



A course of study leading to a degree from the College of Engineering provides a well-rounded university education and equips students with a broad theoretical and practical background to meet the new and demanding problems of our technological society. K-State engineering offers the following undergraduate degree programs with several formal options.

Agricultural Tech. Management	Civil Engineering	Electrical Engineering
Architectural Engineering	Computer Engineering	Environmental Engineering
Biological Systems Engineering	Computer Science	Industrial Engineering
Biomedical Engineering	Construction Science & Management	Mechanical Engineering
Chemical Engineering	Cybersecurity	Engineering Undecided

Admissions

Applicants must first be admitted to Kansas State University either as an incoming freshman or a transfer student. To apply for admission to Kansas State University, complete an application online at <https://www.k-state.edu/admissions/> and have official transcripts from all previous colleges sent directly to the Office of Admissions, Kansas State University, 119 Anderson Hall, Manhattan, KS, 66505-0102, or faxed to 785-532-6393 or emailed via electronic transcript service to k-state@k-state.edu. For students transferring to K-State with fewer than 24 credit hours, please also send final high school transcript and ACT or SAT scores.

Admission to the College of Engineering is selective. Declaration of the desired curriculum in the College of Engineering does not guarantee admission into the degree program selected. For current admission criteria please refer to the College of Engineering website at <https://engg.k-state.edu/academics/admissions/>

Students not admitted to the College of Engineering can enter the university Open Option program or another available college/degree program. These students can still apply to enter the College of Engineering at a later date after they have completed one full-time semester at K-State as an internal transfer student.

Grade requirements

In addition to the university standards and policies for grades, the College of Engineering has the following standards:

Curricula grades

See the individual engineering department sections of the [K-State Undergraduate Catalog](#) for the grade requirements for their curriculum and degree. All courses applied to degree requirements require a letter grade except for 0-credit hour assembly courses.

Transferability of Courses

Many of the fundamental courses required for a degree in engineering may be obtained through pre-engineering programs at other four-year institutions or at community colleges. However, there are differences among the curricula; students electing this route should work closely with their pre-engineering advisors. **Students should be aware that only half of the total Bachelor of Science degree credits may be earned at a two-year school, at least 30 credit hours must be K-State credit hours, and 20 of the last 30 must be K-State credit hours.** Only courses with a grade of A, B or C will be applicable toward engineering degree requirements. *The Cr and D grades are not acceptable for transfer into College of Engineering programs.*

Some K-State courses in the curriculum do not have an equivalent course at all other institutions. Please see the [K-State Undergraduate Catalog](#) for details and lists of courses. To learn more about academic credit for prior learning and advanced credit, please see K-State [Advanced Standing](#).

To determine which courses at a particular college or university will substitute for courses at K-State, access [Transfer Equivalency](#) on the K-State website.

K-State 8 General Education:

Each student must successfully complete credit-bearing courses/experiences to cover all of the K-State 8 areas. A minimum of four different course prefixes (e.g. AGEC, MATH, FSHS) must be represented in the fulfillment of the K-State 8 requirements. When a course is tagged for two K-State 8 areas, the student may count that course toward both areas. However, advisors are strongly encouraged to recommend that students enroll in a sufficient variety of courses and experiences to offer them a genuine breadth of perspective. Learn more about [K-State 8](#).

Note: While a course of less than 3 hours may meet a K-State 8 requirement, additional hours may be required to meet K-State degree requirements.

Please refer to the **K-State 8 Matrix for Engineering** to see how required and elective coursework meets the K-State 8 goals.

https://engg.k-state.edu/docs/student-services/kstate-8-matrix_2022.pdf

- K-State 8 Areas: Aesthetic Interpretation Empirical and Quantitative Reasoning Ethical Reasoning and Responsibility Global Issues and Perspectives Historical Perspectives Human Diversity within the U.S. Natural and Physical Sciences Social Sciences

**Agricultural Technology Management (ATM) (B.S.) 120 hours required for the K-State B.S. degree
(No more than half can be completed at JCCC - See Transferability of Courses on page 1)**
















































































Recommended JCCC courses:

K-State Requirement	JCCC Equivalent	JCCC Hrs
ACCTG 241 Accounting for Investing & Financing	ACCT 121 Accounting I & ACCT 122 Accounting II*	3/3
ACCTG 231 Accounting for Business Operations	ACCT 222 Managerial Accounting*	3
BIOL 198 Principles of Biology	BIOL 135 Principles of Cell & Molecular Biology	4
MANGT 430 Business Law I	BLAW 261 Business Law I*	3
MANGT 420 Principles of Management	BUS 141 Principles of Management	3
CHM 210 Chemistry I	CHEM 124/125 General Chemistry I*/Lab*	4/1
COMM 322 Interpersonal Comm.	COMS 120 Interpersonal Communication	3
COMM 105 Public Speaking	COMS 121 Public Speaking	3
ECON 110 Principles of Macroeconomics	ECON 230 Principles of Macroeconomics	3
ENGL 100 Expos Writing	ENGL 121 Composition I*	3
ENGL 200 Expos Writing II	ENGL 122 Composition II*	3
STAT 325 Introduction to Statistics OR	MATH 181 Statistics* OR	3
STAT 350 Business and Economic Statistics	MATH 285 Statistics for Business*	4
MATH 205 General Calculus & Linear Algebra	MATH 231 Business and Applied Calculus I*	3
MKTG 400 Introduction to Marketing	MKT 230 Marketing	3
PHYS 113 General Physics I	PHYS 130 College Physics I*	5
<p>6 hours of approved H&SS Electives. Choose courses to meet these 3 K-State 8 areas if not met with other electives: Aesthetic Interpretation Historical Perspectives Human Diversity within the U.S. <i>Note: KSU COMM 322 (JCCC COMS 120) may be chosen as a Communication elective and meets the Human Diversity requirement.</i></p>		
K-State recommends choosing two of these courses (choose a combination that meets the three K-State 8 goals above):		
ECON 120 Principles of Microeconomic	ECON 231 Principles of Microeconomics	3
HIST 151 History of the U.S. to 1877 OR	HIST 140 U.S. History to 1877 OR	3
HIST 152 History of the U.S. Since 1877	HIST 141 U.S. History Since 1877	3
MUSIC 170 History of Rock and Roll OR	MUS 128 History of Rock and Roll OR	3
MUSIC 250 Introduction to Music	MUS 121 Intro to Music Listening	3
SPAN 101 Spanish I	FL 130 Elementary Spanish	5
<p>OR Choose 6 hours from the K-State 8 table beginning on page 12 to meet K-State areas if not met with other electives.</p>		
Agribusiness Management Option		
BIOL 455 General Microbiology*	BIOL 231/232 Microbiology*/Lab*	3/2
FDSCI Fundamentals of Food Processing	HMGT/SAG 170 Value-Added Production	3
ME 212 Engineering Graphics	ENGR 131 Engineering Graphics: AutoCAD*	4
Animal & Human Health Product Manufacturing Option		
BIOL 455 General Microbiology*	BIOL 231/232 Microbiology*/Lab*	3/2
FDSCI Fundamentals of Food Processing	HMGT/SAG 170 Value-Added Production	3
Precision Agriculture, Production Agriculture and Water Management Options		
ME 212 Engineering Graphics	ENGR 131 Engineering Graphics: AutoCAD*	4
<p><i>Note: ATM 536 taken at ESU meets the requirement for Ethical Reasoning and Responsibility.</i></p>		

Computer Science (CS) (B.S.) 120 hours required for the KSU B.S. degree










































(No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses:

K-State Requirement	JCCC Equivalent	JCCC Hrs
CIS 200 Programming Fundamentals 	CS 201 Concepts of Programming Algorithms Using C#*  OR CS 205 Concepts of Programming Algorithms using Java*  OR CS 236 Object-Oriented Programming Using C#* 	4 4 4
CIS 301 Logical Foundations of Programming 	CS 210 AND CS 211 Discrete Structures I* & II* 	3/3
COMM 105 Public Speaking	COMS 121 Public Speaking	3
Communication Elective (3 hours) Choose one:		
COMM 322 Interpersonal Comm.  	COMS 120 Interpersonal Communication  	3
COMM 326 Group Communication 	No JCCC equivalent for COMM 326	-
MANGT 420 Principles of Management 	BUS 141 Principles of Management 	3
THTRE 261 Fundamentals of Acting  	THEA121 Fundamentals of Acting   OR THEA130 ACTING I  	3
THTRE 265 Fundamentals of Improv. I, II 	No JCCC Equivalent for THTRE 265	-
ECE 241 Introduction to Computer Engineering 	ELEC 227 Digital Electronics II* 	4
ECON 110 Principles of Macroeconomics  	ECON 230 Principles of Macroeconomics  	3
ENGL 100 Expos Writing	ENGL 121 Composition I*	3
ENGL 200 Expos Writing II	ENGL 122 Composition II*	3
12 hours of approved H&SS Electives. Choose courses to meet these 3 K-State 8 areas if not met with other electives:  <i>Aesthetic Interpretation</i>  <i>Historical Perspectives</i>  <i>Human Diversity within the U.S.</i>		
K-State recommends choosing a combination of these courses to meet the three K-State 8 goals above.		
SOCIO 211 Intro to Sociology   OR (Technical elective for Cybersecurity option)	SOC 122 Intro to Sociology   OR	3
HIST 151 History of the U.S. to 1877   OR	HIST 140 U.S. History to 1877   OR	3
HIST 152 History of the U.S. Since 1877  	HIST 141 U.S. History Since 1877  	3
ENGL 251 Introduction to Literature 	ENGL 130 Introduction to Literature* 	3
HIST 111 World History to 1450  	HIST 151 World History: Traditional  	3
OR Choose 12 hours from the K-State 8 table beginning on page 12 to meet K-State areas   		
PSYCH 110 General Psychology   (unrestricted elective or additional H&SS recommended by K-State)	PSYC 130 Intro to Psychology  	3
MATH 220 Analytic Geometry and Calculus I 	MATH 241 Calculus I* 	5
MATH 221 Analytic Geometry and Calc. II 	MATH 242 Calculus II* 	5
5 Science with Lab/Math electives	MATH 243 Calculus III* 	5
MATH 222 Analytic Geometry & Calculus III 	MATH 254 Differential Equations* 	4
MATH 340 Elementary Differential Equations 	CHEM 124/125 General Chemistry I*/Lab*  	4/1
CHM 210 Chemistry I  	CHEM 131/132 General Chemistry II Lecture*/Lab*  	4/1
CHM 230 Chemistry II  	BIOL 121 Biology for Non-Majors   OR	4
BIOL 101 Concepts of Biology   OR	BIOL 135 Principles of Cell and Molecular Biology  	4
BIOL 198 Principles of Biology  		
<i>Note: CIS 415 taken at KSU meets the  Ethical Reasoning and Responsibility Requirement.</i>		

**Construction Science and Management (CNSM) (B.S.) 124 hours required for the K-State B.S. degree
(No more than half can be completed at JCCC - See Transferability of Courses on page 1)**











