

Ouachita Baptist University — Missouri S&T

General Engineering

Transfer Guide Effective as of Fall 2025

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

Students are not required to complete all courses on this guide before transferring to Missouri S&T.

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>Ouachita Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>	
MATH 2014	Calculus I	4	MATH 1214	Calculus I Grade of C or better is required.
MATH 2024	Calculus II	4	MATH 1215	Calculus II Grade of C or better is required.
MATH 3034	Calculus III	4	MATH 2222	Calculus III Grade of C or better is required.
MATH 3043	Differential Equations	3	MATH 3304	Elementary Differential Equations
PHYS 2054 and PHYS 2064 and PHYS 2073	University Physics I and University Physics II and University Physics III	11	PHYSICS 1135 and PHYS 2135	Engineering Physics I and Engineering Physics II <small>The combination of OBU PHYS 2054, 2064, and 2073 is equivalent to the combination of S&T PHYSICS 1135 and 2135. All courses must be taken to receive equivalent credit. Grade of C or better in all courses is required.</small>
ENGR 1123	Intro to Physics and Engineering	3	FR ENG 1100	Study and Careers in Engineering and Computing
CORE 1043	Composition I	3	ENGLISH 1120	Exposition and Argumentation
Total Hours		32	Total Hours	
			27	

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
Biomedical Engineering/Biomanufacturing or Biomaterials
Ceramic Engineering
Chemical Engineering and 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.

Aerospace Engineering Group 2 Major Requirements

<u>Quachita Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing	3	SPMS 1185 or ENGLISH 3560	Technical Writing or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab <small>*CHEM 1310 will be substituted for CHEM 1305.</small>	5
PHYS 3124	Electrical Circuits	4	ELEC ENG 2800	Electrical Circuits	3
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 3203	Strength of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MATH 3093 or MATH 3063	Linear Algebra or Probability and Statistics	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics or <small>Satisfies the Advanced Math/Comp Sci elective requirement.</small>	3
Ethics	Ethics Elective <small>Any engineering, business, bio, social ethics approved by advisor</small>	3	Ethics	Ethics Elective <small>Any engineering, business, bio, social ethics approved by advisor</small>	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music <small>Any literature with prerequisite of no more than English Composition I. *Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation <small>Any literature with prerequisite of no more than ENGLISH 1120. *Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
		<i>No free electives applied to the degree.</i>		Maximum Free Electives	0
		Group 2 Major Requirements		Group 2 Major Requirements	38
		Group 1 Core Requirements		Group 1 Core Requirements	27
		Total Hours	70	Total Hours*	65
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.</small>					

Architectural Engineering Group 2 Major Requirements

<u>Quachita Baptist University</u>	<u>Semester</u>	<u>Missouri S&T</u>
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing 3	SPMS 1185 or ENGLISH 3560 3
CHEM 1004	General Chemistry I 4	CHEM 1310*, 1319 5
PHYS 2123	Statics 3	CIV ENG 2200 3
PHYS 3203	Strength of Materials 3	CIV ENG 2210 3
MATH 3063	Probability and Statistics 3	STAT 3115 3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 9 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 3 hours Behavioral and Social Sciences. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.		
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.		
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. *Satisfies the State of Missouri government requirement. 6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. *Satisfies the State of Missouri government requirement. 6
Behavioral and Social Sciences Select 3 hours		
PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement. 3	PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement. 3
<i>No free electives applied to the degree.</i>		
	0	
	25	
	32	
	57	
		0
		26
		27
		53
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Architectural Engineering degree.		

