## Moberly Area Community College — Missouri S&T General Engineering

Transfer Guide Effective as of Fall 2025

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

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

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

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

	Moberly Area Community College	Seme	<u>ester</u>	Missouri S&T	
MTH 201	Analytic Geometry and Calculus I	5	MATH 1214	Calculus I Grade of C or better is required.	4
MTH 202	Analytic Geometry and Calculus II	5	MATH 1215	Calculus II Grade of C or better is required.	4
MTH 203	Analytic Geometry and Calculus III	5	MATH 2222	Calculus III Grade of C or better is required.	4
MTH 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHY 201	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I Grade of C or better is required.	4
PHY 202	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II Grade of C or better is required.	4
EGN 101	Intro to Engineering	1	FR ENG 1100	Study and Careers in Engineering and Computing	1
LAL 101	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
		Total Haura 22			Total Hours 27

## 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 Engin	eerii	ng Gr	oup 2 Major R	equirements	
	Moberly Area Community College		Seme	ster	Missouri S&T	
LAL 102 or SPK 101	Composition II or Public Speaking I		3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PHY 121	General Chemistry I		5	CHEM 1310*, 1319	General Chemistry I and Lab  *CHEM 1310 will be substituted for CHEM 1305.	5
EGN 201	Statics		3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHI 152	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 option of hours Human	ons listed hities and F ral and So Y 1200, 13	in each gro ine Arts fror cial Science 300, 1310, o	•	elude and olines.	
	Selec			nd Fine Arts st two specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 210 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
	Selec			Social Sciences st two specific disciplines.		
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to Philosophy or Intro to American Government* 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 HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humaniti	i <b>es, Arts, a</b> Select 3	nd Social Sciences hours.	5	
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, 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. Group 2 Major Requirements Group 1 Core Requirements Tota	2	0 29 32 31		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 29 27 56

	Architectural Eng	ineeri	ng Gro	up 2 Major	Requirements	
	Moberly Area Community College		Semester	r	Missouri S&T	
LAL 102 or SPK 101	Composition II or Public Speaking I	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PHY 121	General Chemistry I	5		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
EGN 201	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 163	Geology MOTR GEOL 100L	3		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology MOTR GEOL 100L	3
	From the op 6 hours Huma	tions listed in anities and Fin ioral and Socia	each group be e Arts from at le al Sciences fror	eneral Education Requelow, select 12 hours to in east two specific discipline at least two specific disc L SCI 1200 to satisfy the	nclude es and eiplines.	
			anities and F			
		ect 6 hours fr	om at least two	o specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or			ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or	
HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *satisfies the State of Missouri government requirement.	6		HISTORY 1310* or ART 1180 or ART 1180 or MUSIC 1150 or MUSIC 1150 or THEATRE 1150	American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfes the State of Missourj government requirement.	6
		Behavio	oral and Socia	al Sciences		
		om at least tw	o specific disc	ciplines to include HISTC		
HST 102*	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 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	nitro to Philosophy or Intro to Logic or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3		PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1200 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	26			Group 2 Major Requirements	26
	Group 1 Core Requirements Tol	32 tal Hours 58			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.	27 s* 53

				ering-Biomanufac jor Requirements	cturing	
	Moberly Area Community College			Semester	Missouri S&T	
001/ 404	Public Speaking	3	3	SP&MS 1185	Principles of Speech	3
SPK 101 PHY 121	General Chemistry I		5	CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement.  General Chemistry I and Lab	5
	,			,	General Chemistry II (3) and Qualitative Analysis (2)	
PHY 122	General Chemistry II	5	)	CHEM 1320, 1510*	*CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
BIO 101	Biology	4	1	BIO SCI 1113, 1219	General Biology and Lab Applies to degree as Track Elective.	4
ITC 125 or ITC 243 or ITC 244 or ITC 247 or ITC 220* or ITC 120*	Object-Oriented Programming I or Object-Oriented Programming II: Java or Object-Oriented Programming II: C# or Python Programming or Programming II* or Programming I*	3	3	COMP SCI 1500 or COMP SCI 1971*	Computational Problem Solving or Intro to Programming Methodology* ( C++) *Will be substituted for COMP SCI 1500. COMP SCI 1981 will be waived.	3
	Humanities, A	arts, and Soci	ial S	ciences General Education Require	ments	
		manities and Fi 3 hours E	ine A Beha	ach group below, select 9 hours to include the from at least two specific disciplines a vioral and Social Sciences. 310, or POL SCI 1200 to satisfy the Sta	and	
		Hui	man	ities and Fine Arts		
	S	elect 6 hours f	from	at least two specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or HST 106 or ART 101 or ART 102 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation 'Satisfies the State of Missouri government requirement.	€	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change "satisfies the State of Missouri government requirement.	6
		Behav		I and Social Sciences		
HST 101 or HST 102* or GEO 101 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3		elect 3 hours.  HISTORY 1100 or  HISTORY 1200* or  HISTORY 2110 or  POL SCI 1200* or  PSYCH 1101 or  ECON 1100 or  ECON 1200 or  Foreign Language	Early Western Civilization or  Modern Western Civilization* or World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree.	C	)		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	2 3. Fotal Hours 6			Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *S&T advisor permission is required to transfer more than 69 credit hours toward the degree.	27 27 54

