

Morehouse College — Missouri S&T

General Engineering Transfer Guide

Effective as of Fall 2017

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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
MTH 161 and MTH 162	Calculus I and Calculus II	8	MATH 1214 and MATH 1215	Calculus for Engineers I and Calculus for Engineers II <small>Grade of C or better is required.</small>	4
MTH 263	Calculus III	4	MATH 2222	Calculus with Analytic Geometry III <small>Grade of C or better is required.</small>	4
MTH 321	Intro to Ordinary Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHY 154	Mechanics Lec	4	PHYSICS 1135	Engineering Physics I <small>Grade of C or better is required.</small>	4
PHY 253	Electricity and Magnetism	4	PHYSICS 2135	Engineering Physics II <small>Grade of C or better is required.</small>	4
CHE 111, 111L	Elementary Inorganic Chemistry and Lab	4	CHEM 1310, 1319	General Chemistry I and Lab	5
EGR 101 and EGR 201	Freshman Engineering Design and Engineering Graphics	3 3	FR ENG 1100 and MECH ENG 1720	Study and Careers in Engineering and Engineering Design with Computer Appl	1
ENG 101 or ENG 103	Composition (3) or Composition (3)	3	ENGLISH 1120	Exposition and Argumentation	3
ECO 202 or ECO 201	Principles of Microeconomics or of Macroeconomics	Principles 3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours		29	Total Hours		31

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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History: Topical Approach or National	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
PSC 251	Government of the United States		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech
ENG 102 or ENG 153	Composition or General Speech	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)
CSC 110	Computer Programming I	3	CIV ENG 2200	Engineering Mechanics-Statics
EGR 205	Engineering Statics	3	CIV ENG 2210	Mechanics of Materials
EGR 206	Mechanics of Materials	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics (Will satisfy the Advanced Math/Comp Sci elective requirement.)
MTH 271 or MTH 341	Intro to Linear Algebra or Probability and Statistics	3		Literature Elective
	<i>See your advisor for course options.</i>			Ethics Elective
	<i>See your advisor for course options.</i>			Maximum Free Electives
	<i>No free electives applied to the degree.</i>			0
	Group 2 Major Requirements	18		Group 2 Major Requirements
	Group 1 Core Requirements	29		Group 1 Core Requirements
	Total Hours	47		Total Hours*
				55

*S&T advisor permission is required to transfer more than 60 credits toward the S&T Aerospace Engineering degree.

Architectural Engineering Group 2 Major Requirements

<u>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 112 or HIS 215 or HIS 216	World History: Topical Approach or of the United States to 1876 or the United States Since 1876	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>
EGR 205	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
EGR 308	Engineering Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics
EGR 206	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
			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
ENG 102 or ENG 153	Composition or General Speech	3		Principles of Biology or Intro to Modern Physics (or other chemistry, geology, biology, physics, or astronomy course that is not otherwise required for the degree) Applies to
BIO 111 or PHY 123	General Biology or Physics III	3	BIO SCI 1213 PHYSICS 2305	
	<i>No free electives applied to the degree.</i>			Maximum Free Electives
	Group 2 Major Requirements	21		Group 2 Major Requirements
	Group 1 Core Requirements	29		Group 1 Core Requirements
	Total Hours	50		Total Hours*
				52

*S&T advisor permission is required to transfer more than 60 credits toward the S&T Architectural Engineering degree.

Ceramic Engineering Group 2 Major Requirements

<u>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 215 or HIS 216 or HIS 112 PSC 251	History of the United States to 1876 or History of the United States Since 1876 or World History: Topical Approach or National Government of the United States	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
EGR 205	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics
EGR 206	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials
CHE 231	Elementary Organic Chemistry and Lab	4	CHEM 2210/2219	Organic Chemistry I and Lab (Not a specific requirement. Will satisfy technical elective requirement.)
CHE 112, 112L	Elementary Inorganic Chemistry and Lab	4	CHEM 1320	General Chemistry II
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics
ENG 102 or ENG 153	Composition or General Speech	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 Humanities/Social Science Elective
<i>See your advisor for course options.</i>				Maximum Free Electives
<i>No free electives applied to the degree.</i>				
Group 2 Major Requirements		23	Group 2 Major Requirements	
Group 1 Core Requirements		29	Group 1 Core Requirements	
Total Hours		52	Total Hours*	
			57	

*S&T advisor permission is required to transfer more than 66 credits toward the S&T Ceramic Engineering degree.