Biomedical Engineering-Biomanufacturing Group 2 Major Requirements

Biomedical Engineering-Biomanufacturing Group 2 Major Requirements					
<u>Quachita Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 1003	Fundamentals of Public Speaking	3	SP&MS 1185	Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 1014	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	3
CHEM 3004	Organic Chemistry I	4	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHEM 3104 or BIOL 1014 or BOL 4054	Organic Chemistry II or General Biology I or Genetics	4	CHEM 2220, 2229 or BIO SCI 1213*, 1219 or BIO SCI 2223	Organic Chemistry II and Lab or Principles of Biology* or General Genetics <small>Applies to degree as Track Elective. *BIO SCI 1213 will be substituted for 1113.</small>	4
BIOL 2014	Human Anatomy and Physiology I	4	BIO SCI 3333	Anatomy and Physiology I	3
CSCI 1044 or CSCI 1053 or CSCI 2103	Programming I (4) or Programming II (4) or Data Structures (3)	3	COMP SCI 1500	Computational Problem Solving	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 12 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 3 hours Behavioral and Social Sciences. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 3 hours.					
GEOG 1003 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3	HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3
Humanities, Arts, and Social Sciences ENGLISH 3560 required.					
ENGL 3013	Technical and Professional Writing	3	ENGLISH 3560	Technical Writing	3
<i>No free electives applied to the degree.</i>					
	Group 2 Major Requirements	38		Maximum Free Electives	0
	Group 1 Core Requirements	32		Group 2 Major Requirements	37
	Total Hours	70		Group 1 Core Requirements	27
				Total Hours*	64
<small>*S&T advisor permission is required to transfer more than 69 credit hours toward the degree.</small>					

Biomedical Engineering-Biomaterials Group 2 Major Requirements

Ouachita Baptist University		Semester	Missouri S&T		
COMM 1003	Fundamentals of Public Speaking	3	SP&MS 1185	Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 1014	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	3
CHEM 3004	Organic Chemistry I	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).</small>	4
CHEM 3104	Organic Chemistry II	4	CHEM 2220, 2229*	Organic Chemistry II and Lab* <small>CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).</small>	4
BIOL 1014	General Biology I	4	BIO SCI 1213*, 1219*	Principles of Biology* and Lab* <small>*Applies to degree as Track Elective (Non-engineering). BIO SCI 1213 will be substituted for BIO SCI 1113.</small>	4
BIOL 2014	Human Anatomy and Physiology I	4	BIO SCI 3333	Anatomy and Physiology I	3
CSCI 1044 or CSCI 1053 or CSCI 2103	Programming I (4) or Programming II (4) or Data Structures (3)	3	COMP SCI 1500	Computational Problem Solving	3
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 3124	Electrical Circuits	4	ELEC ENG 2100*	Circuits I* (3) and Circuit Analysis Lab (1) <small>*A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for ELEC ENG 2100. Applies to the degree as a Track Elective (Engineering).</small>	4
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 12 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 3 hours Behavioral and Social Sciences. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 3 hours.					
GEOG 1003 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3	HISTORY 2110 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3
Humanities, Arts, and Social Sciences ENGLISH 3560 required.					
ENGL 3013	Technical and Professional Writing	3	ENGLISH 3560	Technical Writing	3
<i>No free electives applied to the degree.</i>					
	Group 2 Major Requirements	49		Maximum Free Electives	0
	Group 1 Core Requirements	32		Group 2 Major Requirements	48
	Total Hours	81		Group 1 Core Requirements	27
				Total Hours*	75

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

Ceramic Engineering Group 2 Major Requirements

<u>Quachita Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing	3	SPMS 1185 or ENGLISH 3560	Technical Writing or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 3203	Strength of Materials	3	CIV ENG 2210	Mechanics of Materials	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 1014	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	3
CHEM 3004	Organic Chemistry I	4	CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) <small>Satisfies the advanced chemistry elective requirement. *The lab is not a degree requirement, transfers as general elective credit.</small>	3
MATH 3063	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
		<i>No free electives applied to the degree.</i>			0
		Group 2 Major Requirements			39
		Group 1 Core Requirements			32
		Total Hours			71
				Maximum Free Electives	0
				Group 2 Major Requirements	38
				Group 1 Core Requirements	27
				Total Hours*	65