					ing-Biomate equirements		
	Moberly Area Community College			Semeste	ſ	Missouri S&T	
SPK 101	Public Speaking		3		SP&MS 1185	Principles of Speech	3
PHY 121	General Chemistry I		5		CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement.  General Chemistry I and Lab	5
PHY 122	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 101	Biology		4		BIO SCI 1113*, 1219*	General Biology* and Lab*  *Applies to degree as Track Elective (Non-engineering).	4
ITC 125 or ITC 243 or ITC 244 or ITC 247 or ITC 220* or ITC 120*	Object-Oriented Programming I or Object-Oriented Programming II: Java or Object-Oriented Programming II: C# or Python Programming or Programming II* or Programming I*		3		COMP SCI 1500 or COMP SCI 1971*	Computational Problem Solving or Intro to Programming Methodology* ( C++) "Will be substituted for COMP SCI 1500. COMP SCI 1981 will be waived.	3
EGN 201	Statics		3		CIV ENG 2200	Engineering Mechanics-Statics	3
	From the	options liste imanities and 3 hours	d in e Fine Beh	each group b Arts from at I avioral and S	eneral Education Requirelow, select 9 hours to incluse two specific disciplines ocial Sciences.  L SCI 1200 to satisfy the Signal Sciences.	ide and	
		Н	luma	nities and F	ine Arts		
		Select 6 hour	s fror	n at least tw	o specific disciplines.		
LAL 150 or LAL 151 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 102 or DRM 120 DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation or Theatre Appreciation sour Inserts of Missions or Statisfies the State of Missouri government requirement.		6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Ben		al and Social Select 3 hou			
HST 101 or HST 102* or GEO 101 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		3	ociect o flou	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	Total Hours	32 32 64			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 Biomedical Engineering degree.	30 27 57

	Ceramic Engine	ering	Group	2 Major Red	quirements	
	Moberly Area Community College		Semester	•	Missouri S&T	
LAL 102 or SPK 101	Composition II or Public Speaking I	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
EGN 201	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 121	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5
PHY 122	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 opti 6 hours Huma	ions listed in nities and Fin oral and Socia	each group be e Arts from at le al Sciences fror	eneral Education Require elow, select 15 hours to inclu- east two specific disciplines a n at least two specific discipli L SCI 1200 to satisfy the St	rde and nes.	
	Sele		anities and F	ine Arts o specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 121 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1801 to 1865 or American Literature: 1865 to Present or World Literature: 1869 in Present or World Literature: 18eginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
	Sele		oral and Socia om at least two	al Sciences o specific disciplines.		
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or  Words Geography I or Intro to Philosophy or Intro to American Government* 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 HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humanities	s, Arts, and S Select 3 hou	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.	art, 3	23,000 0 7100	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 32 al Hours 63			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 Ceramic Engineering degree.	0 29 27 56

