ineering	Group 2 Major	Requirements	
	Central Methodist University		<u>Semester</u>	Missouri S&T	
EN 110 or EN 306 or CT 101	Expository Writing or Technical Writing or Public Speaking	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CH 111, 111L	General Chemistry and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CS 378	Data Structures & Algorithms	3	COMP SCI 1500	Computational Problem Solving	3
GL 105	Exploring Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the 6 hours Hu	options listed in e manities and Fine avioral and Social	Sciences General Education Re each group below, select 15 hours to Arts from at least two specific discipl Sciences from at least two specific d 1310, or POL SCI 1200 to satisfy the	o include ines and isciplines.	
		Huma	nities and Fine Arts		
EN 340 or EN 342 or EN 323 or EN 324 or HI 117* or HI 118* or ART 111 or MU 318 HI 101 or HI 102* or PL 106 or	British Literature I or British Literature II or American Literature II or American Literature II or Development of the United States I* or Development of the United States II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6 Behavioi	m at least two specific disciplines. ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 ral and Social Sciences m at least two specific disciplines. HISTORY 1100 or HISTORY 1200* or PHILOS 1105 or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1800 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation *Satisfies the State of Missouri government requirement. Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy or	6
PS 101* or PY 101 or EC 202 or EC 201 or Foreign Language	Intro to American National, State, Local Govt* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language 'Satisfies the State of Missouri government requirement.	6	POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	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 Select 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histo music, theater, English and technical communication, philosophy, political science, psychology, economics, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	28 31 Fotal Hours 59		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.	29 26 55