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

Chemical Engineering or Chemical Engineering - Biochemical Engineering Emphasis Group 2 Major Requirements

<u>Ouachita Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 1003	Fundamentals of Public Speaking	3	SP&MS 1185	Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 1014	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	3
CHEM 3004	Organic Chemistry I	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* <small>*CHEM 2210 is a degree requirement. CHEM 2219 applies to the degree as 1 of 9 required science elective credits. See note below.</small>	4
CHEM 3104 or BIOL 3014	Organic Chemistry II Microbiology	4	CHEM 2220, 2229* or BIO SCI 3313, 3319	Organic Chemistry II (3) and Lab* (1) or Microbiology and Lab (5) <small>Applies to the degree as required science elective credits. Select up to 9 hours from these options or CHEM 2219 Organic Chemistry Lab. *CHEM 2229 is not a degree requirement; transfers as general elective credit.</small>	8
CSCI 1044 or CSCI 1053 or CSCI 2103	Programming I (4) or Programming II (4) or Data Structures (3)	3	COMP SCI 1500	Computational Problem Solving	3
MATH 3063	Probability and Statistics	3	STAT 3115	Engineering Statistics <small>Will be substituted for STAT 3113.</small>	3
Humanities, Arts, and Social Sciences General Education Requirements					
From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines.					
*At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences ENGLISH 3560 required.					
ENGL 3013	Technical and Professional Writing	3	ENGLISH 3560	Technical Writing	3
<i>No free electives applied to the degree.</i>		0		Maximum Free Electives	0
		40		Group 2 Major Requirements	44
		32		Group 1 Core Requirements	27
Total Hours		72		Total Hours*	71

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

Civil Engineering Group 2 Major Requirements

<u>Ouachita Baptist University</u>	<u>Semester</u>	<u>Missouri S&T</u>
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing 3	SPMS 1185 or ENGLISH 3560 3
CHEM 1004	General Chemistry I 4	CHEM 1310, 1319 5
PHYS 2123	Statics 3	CIV ENG 2200 3
PHYS 3203	Strength of Materials 3	CIV ENG 2210 3
MATH 3063	Probability and Statistics 3	STAT 3115 3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.		
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.		
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <i>*Satisfies the State of Missouri government requirement.</i>	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature 6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.		
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <i>*Satisfies the State of Missouri government requirement.</i>	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language 6
Humanities, Arts, and Social Sciences Select 3 hours.		
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language. 3	HASS Elective Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language. 3
<i>No free electives applied to the degree.</i>		
		Maximum Free Electives 0
Group 2 Major Requirements 31		Group 2 Major Requirements 32
Group 1 Core Requirements 32		Group 1 Core Requirements 27
Total Hours 63		Total Hours* 59
*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>Quachita Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 1003	Fundamentals of Public Speaking	3	SPMS 1185	Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CSCI 1044 or CSCI 1053 or CSCI 2103	Programming I (4) or Programming II (4) or Data Structures (3)	3	COMP SCI 1500	Computational Problem Solving	3
PHYS 2123 or CHEM 3004	Statics (3) or Organic Chemistry I (4)	3	CIV ENG 2200 or CHEM 2210	Engineering Mechanics-Statics (3) or Organic Chemistry I (4) <small>Satisfies a required engineering/science elective.</small>	3
PHYS 3124	Electrical Circuits	4	ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) <small>*A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for ELEC ENG 2100.</small>	4
MATH 3093	Linear Algebra	3	MATH 3108	Linear Algebra <small>Satisfies a required math elective.</small>	3
MATH 3063	Probability and Statistics	3	STAT 3115	Engineering Statistics* <small>Will be substituted for STAT 3117.</small>	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
ENGL 3013	Technical and Professional Writing	3	ENGLISH 3560	Technical Writing	3
Electives	Maximum Free Electives	3	Electives	Maximum Free Electives	3
	Group 2 Major Requirements	41		Group 2 Major Requirements	42
	Group 1 Core Requirements	32		Group 1 Core Requirements	27
	Total Hours	73		Total Hours*	69

