Lyon College — Missouri S&T

General Engineering

Transfer Guide Effective as of Fall 2026

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.

Lyon College		Semester	Missouri S&T		
MTH 210	Calculus I	4	MATH 1214	Calculus I Grade of C or better is required.	4
MTH 220	Calculus II	4	MATH 1215	Calculus II Grade of C or better is required.	4
MTH 230	Calculus III	4	MATH 2222	Calculus III Grade of C or better is required.	4
MTH 300	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHY 240, 241	Fundamentals of Physics I and Lab	4	PHYSICS 1135	Engineering Physics I Grade of C or better is required.	4
PHY 250, 251	Fundamentals of Physics II and Lab	4	PHYSICS 2135	Engineering Physics II Grade of C or better is required.	4
ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
	Total Hours	26		Total Hours	26

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
Biomedical Engineering - 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
Semiconductor 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.

This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2026.
Further information or updates are available from Missouri S&T Transfer Admissions at transfer.mst.edu, transfer@mst.edu, or 800-522-0938.

Aerospace Engineering Group 2 Major Requirements

Lyon College			Semester	Missouri S&T		
ENG 102	English Composition II	3		ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
MTH 330	Linear Algebra	3		MATH 3108	Linear Algebra I Satisfies the Advanced Math/Comp Sci elective requirement.	3
Ethics	Ethics Elective Engineering, business, bio, social or other ethics approved by advisor.	3		Ethics	Ethics Elective Engineering, business, bio, social or other ethics approved by advisor.	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.						
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6		ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.						
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6		PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	28			Group 2 Major Requirements	29
	Group 1 Core Requirements	26			Group 1 Core Requirements	26
	Total Hours	54			Total Hours*	55
					*S&T advisor permission is required to transfer more than 68 credits toward the S&T Aerospace Engineering degree.	

Architectural Engineering Group 2 Major Requirements

Lyon College			Semester	Missouri S&T		
ENG 102	English Composition II	3		ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 9 hours to include 3 hours Humanities and Fine Arts 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 3 hours.						
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	3		ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	3
Behavioral and Social Sciences Select 3 hours.						
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	3		PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	3
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			Maximum Free Electives	0
	Group 2 Major Requirements	16			Group 2 Major Requirements	17
	Group 1 Core Requirements	26			Group 1 Core Requirements	26
	Total Hours	42			Total Hours*	43
					*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

Lyon College		Semester	Missouri S&T		Semester
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 120	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 210	Organic Chemistry I	4	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHM 220	Organic Chemistry II	4	CHEM 2220, 2229	Organic Chemistry II and Lab Applies to degree as Track Elective.	4
CSC 100	Intro to Programming in C++	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 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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or 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.					
PSY 101 or ECO 102 or ECO 101 or Foreign Language	Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	3	PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	28		Group 2 Major Requirements	28
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	54		Total Hours*	54
				*S&T advisor permission is required to transfer more than 69 credit hours toward the degree.	

Biomedical Engineering-Biomaterials
Group 2 Major Requirements

Lyon College		Semester	Missouri S&T		Semester
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 120	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 210	Organic Chemistry I	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	4
CHM 220	Organic Chemistry II	4	CHEM 2220, 2229*	Organic Chemistry II and Lab* CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).	4
CSC 100	Intro to Programming in C++	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 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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or 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.					
PSY 101 or ECO 102 or ECO 101 or Foreign Language	Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	3	PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	28		Group 2 Major Requirements	28
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	54		Total Hours*	54
				*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

	Lyon College	Semester		Missouri S&T	
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 120	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CSC 100	Intro to Programming in C++	3	COMP SCI 1500	Computational Problem Solving	3
PHY 335	Modern Physics	3	PHYS 2305	Intro to Modern Physics	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.				
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
	Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.				
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	32		Group 2 Major Requirements	32
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	58		Total Hours*	58
				*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

Lyon College		Semester	Missouri S&T		
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 120	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 210	Organic Chemistry I	4	CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2210 is a degree requirement. CHEM 2219 applies to the degree as 1 of 9 required science elective credits See note below .	4
CHM 220	Organic Chemistry II	4	CHEM 2220, 2229*	Organic Chemistry II CHEM 2220 will partially satisfy the 9-hour science elective requirement. *CHEM 2229 is not an S&T degree requirement; transfers as general elective credit.	4
CSC 100	Intro to Programming in C++	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 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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	6
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	31		Group 2 Major Requirements	31
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	57		Total Hours*	57
				*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

Lyon College		Semester	Missouri S&T		
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	22		Group 2 Major Requirements	23
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	48		Total Hours*	49
				*S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.	

Computer Engineering Group 2 Major Requirements

Lyon College		Semester	Missouri S&T		
CHM 110	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CSC 100	Intro to Programming in C++	3	COMP SCI 1500	Computational Problem Solving	3
CHM 210 or PHY 335	Organic Chemistry I (4) or Modern Physics (3)	3	PHYSICS 2305 or CHEM 2210, 2219* or	Intro to Modern Physics (3) or Organic Chemistry I (3) Satisfies a required engineering/science elective. *CHEM 2229 is not an S&T degree requirement, transfers as general elective credit.	3
MTH 330	Linear Algebra	3	MATH 3108	Linear Algebra Satisfies a required math elective.	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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	6
Humanities, Arts, and Social Sciences Select 3 hours.					
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	3	Electives	Maximum Free Electives	3
	Group 2 Major Requirements	31		Group 2 Major Requirements	32
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	57		Total Hours*	58
				*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

