

Crowder College — Missouri S&T

General Engineering Transfer Guide

Effective as of Fall 2020

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.

<u>Crowder College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
MATH 150, 160	Calculus Part 1 and 2	5	MATH 1214	Calculus for Engineers I	Grade of C or better is required.	4
MATH 201	Calculus II	5	MATH 1215	Calculus for Engineers II	Grade of C or better is required.	4
MATH 202	Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	Grade of C or better is required.	4
MATH 210	Differential Equations	3	MATH 3304	Elementary Differential Equations		3
PHYS 190	General Physics I	5	PHYSICS 1135	Engineering Physics I	Grade of C or better is required.	4
PHYS 210	General Physics II	5	PHYSICS 2135	Engineering Physics II	Grade of C or better is required.	4
CHEM 111	General Chemistry	5	CHEM 1310, 1319	General Chemistry I and Lab		5
ENG 101	English Composition	3	FR ENG 1100	Study and Careers in Engineering and Computing		1
ECON 202 or ECON 201	Principles of Economics II (Micro) or Principles of Economics I (Macro)	3	ENGLISH 1120	Exposition and Argumentation		3
Total Hours						39
						Total Hours
						35

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 history, economics, political science, sociology, psychology, philosophy, fine art, literature, or foreign language. Missouri S&T approved HSS courses are listed at ugs.mst.edu. Your campus may have additional acceptable options. Consult with your advisor or email transfer@mst.edu with questions.

Aerospace Engineering Group 2 Major Requirements

<u>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
ENGL 102 or COMM 104 or ENGL 203	Advanced English Composition or Fundamentals of Speech or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
ENGL 240 or ENGL 230 or ENGI 222 or	British Literature I or Survey of American Literature I or World Literature I (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I (or other literature elective)
	<i>See your advisor for course options.</i>	3		Ethics Elective
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	15		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	54		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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIST 102* (or HIST 106 or HIST 107)	Western Civilization II* (or U.S. History I or U.S. History II) <small>*HIST 102 is preferred; 106 or 107 will also be accepted.</small>	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>
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
ENGL 102 or COMM 104 or HSS Elective	Advanced English Composition or Fundamentals of Speech 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 Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language
GEOL 115	Intro to Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	12		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	51		Total Hours*
				47

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
CHEM 112	General Chemistry II	5	CHEM 1320,1510*	General Chemistry II (3) and Qual. Analysis* (2) <small>*Note: CHEM 1510 is not an S&T degree requirement. Course will transfer as elective credit.</small>
ENGL 102 or COMM 104 or HSS Elective	Advanced English Composition or Fundamentals of Speech 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 Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	17		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	56		Total Hours*
				50

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 102 or ENGL 203	Advanced English Composition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
CHEM 112	General Chemistry II	5	CHEM 1320,1510*	General Chemistry II (3) and Qual. Analysis* (2) <small>*Note: CHEM 1510 is not an S&T degree requirement. Course will transfer as elective credit.</small>	3
COMP 111	Intro to Computer Science	3	CS 1500	Computational Problem Solving	3
COMM 104	Fundamentals of Speech	3	SP&MS 1185	Principles of Speech	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	20		Group 2 Major Requirements	18
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	59		Total Hours*	53

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

Chemical Engineering - Biochemical Engineering Emphasis Group 2 Major Requirements

<u>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 102 or ENGL 203	Advanced English Composition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
CHEM 112	General Chemistry II	5	CHEM 1320,1510*	General Chemistry II (3) and Qual. Analysis* (2) <small>*Note: CHEM 1510 is not an S&T degree requirement. Course will transfer as elective credit.</small>	3
COMP 111	Intro to Computer Science	3	CS 1500	Computational Problem Solving	3
COMM 104	Fundamentals of Speech	3	SP&MS 1185	Principles of Speech	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	20		Group 2 Major Requirements	18
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	59		Total Hours*	53

*S&T advisor permission is required to transfer more than 71 credits toward the S&T Chemical/Biochemical Engineering degree.