*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>Quachita Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 1003	Fundamentals of Public Speaking	3	SPMS 1185	Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CSCI 1044 or CSCI 1053 or CSCI 2103	Programming I (4) or Programming II (4) or Data Structures (3)	3	COMP SCI 1500	Computational Problem Solving	3
PHYS 2123 or CHEM 3004	Statics (3) or Organic Chemistry I (4) <small>Organic Chemistry I OR the combination of OBU Statics and S&T Dynamics will satisfy a required engineering science elective.</small>	3	CIV ENG 2200 and MECH ENG 2350 <small>BOTH of the courses above or ONE of the courses below.</small> OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2) <small>Both courses above combined or any one of the following courses will satisfy a required engineering science elective.</small> OR Organic Chemistry I (3)	3
PHYS 3124	Electrical Circuits	3	ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) <small>*A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for ELEC ENG 2100.</small>	4
MATH 3093	Linear Algebra	4	MATH 3108	Linear Algebra	3
MATH 3063	Probability and Statistics	3	STAT 3115	Engineering Statistics* <small>Will be substituted for STAT 3117.</small>	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
ENGL 3013	Technical and Professional Writing	3	ENGLISH 3560	Technical Writing	3
Electives	Maximum Free Electives	6	Electives	Maximum Free Electives	6
	Group 2 Major Requirements	44		Group 2 Major Requirements	45
	Group 1 Core Requirements	32		Group 1 Core Requirements	27
	Total Hours	76		Total Hours*	72

*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>Quachita Baptist University</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COMM 1003	Fundamentals of Public Speaking	3	SPMS 1185	Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
PHYS 3124	Electrical Circuits	4	ELEC ENG 2800	Electrical Circuits	3
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 3203	Strength of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MATH 3063	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
Humanities, Arts, and Social Sciences General Education Requirements					
From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines.					
*At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts					
Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines to include PSYCH 1101.					
PSYC 1013	General Psychology	3	PSYCH 1101	General Psychology <small>Required</small>	3
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3
Humanities, Arts, and Social Sciences					
Select 3 hours.					
ENGL 3013	Technical and Professional Writing	3	ENGLISH 3560	Technical Writing	3
<i>No free electives applied to the degree.</i>		0	Electives	Maximum Free Electives	0
		35		Group 2 Major Requirements	35
		32		Group 1 Core Requirements	27
Total Hours		67			Total Hours*
					61

*S&T advisor permission is required to transfer more than 61 credits toward the S&T Engineering Management degree.

Environmental Engineering Group 2 Major Requirements

<u>Quachita Baptist University</u>	<u>Semester</u>		<u>Missouri S&T</u>
COMM 1003 or ENGL 3013	3	Fundamentals of Public Speaking or Technical and Professional Writing	Technical Writing or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>
CHEM 1004	4	General Chemistry I	General Chemistry I and Lab
CHEM 1014	4	General Chemistry II	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>
BIOL 1014	4	General Biology I	Principles of Biology (3) and Lab* (1) <small>*The lab is not a degree requirement, transfers as general elective credit. BIO SCI 1213 will be substituted for BIO SCI 1113.</small>
PHYS 2123	3	Statics	Engineering Mechanics-Statics
PHYS 3203	3	Strength of Materials	Mechanics of Materials
MATH 3063	3	Probability and Statistics	Engineering Statistics <small>Will be substituted for STAT 3113.</small>
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 9 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 3 hours Behavioral and Social Sciences. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.			
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.			
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	6	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>
Behavioral and Social Sciences Select 3 hours			
PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	3	Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>
<i>No free electives applied to the degree.</i>			
	0		Maximum Free Electives
	33		Group 2 Major Requirements
	32		Group 1 Core Requirements
	65	Total Hours	Total Hours*
			59