Chemical Engineering Group 2 Major Requirements

<u>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENG 102	Composition	3	ENGLISH 1160	Writing and Research
HIS 215 or HIS 216 or HIS 112 PSC 251	History of the United States to 1876 or History of the United States Since 1876 or World History: Topical Approach or National Government of the United States	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
CHE 112, 112L	Elementary Inorganic Chemistry and Lab	4	CHEM 1320	General Chemistry II
CHE 231	Elementary Organic Chemistry and Lab	4	CHEM 2210	Organic Chemistry I
CHE 232	Elementary Organic Chemistry and Lab	4	CHEM 2220	Organic Chemistry II (Will satisfy science elective requirement.)
CSC 110	Computer Programming I	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
<i>See your advisor for course options.</i>				Humanities/Social Science Elective
<i>See your advisor for course options.</i>				Humanities/Social Science Elective
<i>No free electives applied to the degree.</i>				Maximum Free Electives
Group 2 Major Requirements		24	Group 2 Major Requirements	
Group 1 Core Requirements		29	Group 1 Core Requirements	
Total Hours		53	Total Hours*	
			60	

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENG 102	Composition	3	ENGLISH 1160	Writing and Research
HIS 215 or HIS 216 or HIS 112 PSC 251	History of the United States to 1876 or History of the United States Since 1876 or World History: Topical Approach or National Government of the United States	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
CHE 112, 112L	Elementary Inorganic Chemistry and Lab	4	CHEM 1320	General Chemistry II
CHE 231	Elementary Organic Chemistry and Lab	4	CHEM 2210	Organic Chemistry I
CHE 232	Elementary Organic Chemistry and Lab	4	CHEM 2220	Organic Chemistry II (Will satisfy science elective requirement.)
CSC 110	Computer Programming I	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)
<i>See your advisor for course options.</i>				Humanities/Social Science Elective
<i>See your advisor for course options.</i>				Humanities/Social Science Elective
<i>No free electives applied to the degree.</i>				Maximum Free Electives
Group 2 Major Requirements		24	Group 2 Major Requirements	
Group 1 Core Requirements		29	Group 1 Core Requirements	
Total Hours		53	Total Hours*	
			60	

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 102 or ENG 153	Composition or General Speech	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	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
PSC 251	Government of the United States		CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 205	Engineering Statics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 308	Engineering Dynamics	3	CIV ENG 2210	Mechanics of Materials	3
EGR 206	Mechanics of Materials	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)	3
MTH 341	Probability and Statistics	3		Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Maximum Free Electives	0
<i>No free electives applied to the degree.</i>				Group 2 Major Requirements	21
	Group 2 Major Requirements	18		Group 1 Core Requirements	31
	Group 1 Core Requirements	29		Total Hours*	52
	Total Hours	47			

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

Computer Engineering Group 2 Major Requirements

<u>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 153	General Speech	3	SPMS 1185	Public Speaking	3
ENG 102	Composition	3	ENGLISH 1160	Writing and Research	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	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
PSC 251	Government of the United States		CS 1575	Data Structures	3
CIS 122 or CSC 160	Computer Science II (4) or Computer Programming II (3)	4	CIV ENG 2200 and MECH ENG 2350	Engineering Mechanics-Statics and Engineering Mechanics-Dynamics (Both courses combined will satisfy a required engineering science elective.)	6
EGR 205 and EGR 308	Engineering Statics and Engineering Dynamics	3	MATH 3108	Linear Algebra (Will satisfy a required math elective.)	3
MTH 271	Intro to Linear Algebra	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3117.)	3
MTH 341	Probability and Statistics	3		Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Maximum Free Electives	3
<i>See your advisor for course options.</i>				Group 2 Major Requirements	30
	Group 2 Major Requirements	22		Group 1 Core Requirements	31
	Group 1 Core Requirements	29		Total Hours*	61
	Total Hours	51			