			_	ineering or						
	Chemical Engineeri	ng - B	ioche	mical Engine	ering Emphasis					
Group 2 Major Requirements										
	Moberly Area Community College		Semest	<u>er</u>	Missouri S&T					
SPK 101	Public Speaking	3		SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3				
PHY 121	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5				
PHY 122	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 206	Microbiology	4		BIO SCI 3313, 3319	Microbiology and Lab Partially satisfies a 9-hour science elective requirement.	8				
ITC 125 or ITC 243 or ITC 244 or ITC 247 or ITC 220* or ITC 120*	Object-Oriented Programming I or Object-Oriented Programming II: Java or Object-Oriented Programming II: C# or Python Programming or Programming II* or Programming II*	3		COMP SCI 1500 or COMP SCI 1971*	Computational Problem Solving or Intro to Programming Methodology* (C++) *Will be substituted for COMP SCI 1500. COMP SCI 1981 will be waived.	3				
	From the opt 6 hours Huma	ons listed in nities and Fi oral and Soc	n each group ne Arts from af ial Sciences fro	General Education Requi below, select 12 hours to ind t least two specific disciplines om at least two specific disci DL SCI 1200 to satisfy the	clude s and plines.					
	0.1		nanities and							
LAL 150 or LAL 151 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey from 1870 to Present or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.	ct 6 hours f		wo specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6				
	0.1			cial Sciences						
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or  Western Civilization II* or  World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	ct 6 hours f		wo 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 Philiosophy or  Logic and Reasoning: An Introduction or  American Government*or  General Psychology or  Principles of Microeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6				
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Tota	0 32 32 al Hours 64	2		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 \$&T Chemical Engineering degree.	0 34 27 61				

	Civil Engineeri	ng Gı	roup 2	Major Requ	ıirements	
	Moberly Area Community College		Semester		Missouri S&T	
LAL 102 or SPK 101 PHY 121	Composition II or Public Speaking I General Chemistry I	3 5	<u>Jemester</u>	ENGLISH 1160 or SPMS 1185 CHEM 1310, 1319	Writing and Research or Principles of Speech General Chemistry I and Lab	3 5
PHY 163	Geology MOTR GEOL 100L	3		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology MOTR GEOL 100L	3
EGN 201	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
	From the option 6 hours Humaniti	s listed in e es and Fine I and Social	each group be Arts from at le Sciences from	neral Education Requir low, select 15 hours to inc ast two specific disciplines at least two specific discip SCI 1200 to satisfy the S	rements lude and blines.	
			nities and Fi			
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	Select  English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey from 1870 to Present or A merican Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation Theatre Appreciation *Satisfies the State of Missouri government requirement.	6		specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change  *Satisfies the State of Missouri government requirement.	6
	Calaat		ral and Socia			
HST 101 or HST 102* or GEO 101 or PHI 150 or PSC 105* or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to Philosophy or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  Logic and Reasoning: An Introduction or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
	н		Arts, and So Select 3 hour	ocial Sciences s.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, ar music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	t, 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 Total H	0 29 32 Hours 61			Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.	0 29 27 56

	Computer Engi	neering	Group 2 Major R	equirements	
	Moberly Area Community College		Semester	Missouri S&T	
SPK 101	Public Speaking I	3	SPMS 1185	Principles of Speech	3
	· •			Applies to degree as Gen Ed Communication requirement.	
PHY 121 ITC 125 or	General Chemistry I Object-Oriented Programming I or	5	CHEM 1310, 1319	General Chemistry I and Lab	5
ITC 243 or ITC 244 or ITC 247 or ITC 220* or ITC 120*	Object-Oriented Programming II: Java or Object-Oriented Programming II: C# or Python Programming or Programming II* or Programming II* or	3	COMP SCI 1500 or COMP SCI 1971*	Computational Problem Solving or Intro to Programming Methodology* (C++) *Will be substituted for COMP SCI 1500. COMP SCI 1981 will be waived.	3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics Satisfies a required engineering/science elective.	3
	From the o 6 hours Hun	ptions listed in enanities and Fine vioral and Social DRY 1200, 1300,	-	clude s and iplines.	
	90		nities and Fine Arts m at least two specific disciplines.		
LAL 150 or	English Literature Survey to 1750 or	iect o nours no	ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or	English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or	6	ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or	British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or	6
ART 102 or MUS 101 or MUS 102 or DRM 120	Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation  *Satisfies the State of Missouri government requirement.		ART 1180 or MUSIC 1150 or MUSIC 1150 or THEATRE 1150	Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change 'Satisfies the State of Missouri government requirement.	
			ral and Social Sciences		
LIOT 404 am		lect 6 hours fro	m at least two specific disciplines.	Fort Western Obition to	
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* 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 HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humanities,	Arts, and Social Sciences Select 3 hours.		
LAL 102	Composition II	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements To	3 32 32 otal Hours 64	Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Tot:  *S&T advisor permission is required to transfer more than 68 credits toward the Computer Engineering degree.	3 32 27 al Hours* 59 e S&T

