Missouri State University-West Plains — 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.

	Missouri State University-West Plains		Semester		<u>Missouri S&T</u>		
MTH 261	Analytic Geometry and Calculus I	5		MATH 1214	Calculus I Grade of C or better is required.		4
MTH 280	Analytic Geometry and Calculus II	5		MATH 1215	Calculus II Grade of C or better is required.		4
MTH 292	Multivariate Calculus	3		MATH 2222	Calculus III Grade of C or better is required.		4
PHY 203	Foundations of Physics I	5		PHYSICS 1135	Engineering Physics I Grade of C or better is required.		4
PHY 204	Foundations of Physics II	5		PHYSICS 2135	Engineering Physics II Grade of C or better is required.		4
EGR 100	Careers in Engineering and Technology	3		FR ENG 1100	Study and Careers in Engineering and Computing		1
ENG 110	Writing I	3		ENGLISH 1120	Exposition and Argumentation		3
		Total Hours 29				Total Hours	24

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 Engi	neering	g Grou	p 2 Major R	Requirements	
	Missouri State University-West Plains		Semester		Missouri S&T	
EGR 110 ENG 210 or ENG 221 or COM 115	Introduction to Engineering Design Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of Public Speaking	3		MECH ENG 1720 ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Intro to Engineering Design Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 160, 161	General Chemistry I and Lab	5		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CSC 125	Intro to C++ Programming	4		CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
Ethics	Ethics Elective Engineering, business, bio, social or other ethics approved by advisor.	3		Ethics	Ethics Elective Engineering, business, bio, social or other ethics approved by advisor.	3
	From the op 6 hours Huma	tions listed in e anities and Fine ioral and Social RY 1200, 1300,	each group bel Arts from at lea Sciences from 1310, or POL	•	clude s and iplines.	
	Sole		nities and Fi	ne Arts specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature II or Survey of US History to 1877* or Survey of US History to 1877* or Art in Context or The Language of Music "Satisfies the State of Missouri government requirement.	6		ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1600 to 1865 or American 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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
	0.1		ral and Social			
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of 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 PHILOS 1105 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 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
			Arts, and So Select 3 hours	cial 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.			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 Tot	0 33 29 al 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 24 56

	Architectural En	gineeri	ng Gro	up 2 Major R	Requirements	
	Missouri State University-West Plains		Semester		Missouri S&T	
EGR 110	Introduction to Engineering Design	3		MECH ENG 1720	Intro to Engineering Design	3
ENG 210 or ENG 221 or COM 115	Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of 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
CHM 160, 161	General Chemistry I and Lab	5		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
GLG 110	Principles of Geology	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
				eneral Education Require		
		•	0 1	elow, select 12 hours to inclu		
				east two specific disciplines a m at least two specific discipli		
	*At least one course must be selected from HIS					
	7.1.100.01.01.00.00		nanities and F		ato or microan government requirement.	
	S			o specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History to 1877* or Art in Context or The Language of Music "Satisfies the State of Missouri government requirement.	6		ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			ioral and Socia			
	Select 6 hours	from at least t	wo specific disc	ciplines to include HISTOR'	Y 1200.	
HST 104*	World History Since 1600 C.E.* *Satisfies the State of Missouri government requirement.	3		HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3		PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	2			Group 2 Major Requirements	26
	Group 1 Core Requirements	29 Total Hours 5			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.	24 50

			ering-Biomanufa or Requirements	or and the second s	
	Missouri State University-West Plains	<u>s</u>	<u>emester</u>	Missouri S&T	
COM 115	Fundamentals of Public Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 160, 161	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 170, 171	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
BIO 102 or BIO 121 or BIO 235	Biological Science or General Biology I or Principles of Genetics	4	BIO SCI 1113, 1219 or BIO SCI 2223	General Biology and Lab or General Genetics Applies to degree as Track Elective.	4
CSC 125* or CSC 131 or CSC 232	Intro to C++ Programming* or Computational Thinking or Data Structures	4	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* (C++) *Course will be substituted for CS 1500.	3
	From the	e options listed in eac lumanities and Fine Art 3 hours Behavi	iences General Education Requir h group below, select 12 hours to incl is from at least two specific disciplines oral and Social Sciences. 10, or POL SCI 1200 to satisfy the Si	ude and	
			ies and Fine Arts It least two specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			and Social Sciences lect 3 hours.		
HST 103 or HST 104* or GRY 100 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
			ts, and Social Sciences SH 3560 required.		
ENG 221	Writing II: Writing for the Professions	3	ENGLISH 3560	Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 32 29 Total 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 credit hours toward the degree.	0 30 24 * 54