Recommended JCCC Courses:







































































K-State Requirement	JCCC Equivalent	JCCC Hrs
ENGL 100 Expos Writing	ENGL 121 Composition I*	3
ENGL 200 Expos Writing II	ENGL 122 Composition II*	3
ECON 110 Principles of Macroeconomics 	ECON 230 Principles of Macroeconomics 	3
COMM 105 Public Speaking	COMS 121 Public Speaking	3
6 hours of H&SS Electives to meet K-State 8 <i>Human Diversity within the U.S.</i> 		
K-State recommends including at least one of the following courses:		
SOCIO 211 Intro to Sociology   OR	SOC 122 Intro to Sociology   OR	3
HIST 151 History of the U.S. to 1877   OR	HIST 140 U.S. History to 1877   OR	3
HIST 152 History of the U.S. Since 1877  	HIST 141 U.S. History Since 1877  	3
OR Choose 6 hours (with one course meeting Human Diversity within the U.S.  requirement) from the K-State 8 Table beginning on page 12		
^MATH 205 General Calculus & Linear Algebra 	^MATH 231 Business and Applied Calculus I* 	3
STAT 350 Business and Economic Statistics 	MATH 285 Statistics for Business* 	4
^PHYS 113 General Physics I  	^PHYS 130 College Physics I*  	5
^PHYS 114 General Physics II  	^PHYS 131 College Physics II*  	5
ACCTG 231 Accounting for Business Operations 	^ACCT 121 Accounting I and ACCT 122 Accounting II* (not direct equivalent, but can sub for ACCTG 231) 	3/3
MANGT 420 Principles of Management 	BUS 141 Principles of Management 	3
MANGT 430 Business Law I  	BLAW 261 Business Law I*  	3
MKTG 400 Introduction to Marketing  (Management Elective)	MKT 230 Marketing 	3
CNS 550 Construction Safety	CMGT 150 Construction Safety/OSHA-30	3
<i>Note: CNS 110 taken at KSU meets these two requirements:  Aesthetic Interpretation and  Historical Perspectives. CNS 542 taken at KSU meets the  Ethical Reasoning and Responsibility requirement.</i>		

^Important to complete in semesters 1 & 2 to satisfy prerequisites and stay on pace for a 4-year completion. Expect 3 more years at K-State after transfer to complete CNS Degree.

**Cybersecurity (CYS) (B.S.) 120 hours required for the K-State B.S. degree
(No more than half can be completed at JCCC - See Transferability of Courses on page 1)**





Recommended JCCC Courses:

























K-State Requirement	JCCC Equivalent	JCCC Hrs
Required CIS Courses (35 hours) The following courses have JCCC Equivalents:		
CIS 200 Programming Fundamentals 	CS 201 Concepts of Programming Algorithms using C# *  OR	4
	CS 205 Concepts of Programming Algorithms using Java*  OR	4
	CS 236 Object-Oriented Programming Using C#* 	4
CIS 301 Logical Foundations of Programming 	CS 210 AND CS 211 Discrete Structures I* & II* 	3/3
Additional cybersecurity courses (15 hours) - No JCCC Equivalents for these courses		
Quantitative Courses (14 hours) The following courses have JCCC Equivalents:		
MATH 220 Analytic Geometry and Calculus I 	MATH 241 Calculus I* 	5
MATH 221 Analytic Geometry and Calculus II 	MATH 242 Calculus II* 	5

...Cybersecurity continuation		
Other required courses (26-27 hours) The following courses have JCCC Equivalents:		
ECE 241 Introduction to Computer Engineering 	ELEC 227 Digital Electronics II* 	4
ENGL 100 Expository Writing	ENGL 121 Composition I*	3
ENGL 200 Expos Writing II	ENGL 122 Composition II*	3
COMM 105 Public Speaking	COMS 121 Public Speaking	3
COMM 322 Interpersonal Comm.  	COMS 120 Interpersonal Communication  	3
ECON 110 Principles of Macroeconomics  	ECON 230 Principles of Macroeconomics  	3
SOCIO 211 Intro to Sociology  	SOC 122 Intro to Sociology  	3
Humanities and Social Science Electives (6 hours in addition to SOCIO 211 and K-State CRIM 500)		
Choose 6 hours from the K-State 8 Table beginning on page 12 to meet these two K-State 8 areas:  <i>Aesthetic Interpretation</i>  <i>Historical Perspectives</i>		
Math/Science Electives (17 hours, must include at least one course at the 300 level or above. The following courses have JCCC Equivalents:		
BIOC 521 General Biochemistry	CHEM 250 Biochemistry	4
BIOL 198 Principles of Biology  	BIOL 135 Princ. of Cell & Molecular Biology  	4
BIOL 401 Organismic Biology 	BIOL 150 Biology of Organisms* 	5
BIOL 455 General Microbiology  	BIOL 231/232 Microbiology*/Lab  	3/2
CHM 210 Chemistry I  	CHEM 124/125 General Chemistry I*/Lab*  	4/1
CHM 230 Chemistry II  	CHEM 131/132 General Chem. II Lecture*/Lab*  	4/1
CHM 350/351 General Organic Chem/Lab   (Biological and Environmental Options only)	CHEM 140 Princ of Organic & Biological Chem*   CHEM 220 Organic Chemistry I*   CHEM 221 Organic Chemistry II*  	5 5 5
GEOL 100/103 Earth in Action/Lab  	GEOS 130 General Geology  	5
MATH 222 Analytic Geometry & Calculus III 	MATH 243 Calculus III* 	5
MATH 340 Elementary Differential Equations 	MATH 254 Differential Equations* 	4
PHYS 113 General Physics I   OR	PHYS 130 College Physics I*   OR	5
PHYS 213 Engineering Physics I  	PHYS 220 Engineering Physics I*  	5
PHYS 114 General Physics II   OR	PHYS 131 College Physics II*   OR	5
PHYS 214 Engineering Physics II  	PHYS 221 Engineering Physics II*  	5
One of the following two-semester sequences must be included:		
BIOL 198 and BIOL 401	BIOL 135 and BIOL 150	4 & 5
CHM 210 and CHM 230	CHEM 124/125 and CHEM 131/132	4/1&4/1
PHYS 213 and PHYS 214	PHYS 220 and PHYS 221	5 & 5
PHYS 223 and PHYS 224	No JCCC Equivalents	--
One of the following mathematics courses must be included:		
MATH 222 Analytic Geometry & Calculus III 	MATH 243 Calculus III* 	5
MATH 340 Elementary Differential Equations 	MATH 254 Differential Equations* 	4
MATH 506, 511, 512, 515, 551, 572, 633 and STAT 511 are other options that can be taken at ESU, but there are no equivalents at JCCC for those courses.		
Unrestricted electives (6-7) hours to reach the 120 hours required for the B.S. degree.		