	Electrical Engin	eering	Grou	o 2 Major Ro	equirements	
	Moberly Area Community College		Semester		Missouri S&T	
SPK 101	Public Speaking I	3		SPMS 1185	Principles of Speech	3
PHY 121	General Chemistry I	5		CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement.  General Chemistry I and Lab	5
ITC 125 or	Object-Oriented Programming I or	3		CITEM 1310, 1319	General Grieffisti y Fariu Lab	3
ITC 243 or ITC 244 or ITC 247 or ITC 220* or ITC 120*	Object-Oriented Programming II: Java or Object-Oriented Programming II: C# or Python Programming or Programming II* or Programming II* or	3		COMP SCI 1500 or COMP SCI 1971*	Computational Problem Solving or Intro to Programming Methodology* ( C++) *Will be substituted for COMP SCI 1500. COMP SCI 1981 will be waived.	3
CIV ENG 2200 and Missouri S&T Dynamics	Engineering Mechanics-Statics (3) and MECH ENG 2350 Dynamics to be taken at S&T	3		CIV ENG 2200 and MECH ENG 2350	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2)	3
		•		eneral Education Requi		
				elow, select 15 hours to in		
				east two specific discipline n at least two specific disci		
	*At least one course must be selected from HISTOI					
			anities and F	•		
				specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300° or HISTORY 1310° or ART 1180 or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
	O-I-		ral and Socia			
HST 101 or  HST 102* or  GEO 101 or  PHI 150 or  PHI 151 or  PSC 105* or  PSY 101 or  ECN 102 or  ECN 101 or  Foreign Language	Western Civilization I or  Western Civilization II* or  World Geography I or Intro to Philosophy or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	ct 6 nours fro	m at least two	o specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  Logic and Reasoning: An Introduction or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
		Humanities		ocial Sciences		
LAL 102	Composition II	3	Select 3 hou	rs. ENGLISH 1160	Writing and Dancouch	3
					Writing and Research	
Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Tot	6 35 32 al Hours 67		Electives	Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *S&T advisor permission is required to transfer more than 68 credits toward the S&T Electrical Engineering degree.	6 35 27 62

	Engineering Ma	nagen	nent Gr	oup 2 Major I	Requirements	
	Moberly Area Community College		Semest	<u>ter</u>	Missouri S&T	
SPK 101	Public Speaking I		3	SPMS 1185	Principles of Speech	3
PHY 121	General Chemistry I		5	CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement.  General Chemistry I and Lab	5
EGN 201	Statics		3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From the 6 hours Hu	options liste umanities and navioral and S	d in each group I Fine Arts from a Social Sciences fi	General Education Requi below, select 15 hours to inc at least two specific disciplines from at least two specific disciplines OL SCI 1200 to satisfy the S	clude s and olines.	
			lumanities and			
		Select 6 hour	s from at least	two specific disciplines.		
LAL 150 or LAL 151 or LAL 121 or LAL 2210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation statisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1222 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Beh	avioral and So	cial Sciences		
	Select 6 hour	s from at lea	ast two specific	disciplines to include PSYC	H 1101.	
PSY 101	General Psychology		3	PSYCH 1101	General Psychology Required	3
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* or Microeconomics or 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 PHIL 1115 or POL SCI 1200* or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
		Human		Social Sciences		
			Select 3 h		W 50	
LAL 102	Composition II		3	ENGLISH 1160	Writing and Research	3
	No free electives applied to the degree.		0	Electives	Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	Total Hours	29 32 61		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.	26 27 61

	Environmental Enç	jineerin	ig Group 2 Major	Requirements	
	Moberly Area Community College	Ş	Semester	Missouri S&T	
LAL 102 or SPK 101	Composition II or Public Speaking I	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PHY 163	Geology MOTR GEOL 100L	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology MOTR GEOL 100L	3
PHY 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHY 122	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 101	Biology	4	BIO SCI 1113, 1219*	General Biology (3) and Lab* (1)  *The lab is not a degree requirement, transfers as general elective credit.	3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From the opti 6 hours Huma	ons listed in each nities and Fine A oral and Social So	ciences General Education Requi ch group below, select 12 hours to inc tts from at least two specific disciplines ciences from at least two specific discip 310, or POL SCI 1200 to satisfy the S	elude and olines.	
			ities and Fine Arts		
LAL 150 or LAL 151 or LAL 120 or LAL 210 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.	6	at least two specific disciplines.  ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1222 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change "Satisfies the State of Missouri government requirement.	6
	Select 6 hours fro		specific disciplines to include HISTO	RY 1200	
HST 102*	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 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Intro to Philosophy or Intro to Logic or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language 'Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements Tota	35 32 al Hours 67		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 27 s* 59

