

Houston Community College — 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.

<u>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
MATH 2413 and	Calculus I (4) and	8	MATH 1214 and	Calculus I and	8
MATH 2414	Calculus II (4)		MATH 1215	Calculus II Grade of C or better in both courses is required.	
MATH 2415	Calculus III	4	MATH 2222	Calculus III Grade of C or better is required.	4
PHYS 2325, 2125	University Physics I and Lab I	4	PHYSICS 1135	Engineering Physics I Grade of C or better is required.	4
PHYS 2326, 2126	University Physics II and Lab II	4	PHYSICS 2135	Engineering Physics II Grade of C or better is required.	4
CHEM 1311, 1111	General Chemistry I and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
ENGR 1201	Intro to Engineering	2	FR ENG 1100	Study and Careers in Engineering and Computing	1
ENGL 1301	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ECON 2302 or	Principles of Microeconomics or		ECON 1100 or	Principles of Microeconomics or	
ECON 2301	Principles of Macroeconomics	3	ECON 1200	Principles of Macroeconomics	3
Total Hours		32	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>Houston Community College</u>	<u>Semester</u>	<u>Missouri S&T</u>	
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	3
ENGL 1302 or SPCH 1311 or SPCH 1315	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	3
ENGL 2314		EE 2800	3
ENGR 2405	3	CIV ENG 2200	3
ENGR 2301	3	CIV ENG 2210	3
ENGR 2332	3	MATH 3108	3
MATH 2318	3		3
	3		3
	3		3
	0		0
	24		24
	32		32
Total Hours	56	Total Hours*	56

*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>Houston Community College</u>	<u>Semester</u>	<u>Missouri S&T</u>	
HISTORY 2312 or HISTORY 1301 or HISTORY 1302	3	HISTORY 1200* (or HISTORY 1300 or HISTORY 1310)	3
ENGR 2301	3	CIV ENG 2200	3
ENGR 2302	3	MECH ENG 2350	2
ENGR 2332	3	CIV ENG 2210	3
HSS Elective	3	HSS Elective	3
	0		0
	15		14
	32		32
Total Hours	47	Total Hours*	46

*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

Ceramic Engineering Group 2 Major Requirements						
<u>Houston Community College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3		HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
ENGR 2301	Engineering Mechanics - Statics	3		CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2332	Mechanics of Materials	3		CIV ENG 2210	Mechanics of Materials	3
CHEM 2423	Organic Chemistry I	4		CHEM 2210	Organic Chemistry I <small>(Will satisfy the advanced chemistry elective requirement.)</small>	4
CHEM 1412	General Chemistry II	4		CHEM 1320	General Chemistry II	3
ENGL 1302 or SPCH 1311 or SPCH 1315 or HSS Elective	Composition II or Intro to Speech Communication 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 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	23			Group 2 Major Requirements	22
	Group 1 Core Requirements	32			Group 1 Core Requirements	32
	Total Hours	55			Total Hours*	54

*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

Chemical Engineering Group 2 Major Requirements						
<u>Houston Community College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
ENGLISH 2314	Technical Writing I	3		ENGLISH 3560	Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3		HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
CHEM 1412	General Chemistry II	4		CHEM 1320	General Chemistry II	3
CHEM 2423	Organic Chemistry I	4		CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*The lab is not required for the degree, will partially satisfy the 9-credit-hour science elective requirement.</small>	4
CHEM 2425	Organic Chemistry II	4		CHEM 2220	Organic Chemistry II <small>Will partially satisfy the 9-credit-hour science elective requirement.</small>	4
COSC 1436 or COSC 1437	Programming Fundamentals I or Programming Fundamentals II	4		CS 1500	Computational Problem Solving	3
SPCH 1311 or SPPCH 1315	Intro to Speech Communication or Public Speaking	3		SPMS 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	28			Group 2 Major Requirements	26
	Group 1 Core Requirements	32			Group 1 Core Requirements	32
	Total Hours	60			Total Hours*	58