*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

Ouachita Baptist University		Semester	Missouri S&T		
ENGL 3013	Technical and Professional Writing	3	ENGLISH 3560	Technical Writing <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CSCI 1044 or CSCI 1053 or CSCI 2103	Programming I (4) or Programming II (4) or Data Structures (3)	3	COMP SCI 1500	Computational Problem Solving	3
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 3203	Strength of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MATH 3063	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
<i>No free electives applied to the degree.</i>					
		0		Maximum Free Electives	0
	Group 2 Major Requirements	34		Group 2 Major Requirements	35
	Group 1 Core Requirements	32		Group 1 Core Requirements	27
	Total Hours	66		Total Hours*	62

*S&T advisor permission is required to transfer more than 65 credits toward the S&T Geological Engineering degree.

Mechanical Engineering Group 2 Major Requirements

Quachita Baptist University		Semester	Missouri S&T		
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing	3	SPMS 1185 or ENGLISH 3560	Technical Writing or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab <small>*CHEM 1310 will be substituted for CHEM 1305.</small>	5
PHYS 3124	Electrical Circuits	4	ELEC ENG 2800	Electrical Circuits	3
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 3203	Strength of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MATH 3093 or MATH 3063	Linear Algebra or Probability and Statistics	3	MATH 3108 or STAT 3115	Linear Algebra I or Engineering Statistics or <small>Satisfies the Advanced Math/Comp Sci elective requirement.</small>	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
		0	Maximum Free Electives		0
		35	Group 2 Major Requirements		35
		32	Group 1 Core Requirements		27
Total Hours		67	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

Ouachita Baptist University		Semester	Missouri S&T																					
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing	3	SPMS 1185 or ENGLISH 3560	Technical Writing or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3																			
MATH 3063	Probability and Statistics	3	STAT 3115	Engineering Statistics	3																			
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3																			
PHYS 3203	Strength of Materials	3	CIV ENG 2210	Mechanics of Materials	3																			
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5																			
CHEM 1014	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	3																			
CHEM 3004 or PHYS 3124	Organic Chemistry I (4) or Electrical Circuits (4)	3	CHEM 2210 or ELEC ENG 2800	Organic Chemistry I (4) or Electrical Circuits (3) <small>Not specifically required for the degree but will satisfy Out-of-Department Technical Elective Requirement.</small>	3																			
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.																								
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.																								
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6																			
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.																								
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6																			
Humanities, Arts, and Social Sciences Select 3 hours.																								
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3																			
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td style="width: 35%; text-align: right;">Maximum Free Electives</td> <td style="width: 10%; text-align: center;">3</td> <td style="width: 35%; text-align: right;">Maximum Free Electives</td> <td style="width: 5%; text-align: center;">3</td> </tr> <tr> <td></td> <td style="text-align: right;">Group 2 Major Requirements</td> <td style="text-align: center;">41</td> <td style="text-align: right;">Group 2 Major Requirements</td> <td style="text-align: center;">41</td> </tr> <tr> <td></td> <td style="text-align: right;">Group 1 Core Requirements</td> <td style="text-align: center;">32</td> <td style="text-align: right;">Group 1 Core Requirements</td> <td style="text-align: center;">27</td> </tr> <tr> <td></td> <td style="text-align: right;">Total Hours</td> <td style="text-align: center;">73</td> <td style="text-align: right;">Total Hours*</td> <td style="text-align: center;">68</td> </tr> </table>						Maximum Free Electives	3	Maximum Free Electives	3		Group 2 Major Requirements	41	Group 2 Major Requirements	41		Group 1 Core Requirements	32	Group 1 Core Requirements	27		Total Hours	73	Total Hours*	68
	Maximum Free Electives	3	Maximum Free Electives	3																				
	Group 2 Major Requirements	41	Group 2 Major Requirements	41																				
	Group 1 Core Requirements	32	Group 1 Core Requirements	27																				
	Total Hours	73	Total Hours*	68																				
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.</small>																								