	Geological Engin	eerin	g Grou	up 2 Major R	equirements	
	Moberly Area Community College		Semeste	r	Missouri S&T	
PHY 121	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5
PHY 163	Geology MOTR GEOL 100L	3		GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
EGN 201	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
	From the opti 6 hours Humar	ons listed in hities and Fir oral and Soci Y 1200, 130	each group be le Arts from at al Sciences fro 0, 1310, or PO		elude and olines.	
			nanities and I			
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or	ct 6 hours fr	om at least tw	vo specific disciplines.  ENGLISH 1211 or  ENGLISH 1212 or  ENGLISH 1221 or  ENGLISH 1222 or  ENGLISH 1223 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 World Literature I: Beginnings to the Renaissance or	
HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.	6		HISTORY 1300* or HISTORY 1310* or ART 1180 or ART 1180 or MUSIC 1150 or MUSIC 1150 or THEATRE 1150	American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
		Behavi	oral and Soci	ial Sciences		
	Selec	ct 6 hours fr	om at least tw	o specific disciplines.		
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* 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 HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200° or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language 'Satisfies the State of Missouri government requirement.	6
		Humanitie		Social 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.	art,	Select 3 hou	Jrs. HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Tota	0 26 32 Il Hours 58			Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *S&T advisor permission is required to transfer more than 65 credits toward the S&T Geological Engineering degree.	0 26 27 53

	Mechanical Engir	neerin	g Grou	ıp 2 Major R	equirements	
	Moberly Area Community College		Semester		Missouri S&T	
LAL 102 or SPK 101	Composition II or Public Speaking I	3	_	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PHY 121	General Chemistry I	5		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
EGN 201	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
	From the opti 6 hours Humar	ons listed in entities and Fine ral and Social Y 1200, 1300,	each group be Arts from at le Sciences from , 1310, or POL		ude and ines.	
	Cala		anities and Fi			
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation Statisfies the State of Missouri government requirement.	6	m at least two	specific disciplines. ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1223 or HISTORY 1300° or HISTORY 1310° or ART 1180 or ART 1180 or MUSIC 1150 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 World Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change  **Satisfies the State of Missouri government requirement.	6
			ral and Socia			
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or  Western Civilization II* or  World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	6		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  Logic and Reasoning: An Introduction or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
				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 hour	s. HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Tota	0 26 32 I Hours 58			Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements  Total Hours*  *S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.	0 26 27 53

	Metallurgical Engi	neerir	ng Gro	up 2 Major F	Requirements	
	Moberly Area Community College		Semester	•	Missouri S&T	
LAL 102 or SPK 101	Composition II or Public Speaking I	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
EGN 201	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 121	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab General Chemistry II (3) and Qualitative Analysis (2)	5
PHY 122	General Chemistry II	5		CHEM 1320, 1510*	*CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
	From the optic 6 hours Human 6 hours Behavio	ons listed in ities and Fin ral and Socia	each group be e Arts from at le l Sciences from	eneral Education Require elow, select 15 hours to incluse east two specific disciplines an at least two specific disciplin	rde and nes.	
	*At least one course must be selected from HISTOR				ate of Missouri government requirement.	
	Selec		anities and Form at least two	specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105° or HST 106° or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.	6		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change **Satisfies the State of Missouri government requirement.	6
			oral and Socia			
LIOT 404 en		t 6 hours fro	om at least two	specific disciplines.	Fach Markey Obility that	
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* 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 HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
		Humanities		ocial Sciences		
	Humanities, Arts, Social Sciences Elective: Any history,	ort	Select 3 hour	rs.	Humanities, Arts, Social Sciences Elective: Any history, art,	
HASS Elective	music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3		HASS Elective	numanities, Aris, Social Sciences Elective: Aris 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	34			Group 2 Major Requirements	32
	Group 1 Core Requirements Total	Hours 66			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.	27 59

