

Southeastern Illinois College — Missouri S&T

General Engineering

Transfer Guide Effective as of Fall 2025

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

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

Group 1 - Core Requirements: All Majors Take All Courses

Engineering students take all Group 1 - Core Requirements and Group 2 - Major Requirements for major of choice. Math prerequisites: While they are not part of Missouri S&T engineering degree requirements, algebra and trigonometry skills are critical to success in calculus. To prepare for entry into calculus, students should follow math placement testing and advising recommendations at their college.

<u>Southeastern Illinois College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
MATH 162	Calculus & Analytic Geometry I	5		MATH 1214	Calculus I	Grade of C or better is required. 4
MATH 221	Calculus & Analytic Geometry II	5		MATH 1215	Calculus II	Grade of C or better is required. 4
MATH 222	Calculus & Analytic Geometry III	5		MATH 2222	Calculus III	Grade of C or better is required. 4
MATH 225	Differential Equations	3		MATH 3304	Elementary Differential Equations	3
PHYS 221	General Physics I	5		PHYSICS 1135	Engineering Physics I	Grade of C or better is required. 4
PHYS 222	General Physics II	5		PHYSICS 2135	Engineering Physics II	Grade of C or better is required. 4
ENG 121	Rhetoric and Composition I	3		ENGLISH 1120	Exposition and Argumentation	3
		Total Hours	31			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 or Biomaterials
Ceramic Engineering
Chemical Engineering and Biochemistry Emphasis
Civil Engineering
Computer Engineering
Electrical Engineering

Engineering Management
Environmental Engineering
Geological Engineering
Mechanical Engineering
Metallurgical Engineering
Mining Engineering
Nuclear Engineering
Petroleum Engineering

Engineering Major Requirements are detailed on the following pages.

Free Electives: Some programs allow Free Electives as indicated within each major. Free Electives should be selected in consultation with your advisor and may not include remedial/deficiency courses, algebra, trigonometry, pre-calculus, or extra credits in required courses.

This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2025.
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

Southeastern Illinois College		Semester	Missouri S&T		
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <i>Applies to degree as Gen Ed Communication requirement.</i>	3
CHEM 121	General Chemistry I	5	CHEM 1310*, 1319	General Chemistry I and Lab <i>*CHEM 1310 will be substituted for CHEM 1305.</i>	5
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
Ethics	Ethics Elective <i>Engineering, business, bio, social or other ethics approved by advisor.</i>	3	Ethics	Ethics Elective <i>Engineering, business, bio, social or other ethics approved by advisor.</i>	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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation <i>*Satisfies the State of Missouri government requirement.</i>	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation <i>*Satisfies the State of Missouri government requirement.</i>	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <i>*Satisfies the State of Missouri government requirement.</i>	6	HISTORY 1100 or HISTORY 1200* 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 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 <i>*Satisfies the State of Missouri government requirement.</i>	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		29	Group 2 Major Requirements		29
Group 1 Core Requirements		31	Group 1 Core Requirements		26
Total Hours		60	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

Southeastern Illinois College		Semester	Missouri S&T			
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CHEM 121	General Chemistry I	5	CHEM 1310*, 1319	General Chemistry I and Lab *CHEM 1310 will be substituted for CHEM 1305.	5	
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
PHYS 242	Dyanamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2	
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines to include HISTORY 1200.						
HIST 122*	History of Western Civilization from 1648* *Satisfies the State of Missouri Government requirement.	3	HISTORY 1200*	Modern Western Civilization* *Satisfies the State of Missouri Government requirement.	3	
PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to 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 PSYC 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	
No free electives applied to the degree.		0	Maximum Free Electives		0	
Group 2 Major Requirements		26	Group 2 Major Requirements		25	
Group 1 Core Requirements		31	Group 1 Core Requirements		26	
Total Hours		57			Total Hours*	51
*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

Southeastern Illinois College			Semester	Missouri S&T	
COM 121	Principles of Speaking	3	SP&MS 1185	Principles of Speech	3
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 122	General Chemistry and Qualitative Analysis	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)	3
CHEM 241	Organic Chemistry I To receive credit for S&T CHEM 2219 Organic Chemistry I Lab, student must either complete SEIC CHEM 242 or take S&T CHEM 2219 on the S&T campus.	5	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHEM 242 or BIOL 121	Organic Chemistry II* (5) or Introductory Biology (4) *The equivalent of S&T CHEM 2229 Organic Chemistry II Lab is not available at SEIC and can be taken on the S&T campus.	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
BIOL 261	Human Anatomy and Physiology I	4	BIO SCI 3333, 3339*	Anatomy and Physiology I (3) and Lab* (1) *BIO SCI 3339 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, 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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 3 hours.					
HIST 121 or HIST 122* or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or American Government* or Intro to 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 POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* 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		35	Group 2 Major Requirements		31
Group 1 Core Requirements		31	Group 1 Core Requirements		26
Total Hours		66	Total Hours*		57
*S&T advisor permission is required to transfer more than 69 credit hours toward the degree.					

