

Effective as of Fall 2023

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

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.

Ozarks Technical Community College			Semester	Missouri S&T			
MTH 140	Analytic Geometry and Calculus I	5	MATH 1214	Calculus I	Grade of C or better is required.	4	
MTH 141	Analytic Geometry and Calculus II	5	MATH 1215	Calculus II	Grade of C or better is required.	4	
MTH 240	Analytic Geometry and Calculus III	3	MATH 2222	Calculus III	Grade of C or better is required.	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	Grade of C or better is required.	4	
PHY 222	Physics for Engineers and Scientists II	5	PHYSICS 2135	Engineering Physics II	Grade of C or better is required.	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	Principles of Economics II or	3	ECON 1100 or	Principles of Microeconomics or		3	
ECO 270	Principles of Economics I		ECON 1200	Principles of Macroeconomics			
Total Hours		38				Total Hours	35

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

Ozarks Technical Community College			Semester	Missouri S&T		
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			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		CIV ENG 2200	Engineering Mechanics-Statics	3
MTH 230	Linear Algebra	3		MATH 3108	Linear Algebra I (Will satisfy the Advanced Math/Comp Sci elective requirement.)	3
ENG 240 or	Survey of English Literature I or			ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
ENG 270 or	Survey of American Literature I or			ENGLISH 1221 or	American Literature: 1600 to 1865 or	
ENG 260	Survey of World Literature I (or other literature elective)	3		ENGLISH 1231	World Literature I (or other literature elective)	3
	Ethics Elective	3			Ethics Elective Engineering, business, bio, social or other ethics approved by advisor.	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	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 Aerospace Engineering degree.		

*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 Community 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*	World History II*		HISTORY 1200*	Modern Western Civilization*		
(or HST 120 or HST 130)	(or US History I: to 1865 or US History II: 1865-Present)	3	(or HISTORY 1300 or HISTORY 1310)	(or American History to 1877 or American History since 1877)	3	
	*HISTORY 106 is preferred; 120 or 130 will also be accepted			*HISTORY 1200 is preferred; 1300 or 1310 will also be accepted.		
EGR 201	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	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	
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	17		Group 2 Major Requirements	15	
	Group 1 Core Requirements	38		Group 1 Core Requirements	35	
	Total Hours	55		Total Hours*	50	
			*S&T advisor permission is required to transfer more than 69 credits toward the S&T Architectural Engineering degree.			

*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 Community 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* (CHEM 2210 will satisfy a technical elective requirement. CHEM 2219 will transfer as elective credit.)	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	3		HSS Elective	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	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 Community 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 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	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	
CHM 170	General Chemistry II	4		CHEM 1320	General Chemistry II	3
CHM 242	Organic Chemistry I	5		CHEM 2210, 2219*	Organic Chemistry I and Lab* *The lab is not required for the degree, will transfer as 1 of the 9 science elective credits (below) .	4
CHM 243	Organic Chemistry II	5		CHEM 2220, 2229*	Organic Chemistry II (4) and Lab* (1) *Note: CHEM 2229 is not an S&T degree requirement; course will transfer as elective credit.	4
CSC 160 or	Python Programming I (3) or			CS 1500 or	Computational Problem Solving (3) or	
CSC 210 or	Data Structures (4) or	3		CS 1971, 1981*	Programming Methodology and Lab (C++) (4) *	3
CSC 140*	C++ Programming* (4)				*Course will be substituted for CS 1500.	
COM 105	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	33			Group 2 Major Requirements	29
	Group 1 Core Requirements	38			Group 1 Core Requirements	35
	Total Hours	71			Total Hours*	64

*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

Ozarks Technical Community College			Semester	Missouri S&T	
DDT 200	Production Design Drafting	4	MECH ENG 1720	Engineering Design with Computer Appl	3
ENG 150	Technical Writing	3	ENGLISH 3560	Technical Writing	3
HST 106 or	World History II or	3	HISTORY 1200 or	Modern Western Civilization or	3
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		HISTORY 1310 or	American History since 1877 or	
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 and Lab*	4
				*The lab is not required for the degree, will transfer as 1 of the 9 science elective credits (below) .	
CHM 243	Organic Chemistry II	5	CHEM 2220, 2229*	Organic Chemistry II (4) and Lab* (1)	4
				*Note: CHEM 2229 is not an S&T degree requirement; course will transfer as elective credit.	
CSC 160 or	Python Programming I (3) or	3	CS 1500 or	Computational Problem Solving (3) or	3
CSC 210 or	Data Structures (4) or		CS 1971, 1981*	Programming Methodology and Lab (C++) (4) *	
CSC 140*	C++ Programming* (4)			*Course will be substituted for CS 1500.	
COM 105	Public Speaking	3	SP&MS 1185	Principles of Speech	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	33		Group 2 Major Requirements	29
	Group 1 Core Requirements	38		Group 1 Core Requirements	35
	Total Hours	71		Total Hours*	64
			*S&T advisor permission is required to transfer more than 70 credits toward the S&T Chemical/Biochemical Engineering degree.		

*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

Ozarks Technical Community College			Semester	Missouri S&T		
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 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	Physical and Environmental Geology	3
				(GEO ENG 1150)		
EGR 201	Engineering Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	No free electives applied to the degree.	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 Civil Engineering degree.		