			neering-Biomate or Requirements		
	Missouri State University-West Plains	<u>Se</u>	<u>emester</u>	Missouri S&T	
COM 115	Fundamentals of Public Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 160, 161	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 170, 171	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
BIO 102 or BIO 121	Biological Science or General Biology I	4	BIO SCI 1113*, 1219*	General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4
CSC 125* or CSC 131 or CSC 232	Intro to C++ Programming* or Computational Thinking or Data Structures	4	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* (C++) *Course will be substituted for CS 1500.	3
			ences General Education Requir		
	6 hours Hui	manities and Fine Arts 3 hours Behavio	group below, select 12 hours to incl s from at least two specific disciplines oral and Social Sciences.	and	
	*At least one course must be selected from HIST			tate of Missouri government requirement.	
	S		es and Fine Arts t least two specific disciplines.		
ENG 250 or ENG 251 or ENG 254 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music "Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			and Social Sciences		
HST 103 or HST 104* or GRY 100 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
			s, and Social Sciences H 3560 required.		
ENG 221	Writing II: Writing for the Professions	3	ENGLISH 3560	Technical Writing	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 32 29 Total Hours 61		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hou *S&T advisor permission is required to transfer more than 69 credits toward the S&T Biomedical Engineering degree.	0 30 24

	Ceramic Engin	eering Gro	oup 2 Major Re	equirements	
	Missouri State University-West Plains	Seme	ester	Missouri S&T	
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 210 or ENG 221 or COM 115	Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of 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
CHM 160, 161	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 170, 171	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
	From the op 6 hours Hum	tions listed in each gro anities and Fine Arts fro rioral and Social Science	es General Education Requipup below, select 15 hours to in mat least two specific discipline es from at least two specific discor POL SCI 1200 to satisfy the	iclude is and iplines.	
			and Fine Arts		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Sel Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music "Satisfies the State of Missouri government requirement.	ect 6 hours from at lea	ist two specific disciplines. ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			Social Sciences		
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	Ist two specific disciplines. HISTORY 1100 or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Microeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
			3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histor 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 To	0 30 29 tal Hours 59		Maximum Free Electives Group 2 Major Requirements Group 1 Core Requirements Total Hour *S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	0 29 24 s* 53

	Chemical Enginee	ering - Bio		· · · · · · · · · · · · · · · · · · ·	
	Gı	roup 2 Maj	or Requirements	S	
	Missouri State University-West Plains		<u>emester</u>	Missouri S&T	
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Intro to Engineering Design Principles of Speech	3
COM 115	Fundamentals of Public Speaking	3	SP&MS 1185	Applies to degree as Gen Ed Communication requirement.	3
CHM 160, 161	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 170	General Chemistry II	3	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CSC 125* or CSC 131 or CSC 232	Intro to C++ Programming* or Computational Thinking or Data Structures	4	CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* (C++) *Course will be substituted for CS 1500.	3
		* * * * * * * * * * * * * * * * * * *	iences General Education Requi		
			ts from at least two specific discipline		
			iences from at least two specific disci		
	*At least one course must be selected from HI			State of Missouri government requirement.	
			ties and Fine Arts at least two specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music 'satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
	9	Behavioral	and Social Sciences		
		Select 6 hours from a	at least two specific disciplines.		
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 115 or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	6
			rts, and Social Sciences		
ENG 221	Writing II: Writing for the Professions	ENGLIS 3	SH 3560 required. ENGLISH 3560	Technical Writing	3
LI10 22 I			LINGLIGHT 0000	<u> </u>	
	No free electives applied to the degree. Group 2 Major Requirements	0 33		Maximum Free Electives Group 2 Major Requirements	0 32
	Group 1 Core Requirements	29 Total Hours 62		Group 1 Core Requirements Total Hour: *S&T advisor permission is required to transfer more than 68 credits toward the S&T Chemical Engineering degree.	24