Recommended courses to be taken at JCCC for the following K-State Engineering Degrees - Architectural, Biological Systems, Biomedical, Chemical, Civil, Computer, Electrical, Environmental, Industrial and Mechanical Engineering.
























Note: The following K-State 8 requirements are met with these courses:

-  Empirical and Quantitative Reasoning
-  Natural and Physical Sciences
-  Social Sciences
-  Global Issues and Perspectives

K-State Requirement	JCCC Equivalent	JCCC Hrs
CHM 210 Chemistry I  	CHEM 124/125 General Chemistry I*/Lab*  	4/1
COMM 105 Public Speaking	COMS 121 Public Speaking	3
ECON 110 Principles of Macroeconomics  	ECON 230 Principles of Macroeconomics  	3
ENGL 100 Expository Writing I Architectural Engineering requires only ENGL 200 (JCCC ENGL 122 Composition II*)	ENGL 121 Composition I*	3
Special Note for ENGL 100 - If a student earns a C or lower grade in ENGL 100 equivalent, they must retake ENGL 100 to get an A or B grade, or take ENGL 200 (JCCC ENGL 122*). This is due to the prerequisite for ENGL 415, a required course that engineering students will take as a Junior or Senior at KSU. If both ENGL 100 and 200 must be taken, the additional 3 credit hours do not count towards the total credit hours required for graduation.		
MATH 220 Analytic Geometry and Calculus I 	MATH 241 Calculus I* 	5
MATH 221 Analytic Geometry and Calculus II 	MATH 242 Calculus II* 	5
MATH 222 Analytic Geometry & Calculus III 	MATH 243 Calculus III* 	5
MATH 340 Elementary Differential Equations  (All except Industrial Engineering)	MATH 254 Differential Equations* 	4
PHYS 213 Engineering Physics I  	PHYS 220 Engineering Physics I*  	5
PHYS 214 Engineering Physics II  	PHYS 221 Engineering Physics II*  	5

Architectural Engineering (ARE) (B.S.) 128 hours required for the K-State B.S. degree (No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses (in addition to courses listed in table above):

K-State Requirement	JCCC Equivalent	JCCC Hrs
3 hours of Humanities or Social Science Electives to meet K-State 8 <i>Human Diversity within the U.S.</i> 		
K-State recommends one of the following courses:		
SOCIO 211 Intro to Sociology   OR	SOC 122 Intro to Sociology   OR	3
HIST 151 History of the U.S. to 1877   OR	HIST 140 U.S. History to 1877   OR	3
HIST 152 History of the U.S. Since 1877  	HIST 141 U.S. History Since 1877  	3
OR Choose 3 Hours of Human Diversity within the U.S.  from the K-State 8 Table beginning on page 12		
ART 180 2-Dimensional Drawing  OR	ART 124 Design 2D  OR	3
ART 190 Drawing I  OR	ART 130 Drawing I  OR	3
ART 200 3-Dimensional Design 	ART 127 Design 3D* 	3
ENGL 200 Expository Writing II	ENGL 122 Composition II*	3
CE 333 Statics	ENGR 251 Statics*	3
ME 512 Dynamics (Engineering Elective)	ENGR 254 Dynamics* (Engineering Elective)	3
<i>Note: CNS 110 taken at KSU meets the  Historical Perspectives requirement. ARE 460 taken at KSU meets the  Ethical Reasoning and Responsibility Requirement and CNS 110 taken at KSU meets the  Historical Perspectives Requirement to complete the K-State 8.</i>		

Biological Systems Engineering (B.S.) 127 hours required for the K-State B.S. degree
 (No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses (in addition to courses listed in table on page 6):