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Biomedical Engineering-Biomaterials Group 2 Major Requirements

<u>Southeastern Illinois College</u>			<u>Semester</u>	<u>Missouri S&T</u>	
COM 121	Principles of Speaking	3	SP&MS 1185	Principles of Speech	3
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	Applies to degree as Gen Ed Communication requirement. General Chemistry I and Lab	5
CHEM 122	General Chemistry and Qualitative Analysis	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 241 and CHEM 242	Organic Chemistry I (5) and Organic Chemistry II (5) Both courses must be taken to receive full transfer credit as indicated.	10	CHEM 2210, 2219* and CHEM 2220	Organic Chemistry I and Lab* and Organic Chemistry II (no lab) *CHEM 2219 Lab applies to the degree as a Track Elective (non-engineering).	8
BIOL 121	Introductory Biology	4	BIO SCI 1113*, 1219*	General Biology* and Lab* *Applies to degree as Track Elective (Non-engineering).	4
BIOL 261	Human Anatomy and Physiology I	4	BIO SCI 3333, 3339*	Anatomy and Physiology I (3) and Lab* (1) *BIO SCI 3339 is not a degree requirement; transfers as general elective credit.	3
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences Select 3 hours.					
HIST 121 or HIST 122* or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or American Government* or Intro to 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 POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* 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		43	Group 2 Major Requirements		38
Group 1 Core Requirements		31	Group 1 Core Requirements		26
Total Hours		74	Total Hours*		64
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Biomedical Engineering degree.					

Ceramic Engineering Group 2 Major Requirements

<u>Southeastern Illinois College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 122	General Chemistry and Qualitative Analysis	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	3
CHEM 241	Organic Chemistry I	5	CHEM 2210, 2219*	Organic Chemistry I (3) and Lab* (1) <small>Satisfies the advanced chemistry elective requirement. *The lab is not a degree requirement, transfers as general elective credit.</small>	3
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 1100 or HISTORY 1200* 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 Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
<i>No free electives applied to the degree.</i>		0	Maximum Free Electives		0
Group 2 Major Requirements		36	Group 2 Major Requirements		32
Group 1 Core Requirements		31	Group 1 Core Requirements		26
Total Hours		67	Total Hours*		58
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Ceramic Engineering degree.</small>					

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

Southeastern Illinois College		Semester	Missouri S&T			
COM 121	Principles of Speaking	3	SP&MS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3	
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5	
CHEM 122	General Chemistry and Qualitative Analysis	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 241	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 242 or BIOL 242	Organic Chemistry II (5) or Microbiology (4) After completing CHEM 241, take both CHEM 242 and BIOL 242 to satisfy the 9-hour science elective requirement.	9	CHEM 2220* or BIO SCI 3313, 3319	Organic Chemistry II* (3) or Microbiology and Lab (5) Take both courses. Will satisfy the 9-hour science elective requirement when combined with CHEM 2219 (see note above). *The combination of SEIC CHEM 241 and 242 is equivalent to the combination of S&T CHEM 2210, 2219, and 2220.	8	
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6	
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.						
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to 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 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 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		39	Group 2 Major Requirements		35	
Group 1 Core Requirements		31	Group 1 Core Requirements		26	
Total Hours		70			Total Hours*	61
*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

Southeastern Illinois College		Semester	Missouri S&T		
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <i>Applies to degree as Gen Ed Communication requirement.</i>	3
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 242	Dyanamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to 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 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 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		29	Group 2 Major Requirements		28
Group 1 Core Requirements		31	Group 1 Core Requirements		26
Total Hours		60	Total Hours*		54
*S&T advisor permission is required to transfer more than 69 credits toward the S&T Civil Engineering degree.					