	Civil Enginee	ring Gr				
EGR 110	Missouri State University-West Plains Introduction to Engineering Design	3	<u>Semester</u>	MECH ENG 1720	Missouri S&T	3
ENG 210 or ENG 221 or COM 115	Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of Public Speaking	3		ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Intro to Engineering Design Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 160, 161	General Chemistry I and Lab	5		CHEM 1310, 1319	General Chemistry I and Lab	5
GLG 110	Principles of Geology	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the op 6 hours Huma	tions listed in e anities and Fine ioral and Social RY 1200, 1300,	ach group be Arts from at le Sciences from 1310, or POL		lude and lines.	
	Sele		nities and Fi	ne Arts specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History to 1877* or Art in Context or The Language of Music "Satisfies the State of Missouri government requirement.	6	ii ut isast tiis	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
	Sal		al and Socia			
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of 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 PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
			Select 3 hours	ocial Sciences s.		
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.	0			Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements Tot	30 29 tal 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 Civil Engineering degree.	29 24 53

	Computer Eng	ineering	Grou	o 2 Major R	Requirements	
	Missouri State University-West Plains		Semester		Missouri S&T	
COM 115	Fundamentals of Public Speaking	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 160, 161	General Chemistry I and Lab	5		CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 125 or CSC 131 or CSC 232	Intro to C++ Programming or Computational Thinking or Data Structures	4		CS 1500	Computational Problem Solving	3
BIO 235	Principles of Genetics	3		BIO SCI 2223	General Genetics (3) Satisfies a required engineering/science elective.	3
	From the 6 hours H	e options listed in ea lumanities and Fine havioral and Social STORY 1200, 1300,	ach group be Arts from at le Sciences from 1310, or POL	•	nclude es and ciplines.	
			nities and Fi	ne Arts specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241 HST 103 or HST 104* or GRY 100 or	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music *Satisfies the State of Missouri government requirement.	6 Behavior	al and Socia	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1600 to 1865 or American 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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement. Early Western Civilization or Modern Western Civilization* or World Regional Geography or	6
PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	Arte and S	PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
			Select 3 hour			
ENG 210 or ENG 221	Writing II: Academic Writing or Writing II: Writing for the Professions	3	222.7041	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	33 29 Total Hours 62			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.	32 24 56

	Electrical Eng	gineering	Group	o 2 Major R	equirements	
	Missouri State University-West Plains		Semester	•	Missouri S&T	
EGR 110	Introduction to Engineering Design	3		MECH ENG 1720	Intro to Engineering Design	3
COM 115	Fundamentals of Public Speaking	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 160, 161	General Chemistry I and Lab	5		CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 125 or CSC 131 or CSC 232	Intro to C++ Programming or Computational Thinking or Data Structures	4		CS 1500	Computational Problem Solving	3
BIO 235	Principles of Genetics	3		BIO SCI 2223	General Genetics (3) Satisfies a required engineering/science elective.	3
	From the 6 hours	ne options listed in e Humanities and Fine ehavioral and Social	each group be Arts from at le Sciences from	eneral Education Requipmental Education Requipments of the least two specific disciplines at least two specific disconstances. SCI 1200 to satisfy the	irements Iclude is and iplines.	
	At loads one course must be selected from the		nities and Fi	•	State of Missouri government requirement.	
		Select 6 hours fro	m at least two	specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History to 1877* or Art in Context or The Language of Music 'Satisfies the State of Missouri government requirement.	6		ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	American Literature: 1805 to 1865 or American 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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
			ral and Socia			
LIOT 400	World History to 4000 O.F.	Select 6 hours fro	m at least two	specific disciplines.	Fords Mandage Of Street on an	
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language 'Satisfies the State of Missouri government requirement.	6		HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missourl government requirement.	6
		Humanities	Arts, and So Select 3 hour	ocial Sciences s.		
ENG 210 or ENG 221	Writing II: Academic Writing or Writing II: Writing for the Professions	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	39 29 Total Hours 68			Group 2 Major Requirements Group 1 Core Requirements Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Electrical Engineering degree.	38 24 62

	Engineering Ma	anagen	nent Gro	up 2 Major R	equirements	
	Missouri State University-West Plains		Semester		Missouri S&T	
EGR 110	Introduction to Engineering Design		3	MECH ENG 1720	Intro to Engineering Design	3
COM 115	Fundamentals of Public Speaking		3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHM 160, 161	General Chemistry I and Lab		5	CHEM 1310, 1319	General Chemistry I and Lab	5
CSC 125	Intro to C++ Programming		4	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
	From the 6 hours	ne options listed Humanities and ehavioral and S ISTORY 1200, 1	d in each group be Fine Arts from at le ocial Sciences fron 1300, 1310, or POI	•	de und nes.	
			lumanities and F	ine Arts o specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History to 1877* or Art in Context or The Language of Music 'Satisfies the State of Missouri government requirement.		6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300° or HISTORY 1310° or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation 'Satisfies the State of Missouri government.	6
	0.1.101		avioral and Socia		4404	
PSY 121	Introductory Psychology	ours from at lea	st two specific dis	sciplines to include PSYCH PSYCH 1101	1101. General Psychology Required	3
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 55 or PLS 101* or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.		3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
		Humani	ties, Arts, and S Select 3 hou	rs.		
ENG 210 or ENG 221	Writing II: Academic Writing or Writing II: Writing for the Professions		3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
	No free electives applied to the degree.		0	Electives	Maximum Free Electives	0
	Group 2 Major Requirements		30 29		Group 2 Major Requirements	29 24
	Group 1 Core Requirements	Total Hours	59 59		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.	61