	Mining Engine	erinç	<u> </u>			
LAL 102 or	Moberly Area Community College Composition II or		Semester	ENGLISH 1160 or	Missouri S&T Writing and Research or	
SPK 101	Public Speaking I		3	SPMS 1185	Principles of Speech	3
PHY 121	General Chemistry I		5	CHEM 1310, 1319	General Chemistry I and Lab	5
EGN 201	Statics		3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHY 122	General Chemistry II		5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)  *CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.	3
	From the opt 6 hours Huma	ions listed inities and oral and S RY 1200, 1	I in each group be Fine Arts from at le ocial Sciences fron 300, 1310, or POL	•	ude and ines.	
	Sole		umanities and F	ine Arts o specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey from 1870 to Present or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.		6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300° or HISTORY 1310° or ART 1180 or ART 1180 or MUSIC 1150 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 World Literature: 1865 to Present or World Literature: 1: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change "Satisfies the State of Missouri government requirement.	6
			avioral and Socia			
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or  Western Civilization II* or  World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	ct 6 hours	s from at least two	o specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  Logic and Reasoning: An Introduction or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Tot	al Hours	0 28 32 60		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 27 53

	Nuclear Enginee	ering Gr	oup 2 Major Re	quirements	
	Moberly Area Community College	Ser	nester	Missouri S&T	
LAL 102 or SPK 101	Composition II or Public Speaking I	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PHY 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MTH 215	Intro to Probability and Statistics	3	STAT 3111	Statistical Tools for Decision Making	3
	From the optio 6 hours Humani	ns listed in each g ies and Fine Arts f al and Social Scien	nces General Education Requ group below, select 15 hours to in from at least two specific discipline ices from at least two specific disc , or POL SCI 1200 to satisfy the	nclude es and eiplines.	
		Humanities	s and Fine Arts		
		6 hours from at I	east two specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120  ECN 102 or ECN 101 HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 150 or PSC 105* or	Microeconomics or Macroeconomics  Western Civilization I or Western Civilization II* or World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* or		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or HISTORY 1300* or HISTORY 1310* or ART 1180 or ART 1180 or MUSIC 1150 or MUSIC 1150 or THEATRE 1150  d Social Sciences east two specific disciplines. ECON 1100 or ECON 1200  HISTORY 1100 or HISTORY 1100 or HISTORY 2110 or PHIL 1115 or POL SCI 1200* or	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1805 to Present or World Literature: 1865 to Present or World Literature: 1865 to Present or World Literature: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.  Principles of Microeconomics or Principles of Macroeconomics Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or	3
PSY 101 or	General Psychology or		PSYCH 1101 or	General Psychology or	
Foreign Language	Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		Foreign Language	Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	
			, and Social Sciences et 3 hours.	заизнез не зике от мізгонт дочеттнети гединентети.	
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, a music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.		HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Maximum Free Electives	0		Maximum Free Electives	0
	Group 2 Major Requirements	29		Group 2 Major Requirements	29
	Group 1 Core Requirements Total	32 Hours 61		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.	27 * 56

	Petroleum Engin	eering G	roup 2 Major R	equirements	
	Moberly Area Community College	Sem	ester	Missouri S&T	
LAL 102 or SPK 101	Composition II or Public Speaking I	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PHY 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHY 163	Geology MOTR GEOL 100L	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology MOTR GEOL 100L	3
EGN 201	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	From the optic 6 hours Human	ons listed in each gr ities and Fine Arts fr ral and Social Science	ces General Education Requivoup below, select 15 hours to inorm at least two specific discipline tes from at least two specific discorped to select the select two specific discorped to satisfy the	clude s and iplines.	
	Selec		and Fine Arts ast two specific disciplines.		
LAL 150 or LAL 151 or LAL 120 or LAL 121 or LAL 210 or HST 105* or HST 106* or ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	English Literature Survey to 1750 or English Literature Survey from 1750 to Present or American Literature Survey to 1870 or American Literature Survey from 1870 to Present or A Survey of World Literature I or American History to 1865* or American History from 1865* or Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 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 World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Art Appreciation or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
	Solos		I Social Sciences ast two specific disciplines.		
HST 101 or HST 102* or GEO 101 or PHI 150 or PHI 151 or PSC 105* or PSY 101 or ECN 102 or ECN 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography I or Intro to Philosophy or Intro to Logic or Intro to American Government* 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 HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or  Modern Western Civilization* or  World Regional Geography or  Self and World: Intro to Philosophy or  Logic and Reasoning: An Introduction or  American Government*or  General Psychology or  Principles of Microeconomics or  Principles of Macroeconomics or  Elementary or Intermediate Foreign Language  *Satisfies the State of Missouri government requirement.	6
			and Social Sciences 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	art, 3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements Total	0 29 32 Hours 61		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 27 56