Mining Engineering Group 2 Major Requirements

	<u>Quachita Baptist University</u>	<u>Semester</u>	<u>Missouri S&T</u>		
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing	3	SPMS 1185 or ENGLISH 3560	Technical Writing or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
MATH 3063	Probability and Statistics	3	STAT 3115	Engineering Statistics	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 3203	Strength of Materials	3	CIV ENG 2210	Mechanics of Materials	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 12 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
	<i>No free electives applied to the degree.</i>	0		Maximum Free Electives	0
	Group 2 Major Requirements	28		Group 2 Major Requirements	29
	Group 1 Core Requirements	32		Group 1 Core Requirements	27
	Total Hours	60		Total Hours*	56
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mining Engineering degree.</small>					

Nuclear Engineering Group 2 Major Requirements

	<u>Ouachita Baptist University</u>	<u>Semester</u>	<u>Missouri S&T</u>	
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing	3	SPMS 1185 or ENGLISH 3560	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	5
MATH 3093	Linear Algebra	3	MATH 3108	3
PHYS 2123	Statics	3	CIV ENG 2200	3
PHYS 3203	Strength of Materials	3	CIV ENG 2210	3
MATH 3063	Probability and Statistics	3	STAT 3115	3
PHYS 3124	Electrical Circuits	4	ELEC ENG 2800	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.				
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.				
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	6
			American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines to include either ECON 1100 or 1200.				
ECON 2023 or ECON 2013	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	3
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or Foreign Language	3
			World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	
Humanities, Arts, and Social Sciences Select 3 hours.				
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	3
	Maximum Free Electives	0	Maximum Free Electives	0
	Group 2 Major Requirements	38	Group 2 Major Requirements	38
	Group 1 Core Requirements	32	Group 1 Core Requirements	27
	Total Hours	70	Total Hours*	65

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

Petroleum Engineering Group 2 Major Requirements

<u>Quachita Baptist University</u>	<u>Semester</u>	<u>Missouri S&T</u>			
COMM 1003 or ENGL 3013	Fundamentals of Public Speaking or Technical and Professional Writing	3	SPMS 1185 or ENGLISH 3560	Technical Writing or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 1004	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CSCI 1044 or CSCI 1053 or CSCI 2103	Programming I (4) or Programming II (4) or Data Structures (3)	3	COMP SCI 1500	Computational Problem Solving	3
PHYS 2123	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 3203	Strength of Materials	3	CIV ENG 2210	Mechanics of Materials	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 15 hours to include 6 hours Humanities and Fine Arts from at least two specific disciplines and 6 hours Behavioral and Social Sciences from at least two specific disciplines. *At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines.					
ENGL 3103 or ENGL 3113 or HIST 2003* or HIST 2013* or FINA 3113 or FINA 3123 or Literature	American Literature to 1865 or American Literature to 1865 or United States History to 1877* or United States History Since 1877* or Fine Arts: Art or Fine Arts: Music Any literature with prerequisite of no more than English Composition I. <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or Literature	American Literature: 1600 to 1865 or American Literature: 1865 to Present or American History to 1877* or American History Since 1877* or Art Appreciation or Music Understanding and Appreciation Any literature with prerequisite of no more than ENGLISH 1120. <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
GEOG 1003 or PHIL 1003 or PHIL 1023 or PSCI 2013* or PSYC 1013 or ECON 2023 or ECON 2013 or Foreign Language	Intro to Human Geography or Intro to Philosophy or Logic or American National Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
		No free electives applied to the degree.	0		
		Group 2 Major Requirements	31		
		Group 1 Core Requirements	32		
		Total Hours	63		
				Maximum Free Electives	0
				Group 2 Major Requirements	32
				Group 1 Core Requirements	27
				Total Hours*	59

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