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 153	General Speech	3	SPMS 1185	Public Speaking	3
ENG 102	Composition	3	ENGLISH 1160	Writing and Research	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	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
PSC 251	Government of the United States		CIV ENG 2200 and MECH ENG 2350	Engineering Mechanics-Statics and Engineering Mechanics-Dynamics (Both courses combined will satisfy a required engineering science elective.)	6
EGR 205 and EGR 308	Engineering Statics and Engineering Dynamics	3	MATH 3108	Linear Algebra	3
MTH 271	Intro to Linear Algebra	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3117.)	3
MTH 341	Probability and Statistics	3		Humanities/Social Science Elective	3
<i>See your advisor for course options.</i>				Maximum Free Electives	3
<i>See your advisor for course options.</i>				Group 2 Major Requirements	27
	Group 2 Major Requirements	18		Group 1 Core Requirements	31
	Group 1 Core Requirements	29		Total Hours*	58
	Total Hours	47			

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
PSY 101	Intro to Psychology	3	PSYCH 1101	General Psychology	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or	American History to 1877 or American History since 1877 or Modern Western Civilization or	3
PSC 251	Government of the United States		POL SCI 1200	American Government	
ENG 102 or ENG 153	Composition or General Speech	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
EGR 205	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 308	Engineering Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 206	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
<i>See your advisor for course options.</i>			Humanities/Social Science Elective		3
<i>See your advisor for course options.</i>			Maximum Free Electives		3
Group 2 Major Requirements		21	Group 2 Major Requirements		27
Group 1 Core Requirements		29	Group 1 Core Requirements		31
Total Hours		50	Total Hours*		58

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 102 or ENG 153	Composition or General Speech	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 (preferred) or American History since 1877 (preferred) or Modern Western Civilization	3
CHE 112, 112L	Elementary Inorganic Chemistry and Lab	4	CHEM 1320	General Chemistry II	3
EGR 205	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 308	Engineering Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 206	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics (Will be substituted for STAT 3113.)	3
<i>See your advisor for course options.</i>			Humanities/Social Science Elective		3
<i>No free electives applied to the degree.</i>			Maximum Free Electives		0
Group 2 Major Requirements		22	Group 2 Major Requirements		24
Group 1 Core Requirements		29	Group 1 Core Requirements		31
Total Hours		51	Total Hours*		55

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

Geological Engineering Group 2 Major Requirements

<u>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 102 or ENG 153	Composition or General Speech	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or	American History to 1877 or American History since 1877 or Modern Western Civilization or	3
PSC 251	Government of the United States		POL SCI 1200	American Government	
EGR 205	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 308	Engineering Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
CHE 112, 112L or CHE 231	Elementary Inorganic Chemistry and Lab or Organic Chemistry I	4	CHEM 1320 or CHEM 2210	General Chemistry II or Organic Chemistry I	
<i>See your advisor for course options.</i>			Humanities/Social Science Elective		3
<i>See your advisor for course options.</i>			Humanities/Social Science Elective		3
<i>No free electives applied to the degree.</i>			Maximum Free Electives		0
Group 2 Major Requirements		16	Group 2 Major Requirements		18
Group 1 Core Requirements		29	Group 1 Core Requirements		31
Total Hours		45	Total Hours*		49