*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 Community College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
COM 105	Public Speaking	3		SPMS 1185	Public Speaking	3
ENG 102 or	Composition II or	3		ENGLISH 1160 or	Writing and Research or	3
ENG 150	Technical Writing			ENGLISH 3560	Technical Writing	
HST 106 or	World History II or	3		HISTORY 1200 or	Modern Western Civilization or	3
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			HISTORY 1310 or	American History since 1877 or	
PLS 101	American Government and Politics			POL SCI 1200	American Government	
CSC 210 or	Data Structures (4) or	3		CS 1500	Computational Problem Solving	3
CSC 160	Python Programming I (3)					
EGR 204 or	Statics and Dynamics (3) or	3		MECH 2340 or	Statics and Dynamics (3) or	3
CHM 242 or	Organic Chemistry I (5) or			CHEM 2210 or	Organic Chemistry I (4) or	
BIO 250	Genetics (3)			BIO SCI 2223	General Genetics (3)	
MTH 230	Linear Algebra	3		MATH 3108	Linear Algebra	3
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	Maximum Free Electives	3			Maximum Free Electives	3
	Group 2 Major Requirements	24			Group 2 Major Requirements	24
	Group 1 Core Requirements	38			Group 1 Core Requirements	35
	Total Hours	62			Total Hours*	59
				*S&T advisor permission is required to transfer more than 68 credits toward the S&T Computer Engineering degree.		

*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

Ozarks Technical Community College			Semester	Missouri S&T		
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	Composition II or	3		ENGLISH 1160 or	Writing and Research or	3
ENG 150	Technical Writing			ENGLISH 3560	Technical Writing	
HST 106 or	World History II or	3		HISTORY 1200 or	Modern Western Civilization or	3
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			HISTORY 1310 or	American History since 1877 or	
PLS 101	American Government and Politics			POL SCI 1200	American Government	
CSC 210 or	Data Structures (4) or	3		CS 1500	Computational Problem Solving	3
CSC 160	Python Programming I (3)					
EGR 204 or	Statics and Dynamics (3) or	3		MECH ENG 2340 or	Statics and Dynamics or	3
CHM 242 or	Organic Chemistry I (5) or			CHEM 2210 or	Organic Chemistry I or	
BIO 250	Genetics (3)			BIO SCI 2223	General Genetics	
MTH 230	Linear Algebra	3		MATH 3108	Linear Algebra	3
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	Maximum Free Electives	3			Maximum Free Electives	3
	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 Electrical Engineering degree.		

*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 Community 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	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	
COM 105	Public Speaking	3		SPMS 1185	Principles of Speech	3
ENG 102 or	Composition II or			ENGLISH 1160 or	Writing and Research or	
ENG 150	Technical Writing	3		ENGLISH 3560	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
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	Maximum Free Electives	3			Maximum Free Electives	3
	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 Engineering Management degree.

Environmental Engineering Group 2 Major Requirements

<u>Ozarks Technical Community 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 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	US History II: 1865-Present			HISTORY 1310	American History since 1877	
PHY 110	Intro to Geology	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CHM 170	General Chemistry II	5		CHEM 1320	General Chemistry II	3
BIO 100	Life Science	4		BIO SCI 1113	General Biology	4
EGR 201	Engineering Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	29			Group 2 Major Requirements	25
	Group 1 Core Requirements	38			Group 1 Core Requirements	35
	Total Hours	67			Total Hours*	60

*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 Community 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 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		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	Life Science (4) or			BIO SCI 1113 or	General Biology or	
CHM 170 or	General Chemistry II (4) or			CHEM 1320 or	General Chemistry II or	
CHM 242	Organic Chemistry (5)	4		CHEM 2210	Organic Chemistry I	3
					or any 3-hour course in chemistry, geochemistry, or biology. Satisfies chemistry/geochemistry elective requirement.	
	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	27			Group 2 Major Requirements	24
	Group 1 Core Requirements	38			Group 1 Core Requirements	35
	Total Hours	65			Total Hours*	59

*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 Community 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			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		CIV ENG 2200	Engineering Mechanics-Statics	3
MTH 230	Linear Algebra	3		MATH 3108	Linear Algebra I (Will satisfy the Advanced Math/Computer Science elective requirement.)	3
ENG 240 or	Survey of English Literature I or			ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
ENG 270 or	Survey of American Literature I or			ENGLISH 1221 or	American Literature: 1600 to 1865 or	
ENG 260	Survey of World Literature I (or other literature elective)	3		ENGLISH 1231	World Literature I (or other 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	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 Mechanical Engineering degree.

Metallurgical Engineering Group 2 Major Requirements

<u>Ozarks Technical Community 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 Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.	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	32			Group 2 Major Requirements	27
	Group 1 Core Requirements	38			Group 1 Core Requirements	35
	Total Hours	70			Total Hours*	62

*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 Community 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
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	No free electives applied to the degree.	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 68 credits toward the S&T Mining Engineering degree.

Nuclear Engineering Group 2 Major Requirements

<u>Ozarks Technical Community 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	World History II or US History I: to 1865 or US History II: 1865-Present or	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or	Modern Western Civilization or American History to 1877 or American History since 1877 or	3
PLS 101	American Government and Politics			POL SCI 1200	American Government	
CSC 140	C++ Programming I	4		CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
MTH 230	Linear Algebra	3		MATH 3108	Linear Algebra	3
EGR 201	Engineering Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	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	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 Nuclear Engineering degree.

Petroleum Engineering Group 2 Major Requirements

<u>Ozarks Technical Community 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 3560 or ENGLISH 1160	Technical Writing (preferred) or Writing and Research	3
HST 106 or HST 120 or HST 130 or	World History II or US History I: to 1865 or US History II: 1865-Present or	3		HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or	Modern Western Civilization or American History to 1877 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
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	No free electives applied to the degree.	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 Petroleum Engineering degree.