	Environmental En	gineer	ing Gr	oup 2 Major	Requirements	
	Missouri State University-West Plains		Semester	•	Missouri S&T	
EGR 110	Introduction to Engineering Design	3		MECH ENG 1720	Intro to Engineering Design	3
ENG 210 or ENG 221 or COM 115	Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of 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
GLG 110	Principles of Geology	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CHM 160, 161	General Chemistry I and Lab	5		CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 170	General Chemistry II	3		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 102 or BIO 121	Biological Science or General Biology I	4		BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) *The lab is not a degree requirement, transfers as general elective credit.	3
	6 hours Hur	nanities and Fin vioral and Socia ORY 1200, 1300	e Arts from at leal Sciences from 0, 1310, or POI		and dines.	
	Se		anities and F om at least two	ine Arts o specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music 'Satisfies the State of Missouri government requirement.	6		ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation 'Satisfies the State of Missouri government requirement.	6
	0.1.101		oral and Socia		21/ 4000	
HST 104*	World History Since 1600 C.E.* *Satisfies the State of Missouri government requirement.	rom at least tw	o specific disc	ciplines to include HISTOI HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3
PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language "Satisfies the State of Missouri government requirement.	3		PHILOS 1105 or PHILOS 1115 or POL SCI 1200° or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language 'Satisfies the State of Missouri government requirement.	3
	No free electives applied to the degree. Group 2 Major Requirements	0 34			Maximum Free Electives Group 2 Major Requirements	0 32
	Group 1 Core Requirements	29 otal Hours 63			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.	24 56

	Geological Engi	neerin	g Grou	ıp 2 Major F	Requirements	
	Missouri State University-West Plains		Semeste	r	Missouri S&T	
EGR 110	Introduction to Engineering Design	3		MECH ENG 1720	Intro to Engineering Design	3
ENG 221	Writing II: Writing for the Professions	3		ENGLISH 3560	Technical Writing	3
CHM 160, 161	General Chemistry I and Lab	5		CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
CSC 125* or CSC 131 or CSC 232	Intro to C++ Programming* or Computational Thinking or Data Structures	4		CS 1500 or CS 1971, 1981	Computational Problem Solving or Intro to Programming Methodology and Lab	3
GLG 110	Principles of Geology	4		GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
	From the o 6 hours Hun	ptions listed in nanities and Fin vioral and Socia	each group be e Arts from at al Sciences fro	ceneral Education Requirelew, select 15 hours to in least two specific discipline m at least two specific disc	nclude es and ciplines.	
	At least one course must be selected from mis re		anities and I		State of Missouri government requirement.	
	Se			o specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music *Satisfies the State of Missouri government requirement.	6		ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *Satisfes the State of Missouri government requirement.	6
		Behavio	oral and Soci	ial Sciences		
		lect 6 hours fro	om at least tw	o specific disciplines.		
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6		HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1200 or FOREIGN 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	Social Sciences		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histo music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	ry, art, 3	53,600 0 1100	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	34 29 otal Hours 63			Group 2 Major Requirements Group 1 Core Requirements Total Hours* *\$&T advisor permission is required to transfer more than 65 credits toward the \$&T Geological Engineering degree.	32 24 56

