

Ozarks Technical 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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>			
MTH 140	Analytic Geometry and Calculus I	5	MATH 1214	Calculus for Engineers I <small>Grade of C or better is required.</small>	4	
MTH 141	Analytic Geometry and Calculus II	5	MATH 1215	Calculus for Engineers II <small>Grade of C or better is required.</small>	4	
MTH 240	Analytic Geometry and Calculus III	3	MATH 2222	Calculus with Analytic Geometry III <small>Grade of C or better is required.</small>	4	
MTH 241	Differential Equations	3	MATH 3304	Elementary Differential Equations	3	
PHY 220	Physics for Engineers and Scientists I	5	PHYSICS 1135	Engineering Physics I <small>Grade of C or better is required.</small>	4	
PHY 222	Physics for Engineers and Scientists II	5	PHYSICS 2135	Engineering Physics II <small>Grade of C or better is required.</small>	4	
CHM 160, 161	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5	
EGR 100	Study and Careers in Engineering	1	FR ENG 1100	Study and Careers in Engineering and Computing	1	
ENG 101	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3	
ECO 275 or ECO 270	Principles of Economics II or Principles of Economics I	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3	
Total Hours			38	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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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 102 or COM 105 or ENG 150	Composition II or Public Speaking or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
CSC 140	C++ Programming I	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
EGR 201	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MTH 230	Linear Algebra	3	MATH 3108	Linear Algebra I <small>(Will satisfy the Advanced Math/Comp Sci elective requirement.)</small>	3
ENG 340 or ENG 350 or ENG 260	Survey of English Literature I or Survey of American Literature I or Survey of World Literature I <small>(or other literature elective)</small>	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 <small>(or other literature elective)</small>	3
	<i>See your advisor for course options.</i>	3		Ethics Elective	3
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	28		Group 2 Major Requirements	27
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	66		Total Hours*	62

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
HST 106* (or HST 120 or HST 130)	World History II* (or US History I: to 1865 or US History II: 1865-Present) <small>*HISTORY 106 is preferred; 120 or 130 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>	3
EGR 201	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENG 102 or COM 105 or HSS Elective	Composition II or 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 Public Speaking or Humanities/Social Science Elective: history, economics, political science, sociology, psychology, philosophy, fine art, literature, foreign language	3
PHY 110	Intro to 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	20		Group 2 Major Requirements	18
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	58		Total Hours*	53

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
HST 106 or	World History II or		HISTORY 1200 or	Modern Western Civilization or	
HST 120 or	US History I: to 1865 or	3	HISTORY 1300 or	American History to 1877 or	3
HST 130 or	US History II: 1865-Present or		HISTORY 1310 or	American History Since 1877 or	
PLS 101	American Government and Politics		POL SCI 1200	American Government	
EGR 201	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHM 242	Organic Chemistry I	5	CHEM 2210/2219*	Organic Chemistry I and Lab* <small>(CHEM 2210 will satisfy a technical elective requirement. CHEM 2219 will transfer as elective credit.)</small>	5
CHM 170	General Chemistry II	4	CHEM 1320	General Chemistry II	3
ENG 102 or	Composition II or		ENGLISH 1160 or	Writing and Research or	
COM 105 or	Public Speaking or		SPMS 1185 or	Public Speaking or	
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
	<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	25		Group 2 Major Requirements	23
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	63		Total Hours*	58

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or	Composition II or		ENGLISH 1160 or	Writing and Research or	
ENG 150	Technical Writing	3	ENGLISH 3560	Technical Writing	3
HST 106 or	World History II or		HISTORY 1200 or	Modern Western Civilization or	
HST 120 or	US History I: to 1865 or		HISTORY 1300 or	American History to 1877 or	
HST 130 or	US History II: 1865-Present or	3	HISTORY 1310 or	American History Since 1877 or	3
PLS 101	American Government and Politics		POL SCI 1200	American Government	
CHM 170	General Chemistry II	4	CHEM 1320	General Chemistry II	3
CHM 242	Organic Chemistry I	5	CHEM 2210,2219	Organic Chemistry I (4) and Lab (1)	4
CHM 243	Organic Chemistry II	5	CHEM 2220,2229*	Organic Chemistry II (4) and Lab* (1) <small>*Note: CHEM 2229 is not an S&T degree requirement; course will transfer as elective credit.</small>	4
CSC 210 or	Data Structures or		CS 1500 or	Computational Problem Solving (3) or	
CSC 140	C++ Programming	4	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
COM 105	Public Speaking	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	34		Group 2 Major Requirements	29
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	72		Total Hours*	64