Computer Engineering Group 2 Major Requirements

<u>Southeastern Illinois College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
COM 121	Principles of Speaking	3	SPMS 1185	Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab
PHYS 241 or PHYS 242	Statics or Dynamics	3	CIV ENG 2200 or MECH ENG 2350	Engineering Mechanics-Statics (3) or Engineering Mechanics-Dynamics (2) <small>Satisfies a required engineering/science elective.</small>
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation <small>*Satisfies the State of Missouri government requirement.</small>
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.				
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 1100 or HISTORY 1200* 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 Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>
Humanities, Arts, and Social Sciences Select 3 hours.				
ENG 122	Rhetoric and Composition II	3	ENGLISH 1160	Writing and Research
Electives	Maximum Free Electives	3	Electives	Maximum Free Electives
	Group 2 Major Requirements	29		Group 2 Major Requirements
	Group 1 Core Requirements	31		Group 1 Core Requirements
	Total Hours	60		Total Hours*
				55

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

Electrical Engineering Group 2 Major Requirements

<u>Southeastern Illinois College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
COM 121	Principles of Speaking	3	SPMS 1185	Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHYS 241 and PHYS 242	Statics and Dynamics	6	CIV ENG 2200 and MECH ENG 2350	Engineering Mechanics-Statics (3) and Engineering Mechanics-Dynamics (2) <small>Satisfies a required engineering/science elective.</small>	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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 1100 or HISTORY 1200* 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 Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences Select 3 hours.					
ENG 122	Rhetoric and Composition II	3	ENGLISH 1160	Writing and Research	3
Electives	Maximum Free Electives	6	Electives	Maximum Free Electives	6
	Group 2 Major Requirements	35		Group 2 Major Requirements	34
	Group 1 Core Requirements	31		Group 1 Core Requirements	26
	Total Hours	66		Total Hours*	60
<small>*S&T advisor permission is required to transfer more than 68 credits toward the S&T Electrical Engineering degree.</small>					

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

Engineering Management Group 2 Major Requirements

<u>Southeastern Illinois College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
COM 121	Principles of Speaking	3	SPMS 1185	Principles of Speech	3	
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5	
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
PHYS 242	Dyanamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2	
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation	6	
*Satisfies the State of Missouri government requirement.						
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines to include PSYCH 1101.						
PSYC 121	Intro to Psychology	3	PSYCH 1101	General Psychology Required	3	
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	3	HISTORY 1100 or HISTORY 1200* 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 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	3	
*Satisfies the State of Missouri government requirement.						
Humanities, Arts, and Social Sciences						
Select 3 hours.						
ENG 122	Rhetoric and Composition II	3	ENGLISH 1160	Writing and Research	3	
<i>No free electives applied to the degree.</i>		0	Electives	Maximum Free Electives	0	
Group 2 Major Requirements		29		Group 2 Major Requirements	26	
Group 1 Core Requirements		31		Group 1 Core Requirements	28	
Total Hours		60	Total Hours* 61			
<small>*S&T advisor permission is required to transfer more than 61 credits toward the S&T Engineering Management degree.</small>						

Environmental Engineering Group 2 Major Requirements

Southeastern Illinois College			Semester	Missouri S&T		
ENG 122 or COM 121	Rhetoric and Composition II or of Speaking	Principles 3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 121	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 122	General Chemistry and Qualitative Analysis	5		CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not a degree requirement, transfers as general elective credit.</small>	3
BIOL 121	Intro to Biology	4		BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) <small>*The lab is not a degree requirement, transfers as general elective credit.</small>	3
PHYS 241	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 242	Dynamics	3		MECH ENG 2350	Engineering Mechanics-Dynamics	2
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6		ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences Select 6 hours from at least two specific disciplines to include HISTORY 1200						
HIST 122*	History of Western Civilization from 1648* <small>*Satisfies the State of Missouri Government requirement.</small>	3		HISTORY 1200*	Modern Western Civilization* <small>*Satisfies the State of Missouri Government requirement.</small>	3
PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3		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 <small>*Satisfies the State of Missouri government requirement.</small>	3
No free electives applied to the degree.		0		Maximum Free Electives		0
Group 2 Major Requirements		35		Group 2 Major Requirements		31
Group 1 Core Requirements		31		Group 1 Core Requirements		26
Total Hours		66		Total Hours*		57

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

Geological Engineering Group 2 Major Requirements

<u>Southeastern Illinois College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
CHEM 121	General Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5
PHYS 241	Statics	3		CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 242	Dyanamics	3		MECH ENG 2350	Engineering Mechanics-Dynamics	2
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6		ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to 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 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 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		26		Group 2 Major Requirements		25
Group 1 Core Requirements		31		Group 1 Core Requirements		26
Total Hours		57				Total Hours*
						51
*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