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

Chemical Engineering - Biochemical Engineering Emphasis

<u>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGLISH 2314	Technical Writing I	3	ENGLISH 3560	Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
CHEM 1412	General Chemistry II	4	CHEM 1320	General Chemistry II	3
CHEM 2423	Organic Chemistry I	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*The lab is not required for the degree, will partially satisfy the 9-credit-hour science elective requirement.</small>	4
CHEM 2425	Organic Chemistry II	4	CHEM 2220	Organic Chemistry II <small>Will partially satisfy the 9-credit-hour science elective requirement.</small>	4
COSC 1436 or COSC 1437	Programming Fundamentals I or Programming Fundamentals II	4	CS 1500	Computational Problem Solving	3
SPCH 1311 or SPPCH 1315	Intro to Speech Communication or Public Speaking	3	SPMS 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	28		Group 2 Major Requirements	26
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	60		Total Hours*	58

*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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 1302 or SPCH 1311 or SPCH 1315	Composition II or Intro to Speech Communication or Public Speaking or Technical Writing I	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2302	Engineering Mechanics - Dynamics	3	MECH ENG 2350	Engineering Mechanics - Dynamics	2
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	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	18		Group 2 Major Requirements	17
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	50		Total Hours*	49

*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

Houston Community College		Semester	Missouri S&T		
SPCH 1311 or SPPCH 1315	Intro to Speech Communication or Public Speaking	3	SPMS 1185	Principles of Speech	3
ENGL 1302 or ENGL 2314	Composition II or Technical Writing I	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
COSC 1436 or COSC 1437	Programming Fundamentals I or Programming Fundamentals II	4	CS 1500	Computational Problem Solving	3
ENGR 2301 and ENGR 2302 or CHEM 2423	Engineering Mechanics - Statics (3) and Engineering Mechanics - Dynamics (3) or Organic Chemistry I (4)	3	CIV ENG 2200 or MECH ENG 2350 or CHEM 2210	Engineering Mechanics-Statics (3) or Engineering Mechanics-Dynamics (2) or Organic Chemistry I (4)	3
ENGR 2405	Electrical Circuits I	3	EE 2100**	Circuits I **A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 2100.	3
MATH 2318	Linear Algebra	3	MATH 3108	Linear Algebra I (Will satisfy the Advanced Math/Comp Sci elective requirement.)	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	32		Group 1 Core Requirements	32
	Total Hours	60		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

Houston Community College		Semester	Missouri S&T		
SPCH 1311 or SPPCH 1315	Intro to Speech Communication or Public Speaking	3	SPMS 1185	Principles of Speech	3
ENGL 1302 or ENGL 2314	Composition II or Technical Writing I	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
COSC 1436 or COSC 1437	Programming Fundamentals I or Programming Fundamentals II	4	CS 1500	Computational Problem Solving	3
ENGR 2301 and ENGR 2302 (BOTH of the courses above or ONE of the courses below.) OR CHEM 2423	Engineering Mechanics - Statics (3) and Engineering Mechanics - Dynamics (3) (Both courses above combined or any one of the following courses will satisfy a required engineering science elective.) OR Organic Chemistry I (4)	3	CIV ENG 2200 and MECH ENG 2350 (BOTH of the courses above or ONE of the courses below.) OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2) (Both courses above combined or any one of the following courses will satisfy a required engineering science elective.) OR Organic Chemistry I (3)	3
ENGR 2405	Electrical Circuits I	3	EE 2100**	Circuits I **A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 2100.	3
MATH 2318	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	32		Group 1 Core Requirements	32
	Total Hours	60		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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSYC 2301	General Psychology	3	PSYCH 1101	General Psychology	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
SPCH 1311 or SPPCH 1315	Intro to Speech Communication or Public Speaking	3	SPMS 1185	Principles of Speech	3
ENGL 1302 or ENGL 2314	Composition II or Technical Writing I	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
ENGR 2405	Electrical Circuits I	3	EE 2800	Circuit Analysis I	3
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2302	Engineering Mechanics - Dynamics	3	MECH ENG 2350	Engineering Mechanics - Dynamics	2
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	30		Group 2 Major Requirements	29
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	62		Total Hours*	61