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or ENG 150	Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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	4	CHEM 1320	General Chemistry II	3
CHM 242	Organic Chemistry I	5	CHEM 2210,2219	Organic Chemistry I (4) and Lab (1)	4
CHM 243	Organic Chemistry II	5	CHEM 2220,2229*	Organic Chemistry II (4) and Lab* (1) <small>*Note: CHEM 2229 is not an S&T degree requirement; course will transfer as elective credit.</small>	4
CSC 210 or CSC 140	Data Structures or C++ Programming	4	CS 1500 or CS 1971, 1981	Computational Problem Solving (3) or Intro to Programming Method and Lab (C++)	3
COM 105	Public Speaking	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	34		Group 2 Major Requirements	29
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	72		Total Hours*	64

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or COM 105 or ENG 150	Composition II or Public Speaking or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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
PHY 110	Intro to Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
EGR 201	Engineering 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	23		Group 2 Major Requirements	21
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	61		Total Hours*	56

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COM 105	Public Speaking	3	SPMS 1185	Public Speaking	3
ENG 102 or ENG 150	Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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 210 or CSC 140	Data Structures or C++ Programming	4	CS 1500 or CS 1971,1981	Computational Problem Solving or Intro to Programming Methodology and Lab	3
EGR 204 or CHM 242 or BIO 250	Statics and Dynamics (3) or Organic Chemistry I (5) or Genetics (3)	3-5	MECH 2340 or CHEM 2210 or BIO SCI 2223	Statics and Dynamics (3) or Organic Chemistry I (4) or General Genetics (3)	3-6
MTH 230	Linear Algebra	3	MATH 3108	Linear Algebra <small>(Will satisfy a required math elective.)</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		Maximum Free Electives	3
	Group 2 Major Requirements	25		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	63		Total Hours*	59

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
COM 105	Public Speaking	3	SPMS 1185	Public Speaking	3
ENG 102 or ENG 150	Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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
EGR 204 or CHM 242 or BIO 250	Statics and Dynamics (3) or Organic Chemistry I (5) or Genetics (3)	3-5	MECH 2340 or CHEM 2210 or BIO SCI 2223	Statics and Dynamics (3) or Organic Chemistry I (4) or General Genetics (3)	3-6
MTH 230	Linear Algebra	3	MATH 3108	Linear Algebra	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	25		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	63		Total Hours*	59

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
PSY 110	Intro to Psychology	3	PSYCH 1101	General Psychology	3
HST 106 or	World History II or		HISTORY 1200 or	Modern Western Civilization or	
HST 120 or	US History I: to 1865 or		HISTORY 1300 or	American History to 1877 or	
HST 130 or	US History II: 1865-Present or	3	HISTORY 1310 or	American History Since 1877 or	3
PLS 101	American Government and Politics		POL SCI 1200	American Government	
ENG 102 or	Composition II or		ENGLISH 1160 or	Writing and Research or	
COM 105 or	Public Speaking or	3	SPMS 1185 or	Principles of Speech or	3
ENG 150	Technical Writing		ENGLISH 3560	Technical Writing	
CSC 140	C++ Programming I	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
EGR 201	Engineering Statics	3	EE 2800	Circuit Analysis I	3
	<i>See your advisor for course options.</i>	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>See your advisor for course options.</i>	3		Humanities/Social Science Elective	3
	Group 2 Major Requirements	28		Maximum Free Electives	3
	Group 1 Core Requirements	38		Group 2 Major Requirements	30
	Total Hours	66		Group 1 Core Requirements	35
				Total Hours*	65

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or	Composition II or		ENGLISH 1160 or	Writing and Research or	
COM 105 or	Public Speaking or	3	SPMS 1185 or	Public Speaking or	3
ENG 150	Technical Writing		ENGLISH 3560	Technical Writing	
HST 106 or	World History II or		HISTORY 1300 or	American History to 1877 or	
HST 120 or	US History I: to 1865 or	3	HISTORY 1310 or	American History since 1877 or	3
HST 130	US History II: 1865-Present		HISTORY 1200	Modern Western Civilization	
PHY 110	Intro to Geology	4	GEOLOGY 1110	Physical and Environmental Geology	3
CHM 170	General Chemistry II	5	(GEO ENG 1150)		
BIO 100	Life Science	4	CHEM 1320	General Chemistry II	3
EGR 201	Engineering Statics	3	BIO SCI 1113	General Biology	4
	<i>See your advisor for course options.</i>	3	CIV ENG 2200	Engineering Mechanics-Statics	3
	<i>No free electives applied to the degree.</i>	0		Humanities/Social Science Elective	3
	Group 2 Major Requirements	32		Maximum Free Electives	0
	Group 1 Core Requirements	38		Group 2 Major Requirements	28
	Total Hours	70		Group 1 Core Requirements	35
				Total Hours*	63

