

MSU-West Plains — Missouri S&T

General Engineering Transfer Guide

Effective as of Fall 2023

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

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.

MSU-West Plains			Semester	Missouri S&T			
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	
CHM 160, 161	General Chemistry I and lab	5	CHEM 1310, 1319	General Chemistry I and Lab		5	
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	
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	
Total Hours			37	Total Hours			32

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
Ceramic Engineering
Chemical Engineering
Chemical Engineering/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.

Humanities/Social Science (HSS) Electives: HSS electives may include any art, English and technical communication, etymology, foreign language, music, philosophy, speech and media studies, or theatre. Your campus may have additional acceptable options. Consult with your advisor or email transfer@mst.edu with questions. See Missouri S&T online catalog at <https://catalog.mst.edu/undergraduate/degreeprogramsandcourses/> for more information.

Aerospace Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
ENG 210 or COM 115 or ENG 221	Writing II: Academic Writing or Fundamentals of Public Speaking or Writing II: Writing for the Professions	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
CSC 125	Intro to C++ Programming	4	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
	Literature Elective	3		Literature Elective	3
	Ethics Elective	3		Ethics Elective <small>Engineering, business, bio, social or other ethics approved by advisor.</small>	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	19		Group 2 Major Requirements	18
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	56		Total Hours*	50

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.

Architectural Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
HST 104* (or HST 121 or HST 122)	World History since 1600 C.E. * (or Survey of US History to 1877 or Survey of History since 1877)	3	HISTORY 1200* (or HISTORY 1300 or HISTORY 1310)	Modern Western Civilization* (or American History to 1877 or American History since 1877) <small>*HISTORY 1200 is preferred; 1300 or 1310 will also be accepted.</small>	3
HSS Elective	Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3	HSS Elective	Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3
GLG 110	Principles of Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	13		Group 2 Major Requirements	12
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	50		Total Hours*	44

*S&T advisor permission is required to transfer more than 69 credits toward the S&T Architectural Engineering degree.

Ceramic Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
CHM 170	General Chemistry II	3	CHEM 1320	General Chemistry II	3
ENG 210 or COM 115 or HSS Elective	Writing II: Academic Writing or Fundamentals of Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3	ENGLISH 1160 or SPMS 1185 or HSS Elective	Writing and Research or Principles of Speech or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	15		Group 2 Major Requirements	15
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	52		Total Hours*	47

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.

Chemical Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 221	Writing II: Writing for the Professions	3	ENGLISH 3560	Technical Writing	3
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
CHM 170	General Chemistry II	3	CHEM 1320	General Chemistry II	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++)	3
COM 115	Fundamentals of Public Speaking	3	SP&MS 1185	Principles of Speech	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	22		Group 2 Major Requirements	21
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	59		Total Hours*	53

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Chemical Engineering degree.

Chemical Engineering - Biochemical Engineering Emphasis Group 2 Major Requirements

<u>MSU-West Plains</u>			<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3	
ENG 221	Writing II: Writing for the Professions	3	ENGLISH 3560	Technical Writing	3	
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3	
CHM 170	General Chemistry II	3	CHEM 1320	General Chemistry II	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++)	3	
COM 115	Fundamentals of Public Speaking	3	SP&MS 1185	Principles of Speech	3	
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3	
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0	
	Group 2 Major Requirements	22		Group 2 Major Requirements	21	
	Group 1 Core Requirements	37		Group 1 Core Requirements	32	
	Total Hours	59		Total Hours*	53	

*S&T advisor permission is required to transfer more than 70 credits toward the S&T Chemical/Biochemical Engineering degree.

Civil Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>			<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3	
ENG 210 or COM 115 or ENG 221	Writing II: Academic Writing or Fundamentals of Public Speaking or Writing II: Writing for the Professions	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3	
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3	
GLG 110	Principles of Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3	
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3	
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0	
	Group 2 Major Requirements	16		Group 2 Major Requirements	15	
	Group 1 Core Requirements	37		Group 1 Core Requirements	32	
	Total Hours	53		Total Hours*	47	

*S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.

