Kaskaskia 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.

Kaskaskia College		Semester	Missouri S&T		
MATH 166	Calculus and Analytical Geometry I	5	MATH 1214	Calculus I Grade of C or better is required.	4
MATH 267	Calculus and Analytical Geometry II	4	MATH 1215	Calculus II Grade of C or better is required.	4
MATH 268	Calculus and Analytical Geometry III	4	MATH 2222	Calculus III Grade of C or better is required.	4
MATH 269	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHYS 201	University Physics I	5	PHYSICS 1135	Engineering Physics I Grade of C or better is required.	4
PHYS 202	University Physics II	5	PHYSICS 2135	Engineering Physics II Grade of C or better is required.	4
ENGL 101	English Composition	3	ENGLISH 1120	Exposition and Argumentation	3
	Total Hours	29		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

Kaskaskia College		Semester	Missouri S&T		
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
ENGR 210	Electrical Circuits	4	ELEC ENG 2800	Electrical Circuits	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 205	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MATH 236	Linear Algebra	3	MATH 3108	Linear Algebra I	3
PHLE 201	Professional Ethics for Engineers or other engineering, business, bio, social, ethics approved by advisor	3	PHILOS 3225	Engineering Ethics or other engineering, business, bio, social, 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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	39		Group 2 Major Requirements	38
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	68		Total Hours*	64
				*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

Kaskaskia College			Semester	Missouri S&T		
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
ENGR 203	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 204	Dynamics	3		MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENGR 205	Mechanics of Materials	3		CIV ENG 2210	Mechanics of Materials	3
PSCI 103	Geology	4		GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
Humanities, Arts, and Social Sciences General Education Requirements From the options listed in each group below, select 12 hours to include 3 hours Humanities and Fine Arts 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 3 hours.						
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or **MUSC** 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Music Appreciation or Any literature with prerequisite of no more than ENGLISH 1120. ***Satisfies the State of Missouri government requirement.**	3
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines, to include HISTORY 1200.						
HIST 102*	**History of Western Civilization*** ***Satisfies the State of Missouri government requirement.**	3		**HISTORY 1200***	**Modern Western Civilization*** ***Satisfies the State of Missouri Government requirement.**	3
PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	Intro to Philosophy or Logic or **American Government*** or 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
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	33			Group 2 Major Requirements	31
	Group 1 Core Requirements	29			Group 1 Core Requirements	26
	Total Hours	62			Total Hours*	57
					*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

Kaskaskia College			Semester	Missouri S&T		
COMM 103	Fundamentals of Speech Communication	3		SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5		CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	Chemistry II (Physical and Analytical)	5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHEM 208	Organic Chemistry I	5		CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHM 209 or BIOL 101	Organic Chemistry II (5) or Biology (4)	4		CHEM 2220, 2229 or BIO SCI 1113, 1219	Organic Chemistry II and Lab or General Biology and Lab Applies to degree as Track Elective.	4
CITP 155	Programming I	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.						
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.						
HIST 101 or **HIST 102*** or GEOG 104or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	3		HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or World Regional Geography 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
	No free electives applied to the degree.	0			Maximum Free Electives	0
	Group 2 Major Requirements	34			Group 2 Major Requirements	31
	Group 1 Core Requirements	29			Group 1 Core Requirements	26
	Total Hours	63			Total Hours*	57
					*S&T advisor permission is required to transfer more than 69 credit hours toward the degree.	

Biomedical Engineering-Biomaterials
Group 2 Major Requirements

Kaskaskia College		Semester	Missouri S&T		
COMM 103	Fundamentals of Speech Communication	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	Chemistry II (Physical and Analytical)	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHEM 208	Organic Chemistry I	5	CHEM 2210, 2219*	Organic Chemistry I and Lab* *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	4
CHEM 209	Organic Chemistry II	5	CHEM 2220, 2229*	Organic Chemistry II and Lab* CHEM 2229 Lab applies to the degree as a Track Elective (non-engineering).	4
BIOL 101	Biology	4	BIO SCI 1113*, 1219*	General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4
CITP 155	Programming I	3	COMP SCI 1500	Computational Problem Solving	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 210	Electrical Circuits	4	ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T ELEC ENG 2100 final exam is required to receive credit for ELEC ENG 2100. Without the required passing score, the course will transfer as ELEC ENG 2800. ELEC ENG 2100 and 2101 apply to the degree as a Track Elective (Engineering).	4
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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	3	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or World Regional Geography 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
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	46		Group 2 Major Requirements	42
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	75		Total Hours*	68
				*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

Kaskaskia College			Semester	Missouri S&T		
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
ENGR 203	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 205	Mechanics of Materials	3		CIV ENG 2210	Mechanics of Materials	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5		CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	Chemistry II (Physical and Analytical)	5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CITP 155	Programming I	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.						
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.						
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6		HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	37			Group 2 Major Requirements	35
	Group 1 Core Requirements	29			Group 1 Core Requirements	26
	Total Hours	66			Total Hours*	61
					*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