K-State Requirement	JCCC Equivalent	JCCC Hrs
6 hours of Humanities or Social Science Electives to meet these three K-State 8 areas: Aesthetic Interpretation Historical Perspectives Human Diversity within the U.S.		
K-State recommends the following courses:		
HIST 151 History of the U.S. to 1877 OR	HIST 140 U.S. History to 1877 OR	3
HIST 152 History of the U.S. Since 1877	HIST 141 U.S. History Since 1877	3
ENGL 251 Introduction to Literature	ENGL 130 Introduction to Literature*	3
OR Choose 6 hours meeting these three requirements from the K-State 8 Table beginning on page 12		
BIOL 198 Principles of Biology	BIOL 135 Principles of Cell & Molecular Biology	4
BIOL 455 General Microbiology	BIOL 230/231 Microbiology*/Lab* (Requirement for Biological Option. Check with KSU advisor to see if BIOL 230/231 could count as Track Elective for Environmental and Machine Systems Options)	3/2
CHM 230 Chemistry II	CHEM 131/132 General Chem II Lecture*/Lab*	4/1
CHM 350/351 General Organic Chem/Lab (Biological and Environmental Options only)	CHEM 140 Principles of Organic & Biological Chemistry* CHEM 220 Organic Chemistry I* CHEM 221 Organic Chemistry II*	5 5 5
Biological Option requires either CE 333 Statics or CE 530 Statics and Dynamics Environmental Option – check with K-State Advisor Machine Systems Option requires CE 333 Statics	K-State CE 333 Statics = JCCC ENGR 251 Statics There is no JCCC Equivalent for K-State CE 530	3
ME 212 Engineering Graphics Machine Systems Option only	ENGR 131 Engineering Graphics: AutoCAD* Machine Systems Option only	4
ME 512 Dynamics Requirement for Machine Systems Option, Could count as Track or Engineering Elective for Biological or Environmental Options	ENGR 254 Dynamics* Requirement for Machine Systems Option Could count as Track or Engineering Elective for Biological or Environmental Options	3
<i>Note: BAE 536 taken at K-State meets the Ethical Reasoning and Responsibility Requirement to complete the K-State 8.</i>		

Biomedical Engineering (BME) (B.S.) 128 hours required for the KSU B.S. degree
 (No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses (in addition to courses listed in table on page 6):

K-State Requirement	JCCC Equivalent	JCCC Hrs
3 hours of Humanities or Social Science electives to meet K-State Area Aesthetic Interpretation		
K-State recommends:		
ENGL 251 Introduction to Literature	ENGL 130 Introduction to Literature*	3
OR Choose 3 hours from K-State 8 table beginning on page 12 to meet		
BIOL 198 Principles of Biology	BIOL 135 Principles of Cell and Molecular Biology	4
CHM 230 Chemistry II	CHEM 131/132 General Chemistry II Lecture*/Lab*	4/1
CIS 200 Programming Fundamentals	CS 201 Concepts of Programming Algorithms using C#* OR CS 205 Concepts of Programming Algorithms using Java* OR CS 236 Object-Oriented Programming Using C#*	4 4 4
<i>Note: The following courses taken at K-State complete the K-State 8.</i>		
BME 590 Ethical Reasoning and Responsibility BME 200 Historical Perspectives and Human Diversity within the U.S.		

Chemical Engineering (CHE) (B.S.) 128 hours required for the K-State B.S. degree

(No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses (in addition to courses listed in table on page 6):

K-State Requirement	JCCC Equivalent	JCCC Hrs
15 hours of Humanities or Social Science Electives (with 6 of the 15 hours being 300 level or higher) to meet these three K-State 8 areas: <i>Aesthetic Interpretation</i> <i>Historical Perspectives</i> <i>Human Diversity within the U.S.</i>		
K-State recommends these courses:		
SOCIO 211 Intro to Sociology OR	SOC 122 Intro to Sociology OR	3
HIST 151 History of the U.S. to 1877 OR	HIST 140 U.S. History to 1877 OR	3
HIST 152 History of the U.S. Since 1877	HIST 141 U.S. History Since 1877	3
ENGL 251 Introduction to Literature	ENGL 130 Introduction to Literature*	3
PLUS 9 additional hours of approved H&SS electives with 6 hours of those hours being 300 level		
OR Choose 15 hours from K-State 8 table beginning on page 12 to meet , with 6 of the 15 hours 300 level or higher		
BIOL 455 General Microbiology (Chemistry/biochemistry/biology elective)	BIOL 231/232 Microbiology*/Lab* (Chemistry/biochemistry/biology elective)	3/2
CHM 230 Chemistry II	CHEM 131/132 General Chemistry II Lecture*/Lab*	4/1
BIOC 521 General Biochemistry (Chemistry/biochemistry/biology elective)	CHEM 250 Biochemistry* (Chemistry/biochemistry/biology elective)	4
CE 333 Statics and ME 512 Dynamics	ENGR 251 Statics and ENGR 254 Dynamics*	3 3
(Counts as Engineering elective if both taken)	(Counts as Engineering elective if both taken)	
<i>Note: CHE 571 taken at K-State meets the Ethical Reasoning and Responsibility requirement to complete the K-State 8.</i>		

Civil Engineering (CE) (B.S.) 128 hours required for the K-State B.S. degree

(No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses (in addition to courses listed in table on page 6):

K-State Requirement	JCCC Equivalent	JCCC Hrs
6 hours of Humanities or Social Science Electives to meet these two K-State 8 areas: <i>Aesthetic Interpretation</i> <i>Human Diversity within the U.S.</i>		
K-State recommends:		
SOCIO 211 Intro to Sociology OR	SOC 122 Intro to Sociology OR	3
HIST 151 History of the U.S. to 1877 OR	HIST 140 U.S. History to 1877 OR	3
HIST 152 History of the U.S. Since 1877	HIST 141 U.S. History Since 1877	3
ENGL 251 Introduction to Literature	ENGL 130 Introduction to Literature*	3
OR Choose 6 hours from K-State 8 table beginning on page 12 to meet		
CHM 230 Chemistry II	CHEM 131/132 General Chemistry II Lecture*/Lab*	4/1
CE 333 Statics	ENGR 251 Statics*	3
GEOL 100 Earth in Action	GEOS 130 General Geology	5
ME 512 Dynamics	ENGR 254 Dynamics*	3
<i>Note: DEN 325 taken at KSU meets the requirement for Ethical Reasoning and Responsibility to complete the K-State 8.</i>		