*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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 1302 or SPCH 1311 or SPCH 1315 ENGL 2314	Composition II or Intro to Speech Communication or Public Speaking or Technical Writing I	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History since 1877 or Modern Western Civilization	3
CHEM 1412	General Chemistry II	4	CHEM 1320	General Chemistry II	3
BIOL 1306, 1106	General Biology Lecture and Lab	4	BIO SCI 1113	General Biology	4
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2302	Engineering Mechanics - Dynamics	3	MECH ENG 2350	Engineering Mechanics - Dynamics	2
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	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	26		Group 2 Major Requirements	24
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	58		Total Hours*	56

*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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGLISH 2314	Technical Writing I	3	ENGLISH 3560	Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2302	Engineering Mechanics - Dynamics	3	MECH ENG 2350	Engineering Mechanics - Dynamics	2
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
BIOL 1306, 1106 or CHEM 1412 or CHEM 2423	General Biology Lecture and Lab or General Chemistry II (4) or Organic Chemistry I (4)	4	BIO SCI 1113 or CHEM 1320 or CHEM 2210	General Biology or General Chemistry II or Organic Chemistry I <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	25		Group 2 Major Requirements	23
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	57		Total Hours*	55

*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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
ENGL 1302 or SPCH 1311 or SPCH 1315	Composition II or Intro to Speech Communication or Public Speaking or Technical Writing I	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
ENGR 2405	Electrical Circuits I	3	EE 2800	Circuit Analysis I	3
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MATH 2318	Linear Algebra	3	MATH 3108	Linear Algebra	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	24		Group 2 Major Requirements	24
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	56		Total Hours*	56

*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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 1302 or SPCH 1311 or SPCH 1315 ENGL 2314	Composition II or Intro to Speech Communication or Public Speaking or Technical Writing I	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
CHEM 1412	General Chemistry II	4	CHEM 1320	General Chemistry II	3
CHEM 2423	Organic Chemistry II	4	CHEM 2210	Organic Chemistry I <i>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.</i>	4
	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	31		Group 2 Major Requirements	28
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	63		Total Hours*	60

*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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 1302 or SPCH 1311 or SPCH 1315 ENGL 2311	Composition II or Intro to Speech Communication or Public Speaking or Technical & Business Writing	3	ENGLISH 1160 or ENGLISH 3560 or ENGLISH 1600	Writing and Research or Technical Writing or Intro to Technical Communications	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200*	Engineering Mechanics - Statics	3
ENGR 2302	Engineering Mechanics - Dynamics	3	MECH ENG 2350	Engineering Mechanics - Dynamics	2
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	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	21		Group 2 Major Requirements	20
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	53		Total Hours*	52

*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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 1302 or SPCH 1311 or SPCH 1315 ENGL 2314	Composition II or Intro to Speech Communication or Public Speaking or Technical Writing I	3	ENGLISH 1160 or SPMS 1185 or ENGLISH 3560	Writing and Research or Principles of Speech or Technical Writing	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
MATH 2318	Linear Algebra	3	MATH 3108	Linear Algebra	3
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
ENGR 2405	Electrical Circuits I	3	EE 2800	Circuit Analysis I	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	30		Group 2 Major Requirements	30
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	62		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>Houston Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 2314 or ENGL 1302 or SPCH 1311 or SPCH 1315	Technical Writing I (preferred) or Composition II or Intro to Speech Communication or Public Speaking	3	ENGLISH 3560 or ENGLISH 1160 or SPMS 1185	Technical Writing (preferred) or Writing and Research or Principles of Speech	3
HISTORY 1301 or HISTORY 1302 or HISTORY 2312 or GOVT 2305	United States History I (US History to 1877) or United States History II (US After 1877) or Western Civilization II or American Government	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or POL SCI 1200	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
ENGR 2301	Engineering Mechanics - Statics	3	CIV ENG 2200	Engineering Mechanics - Statics	3
ENGR 2302	Engineering Mechanics - Dynamics	3	MECH ENG 2350	Engineering Mechanics - Dynamics	2
ENGR 2332	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	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	21		Group 2 Major Requirements	20
	Group 1 Core Requirements	32		Group 1 Core Requirements	32
	Total Hours	53		Total Hours*	52

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