Computer Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COM 115	Fundamentals of Public Speaking	3	SPMS 1185	Principles of Speech	3
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
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
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
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	19		Group 2 Major Requirements	18
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	56		Total Hours*	50

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Computer Engineering degree.

Electrical Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
COM 115	Fundamentals of Public Speaking	3	SPMS 1185	Principles of Speech	3
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
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
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
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	19		Group 2 Major Requirements	21
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	56		Total Hours*	53

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Electrical Engineering degree.

Engineering Management Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
PSY 121	Introductory Psychology	3	PSYCH 1101	General Psychology	3
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
COM 115	Fundamentals of Public Speaking	3	SPMS 1185	Principles of Speech	3
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
CSC 125	Intro to C++ Programming	4	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	25		Group 2 Major Requirements	24
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	62		Total Hours*	56

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Engineering Management degree.

Environmental Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 210 or COM 115 or ENG 221	Writing II: Academic Writing or Fundamentals of Public Speaking or Writing II: Writing for the Professions	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HST 104 or HST 121 or HST 122	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History since 1877	3
GLG 110	Principles of Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CHM 170	General Chemistry II	3	CHEM 1320	General Chemistry II	3
BIO 101 or BIO 121	Biological Concepts (3) or General Biology I (4)	3	BIO SCI 1113	General Biology	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	22		Group 2 Major Requirements	21
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	59		Total Hours*	53

*S&T advisor permission is required to transfer more than 69 credits toward the S&T Environmental Engineering degree.

Geological Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 221	Writing II: Writing for the Professions	3	ENGLISH 3560	Technical Writing	3
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
GLG 110	Principles of Geology	4	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
CHM 170 or BIO 101 or BIO 121	General Chemistry II (4) or Biological Concepts (3) or General Biology I (4)	3	CHEM 1320 or BIO SCI 1113	General Chemistry II or General Biology <small>or any 3-hour course in chemistry, geochemistry, or biology. Satisfies chemistry/geochemistry elective requirement.</small>	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	22		Group 2 Major Requirements	21
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	59		Total Hours*	53

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Geological Engineering degree.

Mechanical Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
ENG 210 or COM 115 or ENG 221	Writing II: Academic Writing or Fundamentals of Public Speaking or Writing II: Writing for the Professions	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
CSC 125	Intro to C++ Programming	4	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
	Literature Elective	3		Literature Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	19		Group 2 Major Requirements	18
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	56		Total Hours*	50

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.

Metallurgical Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 210 or COM 115 or ENG 221	Writing II: Academic Writing or Fundamentals of Public Speaking or Writing II: Writing for the Professions	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HST 104 or HST 121 or HST 122 or PLS 101 CHM 170	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship General Chemistry II	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200 CHEM 1320	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government General Chemistry II	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	5		Maximum Free Electives	3
	Group 2 Major Requirements	23		Group 2 Major Requirements	21
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	60		Total Hours*	53

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.

Mining Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
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
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
GLG 110	Principles of Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	19		Group 2 Major Requirements	18
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	56		Total Hours*	50

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mining Engineering degree.

Nuclear Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 210 or COM 115 or ENG 221	Writing II: Academic Writing or Fundamentals of Public Speaking or Writing II: Writing for the Professions	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
CSC 125	Intro to C++ Programming	4	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	6		Maximum Free Electives	6
	Group 2 Major Requirements	25		Group 2 Major Requirements	24
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	62		Total Hours*	56

*S&T advisor permission is required to transfer more than 68 credits toward the S&T Nuclear Engineering degree.

Petroleum Engineering Group 2 Major Requirements

<u>MSU-West Plains</u>		<u>Semester</u>	<u>Missouri S&T</u>		
EGR 110	Introduction to Engineering Design	3	MECH ENG 1720	Engineering Design with Computer Appl	3
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 (preferred)	3
HST 104 or HST 121 or HST 122 or PLS 101	World History since 1600 C.E. or Survey of US History to 1877 or Survey of History since 1877 or American Democracy and Citizenship	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3
GLG 110	Principles of Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	19		Group 2 Major Requirements	18
	Group 1 Core Requirements	37		Group 1 Core Requirements	32
	Total Hours	56		Total Hours*	50

*S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.