	Mechanical Engi	neerin	ıg Groı	up 2 Major F	Requirements	
	Missouri State University-West Plains		Semeste	r	Missouri S&T	
EGR 110	Introduction to Engineering Design	3		MECH ENG 1720	Intro to Engineering Design	3
EGR 120	Intro to Computer Aided Design	2		MECH ENG 1761	Intro to Computer Aided Design	1
ENG 210 or	Writing II: Academic Writing or			ENGLISH 1160 or	Writing and Research or	
ENG 221 or	Writing II: Writing for the Professions or	3		ENGLISH 3560 or	Technical Writing or	3
COM 115	Fundamentals of Public Speaking			SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	
CHM 160, 161	General Chemistry I and Lab	5		CHEM 1310*, 1319	General Chemistry I and Lab	5
CSC 125	Intro to C++ Programming	4		CS 1971, 1981	*CHEM 1310 will be substituted for CHEM 1305. Intro to Programming Method and Lab (C++)	3
000 120		s, and Socia	al Sciences G	eneral Education Requi		
	6 hours Huma	nities and Fir oral and Soci RY 1200, 130	ne Arts from at l al Sciences from 0, 1310, or PO	•	s and iplines.	
	Colo		nanities and F			
ENG 250 or	Survey of American Literature I or	ct 6 nours ir	om at least tw	o specific disciplines. ENGLISH 1221 or	American Literature: 1600 to 1865 or	
ENG 250 or	Survey of American Literature II or			ENGLISH 1222 or	American Literature: 1865 to Present or	
ENG 240 or	Survey of World Literature I or			ENGLISH 1231 or	World Literature I: Beginnings to the Renaissance or	
HST 121* or	Survey of US History to 1877* or	6		HISTORY 1300* or	American History to 1877* or	6
HST 122* or	Survey of US History since 1877* or	U		HISTORY 1310* or	American History Since 1877* or	U
ART 200 or	Art in Context or			ART 1180 or	Art Appreciation or	
MUS 241	The Language of Music *Satisfies the State of Missouri government requirement.			MUSIC 1150	Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	
		Behavi	oral and Soci	al Sciences		
	Sele	ct 6 hours fr	om at least tw	o specific disciplines.		
HST 103 or	World History to 1600 C.E. or			HISTORY 1100 or	Early Western Civilization or	
HST 104* or	World History Since 1600 C.E.* or			HISTORY 1200* or	Modern Western Civilization* or	
GRY 100 or PHI 110 or	World Regional Geography or Intro to Philosophy or			HISTORY 2110 or PHILOS 1105 or	World Regional Geography or Self and World: Intro to Philosophy or	
PHI 110 or PHI 105 or	Logic, Language, and Argumentation or			PHILOS 1105 or PHILOS 1115 or	Logic and Reasoning: An Introduction or	
PLS 101* or	American Democracy and Citizenship* or	6		POL SCI 1200* or	American Government*or	6
PSY 121 or	Introductory Psychology or			PSYCH 1101 or	General Psychology or	
ECO 165 or	Principles of Microeconomics or			ECON 1100 or	Principles of Microeconomics or	
ECO 155 or	Principles of Macroeconomics or			ECON 1200 or	Principles of Macroeconomics or	
Foreign Language	Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.			Foreign Language	Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	
		Humanitie		ocial Sciences		
			Select 3 hou	irs.		
	Humanities, Arts, Social Sciences Elective: Any history,	art,			Humanities, Arts, Social Sciences Elective: Any history, art,	
HASS Elective	music, theater, English and technical communication, philosophy, political science, psychology, economics,	3		HASS Elective	music, theater, English and technical communication, philosophy, political science, psychology, economics,	3
	etymology, or foreign language.				etymology, or foreign language.	
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	32			Group 2 Major Requirements	30
	Group 1 Core Requirements	29			Group 1 Core Requirements	24
	Tota	al Hours 61			Total Hours* *S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.	54

	Metallurgical Eng	gineering	Group 2 Major	Requirements	
	Missouri State University-West Plains	Se	mester	Missouri S&T	
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 210 or ENG 221 or COM 115	Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of 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
CHM 160, 161	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 170	General Chemistry II	3	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
	From the 6 hours Hu	options listed in each manities and Fine Arts avioral and Social Scie	nces General Education Requi group below, select 15 hours to in from at least two specific disciplines nces from at least two specific disci , or POL SCI 1200 to satisfy the	clude s and plines.	
		Humanitie	s and Fine Arts		
	S	elect 6 hours from at	least two specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation	6
	*Satisfies the State of Missouri government requirement.	Behavioral a	nd Social Sciences	*Satisfies the State of Missouri government requirement.	
	S		least two specific disciplines.		
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
			s, and Social Sciences ct 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any hist music, theater, English and technical communication philosophy, political science, psychology, economics, etymology, or foreign language.	ory, art, 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	3		Maximum Free Electives	3
	Group 2 Major Requirements Group 1 Core Requirements	32 29 Total Hours 61		Group 2 Major Requirements Group 1 Core Requirements Total Hour: *S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.	32 24 s* 56