Computer Engineering (CMPEN) (B.S.) 128 hours required for the K-State B.S. degree
 (No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses (in addition to courses listed in table on page 6):

K-State Requirement	JCCC Equivalent	JCCC Hrs
9 hours of Humanities or Social Science Electives to meet these three K-State 8 areas: Aesthetic Interpretation Historical Perspectives Human Diversity within the U.S. K-State recommends the following courses:		
HIST 151 History of the U.S. to 1877 OR	HIST 140 U.S. History to 1877 OR	3
HIST 152 History of the U.S. Since 1877	HIST 141 U.S. History Since 1877	3
ENGL 251 Introduction to Literature	ENGL 130 Introduction to Literature*	3
PLUS another 3 hours of H&SS Electives courses		
OR Choose 9 hours meeting these three requirements from the K-State 8 Table beginning on page 12		
CIS 200 Programming Fundamentals	CS 201 Concepts of Programming Algorithms Using C#* OR	4
	CS 205 Concepts of Programming Algorithms using Java* OR	4
	CS 236 Object-Oriented Programming Using C#*	4
ECE 241 Introduction to Computer Engineering	ELEC 227 Digital Electronics II*	4
Note: ECE 590 meets the requirement for Ethical Reasoning and Responsibility to complete the K-State 8.		

Electrical Engineering (EE) (B.S.) 128 hours required for the K-State B.S. degree
 (No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses (in addition to courses listed in table on page 6):

K-State Requirement	JCCC Equivalent	JCCC Hrs
9 hours of Humanities or Social Science Electives to meet these three K-State 8 areas: Aesthetic Interpretation Historical Perspectives Human Diversity within the U.S. K-State recommends the following courses:		
HIST 151 History of the U.S. to 1877 OR	HIST 140 U.S. History to 1877 OR	3
HIST 152 History of the U.S. Since 1877	HIST 141 U.S. History Since 1877	3
ENGL 251 Introduction to Literature	ENGL 130 Introduction to Literature*	3
PLUS another 3 hours of H&SS Electives courses		
K-State recommends:		
PSYCH 110 General Psychology OR	PSYC 130 Intro to Psychology OR	3
SOCIO 211 Intro to Sociology	SOC 122 Intro to Sociology	3
OR Choose 9 hours from the K-State 8 table beginning on page 12 to meet		
BIOL 198 Principles of Biology OR	BIOL 135 Principles of Cell and Molecular Biology OR	4
CHM 230 Chemistry II	CHEM 131/132 General Chemistry II Lecture*/Lab*	4/1
CIS 209 Computer Programming for Engineers	CS 200 Concepts of Programming Algorithms Using C++* OR	4
	CS 235 Object-Oriented Programming Using C++*	4
ECE 241 Introduction to Computer Engineering	ELEC 227 Digital Electronics II*	4
Note: ECE 590 meets the requirement for Ethical Reasoning and Responsibility to complete the K-State 8.		

**Environmental Engineering (ENVE) (B.S.) 126 hours required for the K-State B.S. degree
(No more than half can be completed at JCCC - See Transferability of Courses on page 1)**

Recommended JCCC Courses (in addition to courses listed in table on page 6):

K-State Requirement	JCCC Equivalent	JCCC Hrs
6 hours of Humanities or Social Science Electives to meet these three K-State 8 areas: <i>Aesthetic Interpretation</i> <i>Historical Perspectives</i> <i>Human Diversity within the U.S.</i>		
<i>K-State recommends the following courses:</i>		
HIST 151 History of the U.S. to 1877 OR	HIST 140 U.S. History to 1877 OR	3
HIST 152 History of the U.S. Since 1877	HIST 141 U.S. History Since 1877	3
ENGL 251 Introduction to Literature	ENGL 130 Introduction to Literature*	3
OR Choose 6 hours meeting these three requirements from the K-State 8 Table beginning on page 12		
BIOL 198 Principles of Biology	BIOL 135 Principles of Cell and Molecular Biology	4
BIOL 455 General Microbiology (Biological Science elective)	BIOL 231/232 Microbiology*/Lab* (Biological Science elective)	3/2
CHM 230 Chemistry II	CHEM 131/132 Gen Chemistry II Lecture*/Lab*	4/1
<i>Note: ENVE 536 completed at K-State will meet the Ethical Reasoning and Responsibility requirement to complete the K-State 8</i>		

Industrial Engineering (IE) (B.S.) 124 hours required for the K-State B.S. degree




























(No more than half can be completed at JCCC - See Transferability of Courses on page 1)

Recommended JCCC Courses (in addition to courses listed in table on page 6):