<u>Southeastern Illinois College</u>		<u>Semester</u>	<u>Missouri S&T</u>		
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3
CHEM 121	General Chemistry I	5	CHEM 1310*, 1319	General Chemistry I and Lab <small>*CHEM 1310 will be substituted for CHEM 1305.</small>	5
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 1100 or HISTORY 1200* 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 Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6
Humanities, Arts, and Social Sciences					
Select 3 hours.					
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		26	Group 2 Major Requirements		26
Group 1 Core Requirements		31	Group 1 Core Requirements		26
Total Hours		57			Total Hours*
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mechanical Engineering degree.					

Metallurgical Engineering Group 2 Major Requirements

Southeastern Illinois College		Semester	Missouri S&T		
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech Applies to degree as Gen Ed Communication requirement.	3
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 122	General Chemistry and Qualitative Analysis	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 241	Organic Chemistry I	5	CHEM 2210	Organic Chemistry I 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.					
ENG 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation *Satisfies the State of Missouri government requirement.	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation *Satisfies the State of Missouri government requirement.	6
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 120 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to 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 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 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
		Group 2 Major Requirements			35
		Group 1 Core Requirements			26
		Total Hours			61
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Metallurgical Engineering degree.					

*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

Southeastern Illinois College			Semester	Missouri S&T	
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <i>Applies to degree as Gen Ed Communication requirement.</i>	3
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3
PHYS 242	Dynamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation	6
*Satisfies the State of Missouri government requirement.					
Behavioral and Social Sciences					
Select 6 hours from at least two specific disciplines.					
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	6	HISTORY 1100 or HISTORY 1200* 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 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	6
*Satisfies the State of Missouri government requirement.					
No free electives applied to the degree.		0	Maximum Free Electives		0
Group 2 Major Requirements		26	Group 2 Major Requirements		25
Group 1 Core Requirements		31	Group 1 Core Requirements		26
Total Hours		57	Total Hours*		51
*S&T advisor permission is required to transfer more than 68 credits toward the S&T Mining Engineering degree.					

Nuclear Engineering Group 2 Major Requirements

<u>Southeastern Illinois College</u>		<u>Semester</u>	<u>Missouri S&T</u>			
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3	
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5	
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
ECON 122 or ECON 121	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3	
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	3	HISTORY 1100 or HISTORY 1200* or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	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		26	Group 2 Major Requirements		26	
Group 1 Core Requirements		31	Group 1 Core Requirements		26	
Total Hours		57			Total Hours*	52
<small>*S&T advisor permission is required to transfer more than 69 credits toward the S&T Nuclear Engineering degree.</small>						

Petroleum Engineering Group 2 Major Requirements

Southeastern Illinois College		Semester	Missouri S&T			
ENG 122 or COM 121	Rhetoric and Composition II or Principles of Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech <small>Applies to degree as Gen Ed Communication requirement.</small>	3	
CHEM 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5	
PHYS 241	Statics	3	CIV ENG 2200	Engineering Mechanics-Statics	3	
PHYS 242	Dyanamics	3	MECH ENG 2350	Engineering Mechanics-Dynamics	2	
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 261 or ENG 262 or ENG 245 or HIST 241* or HIST 242* or ART 121 or MUS 121	American Literature I or American Literature II or World Literature or American History I* or American History II* or Art Appreciation or Music Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6	ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150	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 Understanding and Appreciation <small>*Satisfies the State of Missouri government requirement.</small>	6	
Behavioral and Social Sciences						
Select 6 hours from at least two specific disciplines.						
HIST 121 or HIST 122* or PHIL 121 or PHIL 122 or GOVT 121* or PSYC 121 or ECON 122 or ECON 121 or Foreign Language	History of Western Civilization to 1648 or History of Western Civilization from 1648* or Intro to Philosophy or Fundamentals of Logic or American Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	HISTORY 1100 or HISTORY 1200* or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government*or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language <small>*Satisfies the State of Missouri government requirement.</small>	6	
Humanities, Arts, and Social Sciences						
Select 3 hours.						
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	
No free electives applied to the degree.		0	Maximum Free Electives		0	
Group 2 Major Requirements		29	Group 2 Major Requirements		28	
Group 1 Core Requirements		31	Group 1 Core Requirements		26	
Total Hours		60			Total Hours*	54
<small>*S&T advisor permission is required to transfer more than 69 credits toward the S&T Petroleum Engineering degree.</small>						