Civil Engineering Group 2 Major Requirements

<u>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 102 or COMM 104 or ENGL 203	Advanced English Composition or Fundamentals of Speech or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
GEOL 115	Intro to Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>See your advisor for course options.</i>	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	39		Group 1 Core Requirements	35
	Total Hours	54		Total Hours*	50

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 104	Fundamentals of Speech	3	SPMS 1185	Public Speaking	3
ENGL 102 or ENGL 203	Advanced English Composition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
COMP 111	Intro to Computer Science	4	CS 1500	Computational Problem Solving	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Maximum Free Electives	3
	Group 2 Major Requirements	19		Group 2 Major Requirements	18
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	58		Total Hours*	53

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 104	Fundamentals of Speech	3	SPMS 1185	Public Speaking	3
ENGL 102 or ENGL 203	Advanced English Composition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Maximum Free Electives	3
	Group 2 Major Requirements	15		Group 2 Major Requirements	15
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	54		Total Hours*	50

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSYC 101	General Psychology	3	PSYCH 1101	General Psychology	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
ENGL 102 or COMM 104 or ENGL 203	Advanced English Composition or Fundamentals of Speech or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Maximum Free Electives	3
	Group 2 Major Requirements	18		Group 2 Major Requirements	18
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	57		Total Hours*	53

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENGL 102 or COMM 104 or ENGL 203	Advanced English Composition or Fundamentals of Speech or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing
HIST 102 or HIST 106 or HIST 107	Western Civilization II or U.S. History I or U.S. History II	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History Since 1877
GEOL 115	Intro to Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology
CHEM 112	General Chemistry II	5	CHEM 1320,1510*	General Chemistry II (3) and Qual. Analysis* (2) <small>*Note: CHEM 1510 is not an S&T degree requirement. Course will transfer as elective credit.</small>
BIOL 101	General Biology	5	BIO SCI 1113	General Biology
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	25		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	64		Total Hours*
				57

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENGL 102 or COMM 104 or ENGL 203	Advanced English Composition or Fundamentals of Speech or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
GEOL 115	Intro to Geology	3	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
BIOL 101 or CHEM 112	General Biology or General Chemistry II	5	BIO SCI 1113 or CHEM 1320	General Biology or General Chemistry II <small>or any 3-hour course in chemistry, geochemistry, or biology</small>
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives
	Group 2 Major Requirements	23		Group 2 Major Requirements
	Group 1 Core Requirements	39		Group 1 Core Requirements
	Total Hours	62		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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
ENGL 102 or COMM 104 or ENGL 203	Advanced English Composition or Fundamentals of Speech or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGL 240 or ENGL 230 or ENGI 222 or	British Literature I or Survey of American Literature I or World Literature I (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I (or other literature elective)	3
	<i>See your advisor for course options.</i>	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	39		Group 1 Core Requirements	35
	Total Hours	54		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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 102 or COMM 104 or ENGL 203	Advanced English Composition or Fundamentals of Speech or Technical Report Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHEM 112	General Chemistry II	5	CHEM 1320,1510*	General Chemistry II (3) and Qual. Analysis* (2) <small>*Note: CHEM 1510 is not an S&T degree requirement. Course will transfer as elective credit.</small>	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	5		Maximum Free Electives	5
	Group 2 Major Requirements	25		Group 2 Major Requirements	23
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	64		Total Hours*	58

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 102 or ENGL 203	Advanced English Composition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
PHYS 250	Statics	3	CIV ENG 2200*	Engineering Mechanics-Statics	3
GEOL 115	Intro to Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	18		Group 2 Major Requirements	18
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	57		Total Hours*	53

*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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 102 or ENGL 203	Advanced English Composition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	6		Maximum Free Electives	6
	Group 2 Major Requirements	21		Group 2 Major Requirements	21
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	60		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>Crowder College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 102 or ENGL 203	Advanced English Composition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HIST 102 or HIST 106 or HIST 107 or PLSC 103	Western Civilization II or U.S. History I or U.S. History II or National, State, Local Government	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
GEOL 115	Intro to Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
PHYS 250	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	18		Group 2 Major Requirements	18
	Group 1 Core Requirements	39		Group 1 Core Requirements	35
	Total Hours	57		Total Hours*	53

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