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or COM 105 or ENG 150	Composition II or Public Speaking or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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
PHY 110	Intro to Geology	4	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
EGR 201	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
BIO 100 or CHM 170 or CHM 242	Life Science (4) or General Chemistry II (4) or Organic Chemistry (5)	4-5	BIO SCI 1113 or CHEM 1320 or CHEM 2210	General Biology (3) or General Chemistry II (3) or Organic Chemistry I (4) <small>or any 3-hour course in chemistry, geochemistry, or biology. Satisfies chemistry/geochemistry elective requirement.</small>	3-4
	<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	30		Group 2 Major Requirements	27
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	68		Total Hours*	62

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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 102 or COM 105 or ENG 150	Composition II or Public Speaking or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
CSC 140	C++ Programming I	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
EGR 201	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
MTH 230	Linear Algebra	3	MATH 3108	Linear Algebra I <small>(Will satisfy the Advanced Math/Comp Sci elective requirement.)</small>	3
ENG 340 or ENG 350 or ENG 260	Survey of English Literature I or Survey of American Literature I or of World Literature I <small>(or other literature elective)</small>	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 <small>(or other literature elective)</small>	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	28		Group 2 Major Requirements	27
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	66		Total Hours*	62

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or COM 105 or ENG 150	Composition II or Public Speaking or Technical Writing	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Public Speaking or Technical Writing	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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
EGR 201	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHM 170	General Chemistry II	3	CHEM 1320	General Chemistry II	3
CHM 242	Organic Chemistry I	5	CHEM 2210	Organic Chemistry I <i>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.</i>	4
	See your advisor for course options.	3		Humanities/Social Science Elective	3
	See your advisor for course options.	3		Humanities/Social Science Elective	3
	See your advisor for course options.	5		Maximum Free Electives	5
	Group 2 Major Requirements	32		Group 2 Major Requirements	30
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	70		Total Hours*	65

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or ENG 150	Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HST 106 or HST 120 or HST 130 or PLS 101	World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics	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
EGR 201	Engineering Statics	3	CIV ENG 2200*	Engineering Mechanics-Statics	3
PHY 110	Intro to Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
	See your advisor for course options.	3		Humanities/Social Science Elective	3
	See your advisor for course options.	3		Humanities/Social Science Elective	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	26		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	64		Total Hours*	59

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or	Composition II or		ENGLISH 1160 or	Writing and Research or	
ENG 150	Technical Writing	3	ENGLISH 3560	Technical Writing	3
HST 106 or	World History II or		HISTORY 1200 or	Modern Western Civilization or	
HST 120 or	US History I: to 1865 or		HISTORY 1300 or	American History to 1877 or	
HST 130 or	US History II: 1865-Present or	3	HISTORY 1310 or	American History Since 1877 or	3
PLS 101	American Government and Politics		POL SCI 1200	American Government	
MTH 230	Linear Algebra	3	MATH 3108	Linear Algebra I (Will satisfy the Advanced Math/Comp Sci elective requirement.)	3
EGR 201	Engineering 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	28		Group 2 Major Requirements	27
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	66		Total Hours*	62

*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>Ozarks Technical College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 102 or	Composition II or		ENGLISH 1160 or	Writing and Research or	
ENG 150	Technical Writing	3	ENGLISH 3560	Technical Writing	3
HST 106 or	World History II or		HISTORY 1200 or	Modern Western Civilization or	
HST 120 or	US History I: to 1865 or		HISTORY 1300 or	American History to 1877 or	
HST 130 or	US History II: 1865-Present or	3	HISTORY 1310 or	American History Since 1877 or	3
PLS 101	American Government and Politics		POL SCI 1200	American Government	
PHY 110	Intro to Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
EGR 201	Engineering 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	26		Group 2 Major Requirements	24
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	64		Total Hours*	59

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