Lyon College		Semester	Missouri S&T		
CHM 110	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CSC 100	Intro to Programming in C++	3	COMP SCI 1500	Computational Problem Solving	3
CHM 210 or PHY 335	Organic Chemistry I (4) or Modern Physics (3)	3	PHYSICS 2305 or CHEM 2210, 2219* or	Intro to Modern Physics (3) or Organic Chemistry I (3) Satisfies a required engineering/science elective. *CHEM 2229 is not an S&T degree requirement, transfers as general elective credit.	3
MTH 330	Linear Algebra	3	MATH 3108	Linear Algebra	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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	6
Humanities, Arts, and Social Sciences Select 3 hours.					
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	6	Electives	Maximum Free Electives	6
	Group 2 Major Requirements	34		Group 2 Major Requirements	35
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	60		Total Hours*	61
				*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

	Lyon College	Semester		Missouri S&T	
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
	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.				
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
	Behavioral and Social Sciences Select 6 hours from at least two specific disciplines to include PSYCH 1101.				
PSY 101	Intro to Psychology	3	PSYCH 1101	General Psychology Required	3
RPH 306 or ECO 102 or ECO 101 or Foreign Language	Logic or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	3	PHILOS 1115 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	3
	Humanities, Arts, and Social Sciences Select 3 hours.				
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research	3
	No free electives applied to the degree.	0	Electives	Maximum Free Electives	0
	Group 2 Major Requirements	19		Group 2 Major Requirements	20
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	45		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

Lyon College		Semester	Missouri S&T		
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 120	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	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, or 1310 to satisfy the State of Missouri government requirement and a degree-specific gen ed requirement.**					
Humanities and Fine Arts Select 6 hours from at least two specific disciplines. At least one course in either the HFA or the BSS (below) section must be selected from HISTORY 1200, 1300, or 1310.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or 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.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	3	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	3
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	20		Group 2 Major Requirements	20
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	46		Total Hours*	46
				*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

	Lyon College	Semester		Missouri S&T	
CHM 110	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
	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.				
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
	Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.				
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	19		Group 2 Major Requirements	20
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	45		Total Hours*	64
				*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

Lyon College		Semester	Missouri S&T		
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
MTH 330	Linear Algebra	3	MATH 3108	Linear Algebra I Satisfies the Advanced Math/Statistics elective requirement.	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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	25		Group 2 Major Requirements	26
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	51		Total Hours*	52
				*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

Lyon College		Semester	Missouri S&T		Semester
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CSC 100	Intro to Programming in C++	3	COMP SCI 1500	Computational Problem Solving	3
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 120	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHM 210 or PHY 335	Organic Chemistry I (4) or Modern Physics (3)	3	PHYSICS 2305 or CHEM 2210, 2219* or	Intro to Modern Physics (3) or Organic Chemistry I (3) Not specifically required for the degree but will satisfy out-of-department technical elective requirement. *CHEM 2229 is not an S&T degree requirement, will transfer as general elective credit.	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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	32		Group 2 Major Requirements	32
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	58		Total Hours*	68
				*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

Lyon College		Semester	Missouri S&T		Semester
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	6
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	19		Group 2 Major Requirements	20
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	45		Total Hours*	46

*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

Lyon College			Semester	Missouri S&T		
ENG 102	English Composition II	3		ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4		CHEM 1310, 1319	General Chemistry I and Lab	5
MTH 330	Linear Algebra	3		MATH 3108	Linear Algebra	3
PHY 335	Modern Physics	3		PHYSICS 2305	Intro to Modern Physics	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.						
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6		ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines to include either ECON 1100 or 1200.						
ECO 102 or ECO 101	Principles of Economics II or Principles of Economics I	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
RPH 306 or PSY 101 or Foreign Language	Logic or Intro to Psychology or Elementary or Intermediate Foreign Language	3		PHILOS 1115 or PSYCH 1101 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Elementary or Intermediate Foreign Language	3
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
	Maximum Free Electives	0			Maximum Free Electives	0
	Group 2 Major Requirements	28			Group 2 Major Requirements	29
	Group 1 Core Requirements	26			Group 1 Core Requirements	26
	Total Hours	54			Total Hours*	55

*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

Lyon College		Semester	Missouri S&T		Semester
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CSC 100	Intro to Programming in C++	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 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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	25		Group 2 Major Requirements	26
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	51		Total Hours*	52
				*S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.	

Semiconductor Engineering-Device Engineering Emphasis
Group 2 Major Requirements

Lyon College		Semester	Missouri S&T		
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 120	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CSC 100	Intro to Programming in C++	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 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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	32		Group 2 Major Requirements	32
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	58		Total Hours*	58
				*S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	

Semiconductor Engineering-Process Engineering Emphasis
Group 2 Major Requirements

Lyon College		Semester	Missouri S&T		
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research Applies to degree as Gen Ed Communication requirement.	3
CHM 110	General Chemistry I	4	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 120	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CSC 100	Intro to Programming in C++	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 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.					
ENG 290 or ENG 291 or **HIS 101*** or **HIS 102*** or ART 101 or Literature	Survey of British Literature I or Survey of British Literature II or **The United States I*** or **The United States II*** or Intro to Visual Art or Any literature with prerequisite of no more than English Composition I. ***Satisfies the State of Missouri government requirement.**	6	ENGLISH 1211 or ENGLISH 1212 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
RPH 306 or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Logic or Intro to Psychology or Principles of Economics II or Principles of Economics I or Elementary or Intermediate Foreign Language	6	PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate 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
	Maximum Free Electives	3		Maximum Free Electives	3
	Group 2 Major Requirements	32		Group 2 Major Requirements	32
	Group 1 Core Requirements	26		Group 1 Core Requirements	26
	Total Hours	58		Total Hours*	58
				*S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	