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	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
PSC 251 ENG 102 or ENG 153	Government of the United States Composition or General Speech	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech
				3
CSC 110	Computer Programming I	3	CS 1971, 1981 EE 2800	Intro to Programming Method and Lab (C++) Circuit Analysis I
				3
EGR 205 EGR 206	Engineering Statics Mechanics of Materials	3 3	CIV ENG 2200 CIV ENG 2210	Engineering Mechanics-Statics Mechanics of Materials
				3 3
MTH 271 or MTH 341	Intro to Linear Algebra or Probability and Statistics	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics (Will satisfy the Advanced Math/Comp Sci elective requirement.)
				3
<i>See your advisor for course options.</i>				Literature Elective Humanities/Social Science Elective
<i>No free electives applied to the degree.</i>				3 3
		9 29		Group 2 Major Requirements Group 1 Core Requirements
Total Hours		38		0 18 31 49
				Total Hours*

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
ENG 102 or ENG 153	Composition or General Speech	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	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
PSC 251 EGR 205 MTH 341 EGR 206	Government of the United States Engineering Statics Probability and Statistics Mechanics of Materials	3 3 3 3	CIV ENG 2200 STAT 3115 CIV ENG 2210	Engineering Mechanics-Statics Engineering Statistics Mechanics of Materials
				3 3 3 3
CHE 112, 112L CHE 231	Elementary Inorganic Chemistry and Lab Elementary Organic Chemistry and Lab	4 4	CHEM 1320 CHEM 2210	General Chemistry II Organic Chemistry I <i>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement</i>
				3 3 3 3
<i>See your advisor for course options.</i>				Humanities/Social Science Elective Humanities/Social Science Elective
<i>See your advisor for course options.</i>				3 3
<i>See your advisor for course options.</i>				Maximum Free Electives
		23 29		5 Group 2 Major Requirements Group 1 Core Requirements
Total Hours		52		32 31 63
				Total Hours*

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 102	Composition	3	ENGLISH 1160	Writing and Research	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or	American History to 1877 or American History since 1877 or Modern Western Civilization or	3
PSC 251	Government of the United States		POL SCI 1200	American Government	
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
EGR 205	Engineering Statics	3	CIV ENG 2200*	Engineering Mechanics-Statics	3
EGR 308	Engineering Dynamics	3	MECH ENG 2350*	Engineering Mechanics-Dynamics	3
EGR 206	Mechanics of Materials	3	CIV ENG 2210*	Mechanics of Materials	3
			*The combination of CIV ENG 2200 and MECH ENG 2350 will be substituted for MECH ENG 2340. The Combination of CIV ENG 22000 and 2210 and MECH ENG 2350 will be substituted for MI ENG 3812		
			Humanities/Social Science Elective		3
			Humanities/Social Science Elective		3
			Maximum Free Electives		0
Group 2 Major Requirements		18	Group 2 Major Requirements		24
Group 1 Core Requirements		29	Group 1 Core Requirements		31
Total Hours		47	Total Hours*		55

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 102	Composition	3	ENGLISH 1160	Writing and Research	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or	American History to 1877 or American History since 1877 or Modern Western Civilization or	3
PSC 251	Government of the United States		POL SCI 1200	American Government	
			3		
CSC 110	Computer Programming I	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	4
EGR 205	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 206	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
			Humanities/Social Science Elective		3
			Humanities/Social Science Elective		3
			Maximum Free Electives		6
Group 2 Major Requirements		18	Group 2 Major Requirements		27
Group 1 Core Requirements		29	Group 1 Core Requirements		31
Total Hours		47	Total Hours*		58

*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>Morehouse College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 102	Composition	3	ENGLISH 1160	Writing and Research	3
HIS 215 or HIS 216 or HIS 112	History of the United States to 1876 or History of the United States Since 1876 or World History:Topical Approach or National	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200 or	American History to 1877 or American History since 1877 or Modern Western Civilization or	3
PSC 251	Government of the United States		POL SCI 1200	American Government	
EGR 205	Engineering Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
EGR 308	Engineering Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	3
EGR 206	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MTH 341	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
			Humanities/Social Science Elective		3
			Humanities/Social Science Elective		3
			Maximum Free Electives		0
Group 2 Major Requirements		12	Group 2 Major Requirements		18
Group 1 Core Requirements		29	Group 1 Core Requirements		31
Total Hours		41	Total Hours*		49

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