K-State Requirement	JCCC Equivalent	JCCC Hrs
6 hours of Humanities or Social Science Electives to meet these three K-State 8 areas: <i>Aesthetic Interpretation</i> <i>Historical Perspective</i>		
<i>K-State recommends:</i>		
HIST 151 History of the U.S. to 1877 OR	HIST 140 U.S. History to 1877 OR	3
HIST 152 History of the U.S. Since 1877	HIST 141 U.S. History Since 1877	3
ENGL 251 Introduction to Literature	ENGL 130 Introduction to Literature*	3
OR Choose 6 hours from the K-State 8 table beginning on page 12 to meet		
ACCTG 231 Accounting for Business Operations	ACCT 222 Managerial Accounting*	3
BIOL 198 Principles of Biology OR	BIOL 135 Princ. of Cell and Molecular Biology OR	4
CHM 230 Chemistry II	CHEM 131/132 Gen Chemistry II Lecture*/Lab*	
MANGT 420 Principles of Management	BUS 141 Principles of Management	4/1
CIS 209 Computer Programming for Engineers	CS 200 Concepts of Programming Algorithms Using C++* OR	4
	CS 235 Object-Oriented Programming Using C++*	4
ECON 110 Principles of Macroeconomics OR	ECON 230 Principles of Macroeconomics OR	3
ECON 120 Principles of Microeconomics (ECON 110 recommended to meet)	ECON 231 Principles of Microeconomics (ECON 230 recommended to meet)	3
CE 333 Statics	ENGR 251 Statics*	3
IMSE 250 Intro to Manufacturing Processes & Syst.	MFAB 152 Manufacturing Materials and Processes	3
MKTG 400 Introduction to Marketing	MKT 230 Marketing	3
ME 212 Engineering Graphics	ENGR 131 Engineering Graphics: AutoCAD*	4
ME 512 Dynamics	ENGR 254 Dynamics*	3
<i>Note: The following courses taken at KSU complete the K-State 8.</i>		
<i>IMSE 201 Ethical Reasoning and Responsibility IMSE 623 Human Diversity within the U.S. </i>		





















**Mechanical Engineering (ME) (B.S.) 125 hours required for the K-State B.S. degree
(No more than half can be completed at JCCC - See Transferability of Courses on page 1)**





































Recommended JCCC Courses (in addition to courses listed in table on page 6):




















K-State Requirement	JCCC Equivalent	JCCC Hrs
9 hours of Humanities or Social Science Electives to meet these three K-State 8 areas:  <i>Aesthetic Interpretation</i>  <i>Historical Perspectives</i>  <i>Human Diversity within the U.S.</i>		
<i>K-State recommends the following courses:</i>		
HIST 151 History of the U.S. to 1877   OR	HIST 140 U.S. History to 1877   OR	3
HIST 152 History of the U.S. Since 1877  	HIST 141 U.S. History Since 1877  	3
ENGL 251 Introduction to Literature 	ENGL 130 Introduction to Literature* 	3
PLUS another 3 hours of H&SS Electives courses. <i>K-State recommends:</i>		
PSYCH 110 General Psychology   OR	PSYC 130 Intro to Psychology   OR	3
SOCIO 211 Intro to Sociology  	SOC 122 Intro to Sociology  	3
OR Choose 9 hours from the K-State 8 table beginning on page 12 to meet   		
ME 212 Engineering Graphics	ENGR 131 Engineering Graphics: AutoCAD*	4
CE 333 Statics 	ENGR 251 Statics* 	3
ME 512 Dynamics	ENGR 254 Dynamics*	3
<i>Note: ME 574 meets the requirement for  Ethical Reasoning and Responsibility to complete the K-State 8.</i>		


HUMANITIES AND SOCIAL SCIENCE ELECTIVES

Humanities and Social Science electives for the engineering degrees must be chosen from the [Humanities and Social Science Electives](#) list approved by K-State engineering faculty. Courses in the following table are approved Humanities and Social Science Electives for K-State Engineering. Students should choose courses that complete the K-State 8 General Education requirements. While a course of less than 3 hours may meet a K-State 8 requirement, additional hours may be required to meet K-State degree requirements.




















K-State Course	JCCC Equivalent	JCCC Hrs					Course suggested by K-State ENGR
ANTH 260 Intro Archaeology	ANTH 142 World Prehistory OR ANTH 144 Archeology	3					X
ANTH 220 Intro to Linguistic Anthropology	ANTH 165 Linguistic Anthropology	3					
ART 180 2D Design	ART 124 Design 2D	3					X
ART 190 Drawing	ART 130 Drawing I	3					X
ART 195 Survey of Western Art History I	ARTH 180 Art History: Ancient to Medieval	3					X
ENGL 251 Intro To Literature	ENGL 130 Introduction to Literature*	3					X
ENGL 295 Selected Stdy/Enl	ENGL 205 Bible as Literature*	3					
ENGL 295 Selected Stdy/Enl	ENGL 215 US Latino and Latina Literature*	3					
ENGL 295 Selected Stdy/Enl	ENGL 217 Literature by Women*	3					
ENGL 295 Selected Stdy/Enl	ENGL 227 Introduction to Poetry*	3					
ENGL 295 Selected Stdy/Enl	ENGL 230 Introduction to Fiction*	3					
ENGL 295 Selected Stdy/Enl	ENGL 235 Drama as Literature*	3					
ENGL 260 British Literature	ENGL 236 British Literature to 1800* OR ENGL 237 British Literature after 1800*	3					
ENGL 295 Selected Stdy/Enl	ENGL 243 Literature of Science Fiction*	3					


