Kaskaskia College		Semester	Missouri S&T		
COMM 103	Fundamentals of Speech Communication	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	Chemistry II (Physical and Analytical)	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHEM 208	Organic Chemistry I	5	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
CHEM 209 or BIOL 215 or CHEM 210	Organic Chemistry II (5) or Microbiology (4) or Biochemistry (5)	4	CHEM 2220 or BIO SCI 3313, 3319 or CHEM 4610, 4619	Organic Chemistry II (3) or Microbiology and Lab (5) or General Biochemistry and Lab (5) Applies to the degree as required science elective credits. Select up to 9 hours from these options or CHEM 2219 Organic Chemistry Lab.	3
CITP 155	Programming I	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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	6
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	37		Group 2 Major Requirements	33
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	66		Total Hours*	59
				*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

Kaskaskia College		Semester	Missouri S&T		
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
PSCI 103	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 204	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENGR 205	Mechanics 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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	36		Group 2 Major Requirements	34
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	65		Total Hours*	70
				*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

Kaskaskia College		Semester	Missouri S&T		
COMM 103	Fundamentals of Speech Communication	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CITP 155	Programming I	3	COMP SCI 1500	Computational Problem Solving	3
ENGR 203 and ENGR 204 BOTH of the courses above or ONE of the courses below. OR CHEM 208	Statics and Dynamics Both courses above combined or any one of the following courses will satisfy a required engineering science elective. OR Organic Chemistry I (5)	3	CIV ENG 2200 and MECH ENG 2350 BOTH of the courses above or ONE of the courses below. OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2) Both courses above combined or any one of the following courses will satisfy a required engineering science elective. OR Organic Chemistry I and Lab (3) or	3
ENGR 210	Electrical Circuits	4	ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T ELEC ENG 2100 final exam is required to receive credit for ELEC ENG 2100. Without the required passing score, the course will transfer as ELEC ENG 2800.	4
MATH 236	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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	6
Humanities, Arts, and Social Sciences Select 3 hours.					
ENGL 102	English Composition	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	3	Electives	Maximum Free Electives	3
	Group 2 Major Requirements	39		Group 2 Major Requirements	39
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	68		Total Hours*	65

*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

Kaskaskia College			Semester	Missouri S&T		
COMM 103	Fundamentals of Speech Communication	3		SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5		CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CITP 155	Programming I	3		COMP SCI 1500	Computational Problem Solving	3
ENGR 203 and ENGR 204 BOTH of the courses above or ONE of the courses below. OR CHEM 208	Statics and Dynamics Both courses above combined or any one of the following courses will satisfy a required engineering science elective. OR Organic Chemistry I (5)	3		CIV ENG 2200 and MECH ENG 2350 BOTH of the courses above or ONE of the courses below. OR CHEM 2210	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2) Both courses above combined or any one of the following courses will satisfy a required engineering science elective. OR Organic Chemistry I and Lab (3) or	3
ENGR 210	Electrical Circuits	4		ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T ELEC ENG 2100 final exam is required to receive credit for ELEC ENG 2100. Without the required passing score, the course will transfer as ELEC ENG 2800.	4
MATH 236	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.						
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.						
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6		HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	6
Humanities, Arts, and Social Sciences Select 3 hours.						
ENGL 102	English Composition	3		ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	6		Electives	Maximum Free Electives	6
	Group 2 Major Requirements	42			Group 2 Major Requirements	42
	Group 1 Core Requirements	29			Group 1 Core Requirements	26
	Total Hours	71			Total Hours*	68
					*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

Kaskaskia College		Semester	Missouri S&T		
COMM 103	Fundamentals of Speech Communication	3	SPMS 1185	Principles of Speech	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
ENGR 210	Electrical Circuits	4	ELEC ENG 2800	Electrical Circuits	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 204	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENGR 205	Mechanics 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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
PSYH 101	Psychology	3	PSYCH 1101	General Psychology Required	3
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	3	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	3
Humanities, Arts, and Social Sciences					
Select 3 hours.					
ENGL 102	English Composition	3	ENGLISH 1160	Writing and Research	3
	No free electives applied to the degree.	0	Electives	Maximum Free Electives	0
	Group 2 Major Requirements	36		Group 2 Major Requirements	34
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	65		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

Kaskaskia College		Semester	Missouri S&T		Semester
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PSCI 103	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	Chemistry II (Physical and Analytical)	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
BIOL 101	Biology	4	BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) *The lab is not a degree requirement, transfers as general elective credit.	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 204	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENGR 205	Mechanics 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, 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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.. At least one course in either the HFA (above) or the BSS section must be selected from HISTORY 1200, 1300, or 1310.					
HIST 102* or PHLE 121 or PHLE 110 or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	**History of Western Civilization*** or Intro to Philosophy or Logic or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	**HISTORY 1200*** or PHILOS 1105 or PHILOS 1115 or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	**Modern Western Civilization*** or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement and a degree-specific gen ed requirement.**	6
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	42		Group 2 Major Requirements	37
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	71		Total Hours*	63
				*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