	Mining Engi	neering C	Group 2 Major Re	quirements	
	Missouri State University-West Plains		<u>Semester</u>	Missouri S&T	
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 210 or ENG 221 or COM 115	Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of 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
CHM 160, 161	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
GLG 110	Principles of Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	6 hours H	Humanities and Fine chavioral and Social STORY 1200, 1300,	ach group below, select 12 hours to in Arts from at least two specific discipline Sciences from at least two specific disc 1310, or POL SCI 1200 to satisfy the nities and Fine Arts	es and ciplines.	
		Select 6 hours from	n at least two specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation 'Satisfies the State of Missouri government requirement.	6
			al and Social Sciences		
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	Select 6 hours from	n at least two specific disciplines. HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 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.	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements	27 29 Total Hours 56		Group 2 Major Requirements Group 1 Core Requirements Total Hours *\$8T advisor permission is required to transfer more than 68 credits toward the \$8T	26 24 * 50

	Nuclear Engin	eering Gr	oup 2 Major Re	quirements	
	Missouri State University-West Plains	Se	emester	Missouri S&T	
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Intro to Engineering Design	3
ENG 210 or ENG 221 or COM 115	Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of 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
CHM 160, 161 CSC 125	General Chemistry I and Lab Intro to C++ Programming	5 4	CHEM 1310, 1319 CS 1971, 1981	General Chemistry I and Lab Intro to Programming Method and Lab (C++)	5 3
550 120	Humanities, A From the c 6 hours Hur	ptions listed in each manities and Fine Arts avioral and Social Scie	group below, select 15 hours to inc from at least two specific disciplines ences from at least two specific disci	rements clude s and plines.	
			es and Fine Arts	out of misseur government requirement.	
	Se		least two specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music 'Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
	Cationics the State of Missian government requirement.	Behavioral a	nd Social Sciences	Catolico tilo Gato O. IIIOCGA i goroniiiota (Oqui Oniota)	
	Se	elect 6 hours from at	least two specific disciplines.		
ECO 165 or ECO 155	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
			s, and Social Sciences ect 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any histo music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	ry, art, 3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Maximum Free Electives	0		Maximum Free Electives	0
	Group 2 Major Requirements Group 1 Core Requirements T	30 29 otal Hours 59		Group 2 Major Requirements Group 1 Core Requirements Total Hours* *\$&T advisor permission is required to transfer more than 69 credits toward the \$&T Nuclear Engineering degree.	29 24 53

	Petroleum Engi	neering	Group 2 Major F	Requirements	
	Missouri State University-West Plains		Semester	Missouri S&T	
ENG 210 or ENG 221 or COM 115	Writing II: Academic Writing or Writing II: Writing for the Professions or Fundamentals of 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
CHM 160, 161 CSC 125	General Chemistry I and Lab Intro to C++ Programming	5 4	CHEM 1310, 1319 CS 1971, 1981	General Chemistry I and Lab Intro to Programming Method and Lab (C++)	5 3
GLG 110	Principles of Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	From the o 6 hours Hun	ptions listed in e nanities and Fine vioral and Social	Sciences General Education Req ach group below, select 15 hours to Arts from at least two specific disciplin Sciences from at least two specific dis 1310, or POL SCI 1200 to satisfy the	include es and ciplines.	
	Se		nities and Fine Arts n at least two specific disciplines.		
ENG 250 or ENG 251 or ENG 240 or HST 121* or HST 122* or ART 200 or MUS 241	Survey of American Literature I or Survey of American Literature II or Survey of World Literature I or Survey of US History to 1877* or Survey of US History since 1877* or Art in Context or The Language of Music 'Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Music Understanding and Appreciation *satisfies the State of Missouri government requirement.	6
		Behavior	al and Social Sciences	•	
		lect 6 hours fron	m at least two specific disciplines.		
HST 103 or HST 104* or GRY 100 or PHI 110 or PHI 105 or PLS 101* or PSY 121 or ECO 165 or ECO 155 or Foreign Language	World History to 1600 C.E. or World History Since 1600 C.E.* or World Regional Geography or Intro to Philosophy or Logic, Language, and Argumentation or American Democracy and Citizenship* or Introductory Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfles the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
			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, etymology, or foreign language.	ry, art, 3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	No free electives applied to the degree. Group 2 Major Requirements Group 1 Core Requirements	0 31 29 otal Hours 60		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 24 53