Kaskaskia College		Semester	Missouri S&T		
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
PSCI 103	Geology	4	GEO ENG 1150 (GEOLOGY 1110)	Physical and Environmental Geology	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 204	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENGR 205	Mechanics 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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	33		Group 2 Major Requirements	31
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	62		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

Kaskaskia College		Semester	Missouri S&T		
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
ENGR 210	Electrical Circuits	4	ELEC ENG 2800	Electrical Circuits	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 205	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
MATH 236	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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	36		Group 2 Major Requirements	35
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	65		Total Hours*	61
				*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

Kaskaskia College		Semester	Missouri S&T		
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CITP 155	Programming I	3	COMP SCI 1500	Computational Problem Solving	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 205	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	Chemistry II (Physical and Analytical)	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
CHEM 208 or ENGR 210	Organic Chemistry I or Electrical Circuits	4	CHEM 2210 or ELEC ENG 2800	Organic Chemistry I or Electrical Circuits Not specifically required for the degree but will satisfy Out-of-Department Technical 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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	41		Group 2 Major Requirements	38
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	70		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

Kaskaskia College		Semester	Missouri S&T		Semester
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 204	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENGR 205	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
PSCI 103	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	6
	No free electives applied to the degree.	0		Maximum Free Electives	0
	Group 2 Major Requirements	33		Group 2 Major Requirements	31
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	62		Total Hours*	57
				*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

Kaskaskia College		Semester	Missouri S&T		Semester
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
MATH 236	Linear Algebra	3	MATH 3108	Linear Algebra I	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 205	Mechanics of Materials	3	CIV ENG 2210	Mechanics of Materials	3
ENGR 210	Electrical Circuits	4	ELEC ENG 2800	Electrical Circuits	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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
ECON 206 or ECON 205	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	3	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	36		Group 2 Major Requirements	35
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	65		Total Hours*	61
				*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

Kaskaskia College		Semester	Missouri S&T		
ENGL 102	English Composition	3	ENGLISH 1160	Writing and Research	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
CITP 155	Programming I	3	COMP SCI 1500	Computational Problem Solving	3
PSCI 103	Geology	4	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
ENGR 203	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
ENGR 204	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
ENGR 205	Mechanics 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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	39		Group 2 Major Requirements	37
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	68		Total Hours*	63

*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

Kaskaskia College		Semester	Missouri S&T		Semester
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	Chemistry II (Physical and Analytical)	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
ENGR 210	Electrical Circuits	4	ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T ELEC ENG 2100 final exam is required to receive credit for ELEC ENG 2100. Without the required passing score, the course will transfer as ELEC ENG 2800.	4
CITP 155	Programming I	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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	38		Group 2 Major Requirements	36
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	67		Total Hours*	62
				*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

Kaskaskia College		Semester	Missouri S&T		Semester
ENGL 102 or COMM 103	English Composition or Fundamentals of Speech Communication	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
CHEM 111	Chemistry I (Inorganic Chemistry)	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	Chemistry II (Physical and Analytical)	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
ENGR 210	Electrical Circuits	4	ELEC ENG 2100*, 2101	Circuits I* (3) and Circuit Analysis Lab (1) *A passing grade on the Missouri S&T ELEC ENG 2100 final exam is required to receive credit for ELEC ENG 2100. Without the required passing score, the course will transfer as ELEC ENG 2800.	4
CITP 155	Programming I	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.					
LITO 201 or LITO 202 or LITO 204 or LITO 205 or LITO 139 or **HIST 103*** or **HIST 104*** or ARTO 105 or MUSC 107 or Literature	British Literature Survey, Part I or British Literature Survey, Part II or American Literature or American Literature or World Literature or **History of the United States*** or **History of the United States*** or Intro to Art or Music Appreciation 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 ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or **HISTORY 1300*** or **HISTORY 1310*** or ART 1180 or MUSIC 1150 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or **American History to 1877*** or **American History Since 1877*** or Art Appreciation or Music 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.					
HIST 101 or **HIST 102*** or GEOG 104 or PHLE 121 or PHLE 110 or **POLS 101*** or PSYH 101 or ECON 206 or ECON 205 or Foreign Language	History of Western Civilization or **History of Western Civilization*** or World Geography or Intro to Philosophy or Logic or **American Government*** or Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language ***Satisfies the State of Missouri government requirement.**	6	HISTORY 1100 or **HISTORY 1200*** or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or **POL SCI 1200*** or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or **Modern Western Civilization*** or 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 ***Satisfies the State of Missouri government requirement.**	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	38		Group 2 Major Requirements	36
	Group 1 Core Requirements	29		Group 1 Core Requirements	26
	Total Hours	67		Total Hours*	62
				*S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.	