HUMANITIES AND SOCIAL SCIENCE ELECTIVES cont.							
K-State Course	JCCC Equivalent	JCCC Hrs					Course suggested by K-State ENGR
ENGL 295 Selected Study/Engl	ENGL 244 Literature of American Popular Music	3					
ENGL 280 Studies in World Literature and Culture	ENGL 251 World Literature to 1620*	3					
Foreign Language (Except Native Language & Sign Lang.)	**See Note below about JCCC FL and MUS courses						
ENGL 220 Fiction into Film	FMS 275 Intro to Film and Media Production*	3					X
GEOG 100 World Regional Geography	GEOS 145 World Regional Geography	3					
HIST 200 Top/History F & S	HIST 120 Local & Kansas History	3					
HIST 101 Western Civ: The Rise of Europe	HIST 125 West Civ: Ancient World to The Renaissance	3					
HIST 102 Western Civ: The Modern Era	HIST 126 Western Civ: Scientific Revolution to the Modern Age OR HIST 130 European History Since 1789	3					
HIST 200 Top/History F & S	HIST 129 Early Modern Europe 1500-1789	3					
HIST 151 History of the US to 1877	HIST 140 US History to 1877	3					X
HIST 152 History of the US Since 1877	HIST 141 US History Since 1877	3					X
HIST 111 World Hist to 1450	HIST 151 World History I: Traditional	3					X
HIST 112 World Hist From 1450	HIST 152 World History 2: Modern	3					X
HIST 200 Top/History F & S	HIST 162 Modern Latin America	3					
HIST 200 Top/History F & S	HIST 180 North American Indian History	3					
HIST 200 Top/History F & S	HIST 250 American West	3					
HIST 200 Top/History F & S	HIST 260 Women in U.S. History	3					
MC 110 Mass Communication in Society	JOUR 120 Mass Media & Society	3					X
LEAD 212 Intro to Leadership Concepts	LEAD 130 Leadership & Civic Engagement	3					X
MUSIC 250 Intro to Music	MUS 121 Intro to Music Listening	3					X
MUSIC 170 History of Rock & Roll	MUS 128 History of Rock and Roll Music	3					X
**See Note below about JCCC FL and MUS courses							
PHILO 100 Intro Philosophical Problems	PHIL 121 Intro to Philosophy	3					X
PHILO 130 Intro/Moral Philo	PHIL 128 Environmental Ethics OR PHIL 143 Ethics	3					X
PHILO 145 History/Intro/Philo	PHIL 142 History of Asian Philosophy	3					
PHILO 115 Intro Philo Religion	PHIL 176 Philosophy of Religion	3					X
POLSC 115 US Politics	POLS 124 American National Government	3					X
POLSC 155 Introduction to Political Thought	POLS 192 Political Theory						

HUMANITIES AND SOCIAL SCIENCE ELECTIVES cont.							
K-State Course	JCCC Equivalent	JCCC Hrs					Course suggested by K-State ENGR
HDFS 110 Intro Human Development	PSYC 218 Human Development*	3					X
SOCIO 211 Intro to Sociology	SOC 122 Intro to Sociology	3					X
THTRE 270 Intro to Theatre	THEA 120 Intro to Theatre	3					X
THTRE 261 Fundamentals Acting	THEA 121 Fundamentals of Acting OR THEA 130 Acting I*	3					X
THTRE 211 Run Crew	THEA 123 Improvisation for the Theater*	2					
THTRE 211 Run Crew	THEA 133 Technical Practicum I	1					
THTRE 211 Run Crew	THEA 134 Performance Practicum	1					
THTRE 260 Stage Movement	THEA 137 Movement for Stage	3					
THTRE 270 Intro to Theatre	THEA 232 Intro to Stage Direction and Management*	3					X
THTRE 211 Run Crew	THEA 233 Technical Practicum II*	1					
GWSS 105 – Intro to Gender, Women and Sexuality Studies	WGS 201 Global Women’s Studies	3					X

****NOTE:** Most JCCC FL (other than native language and sign language) and most JCCC MUS courses meet the Aesthetic Interpretation requirement at K-State. Please refer to K-State Transfer Equivalency at <https://go.k-state.edu/equiv> and look for courses with the  tag. If a course is not marked with this tag, please check with K-State Engineering before enrolling. While a course of less than 3 hours may meet a K-State requirement, additional hours may be required to meet K-State degree requirements.

300 Level and Higher Humanities and Social Science Electives

K-State Course	JCCC Equivalent	JCCC Hrs					Course suggested by K-State ENGR
All Foreign Language Course 300 or Higher (except native language)	JCCC FL courses equivalent to 300 or higher level K-State foreign language courses, other than sign language or native language. See https://go.k-state.edu/equiv						
ART 345 Intro to Oil Painting	ART 135 Painting I	3					X
ART 365 Ceramics I	ART 142 Ceramics I	3					X
ART 340 Sculpture I	ART 145 Sculpture I	3					X
ART 370 Metalsmithing I	ART 148 Metal & Silversmithing I	3					X
ART 320 Water Media I	ART 172 Watercolor Painting	3					X
ART 325 Figure Drawing I	ART 231 Life Drawing I*	3					X
SOCIO 361 Criminal Justice Systems	CJ 121 Intro to Criminal Justice System	3					X
COMM 322 Interpersonal Communication	COMS 120 Interpersonal Communication	3					
COMM 480 Intercultural Communication	COMS 180 Intercultural Communication	3					X
ENGL 461 Introduction to Fiction Writing	ENGL 223 Introduction to Creative Writing*	3					
ENGL 381 American Survey I	ENGL 246 American Literature I*	3					
ENGL 382 American Survey II	ENGL 247 American Literature II*	3					

300 Level and Higher Humanities and Social Science Electives cont.							
K-State Course	JCCC Equivalent	JCCC Hrs					Course suggested by K-State ENGR
ENGL 355 Literature for Children	ENGL 232 Children's Literature*	3					
ENGL 350 Introduction to Shakespeare	ENGL 252 Introduction to Shakespeare*	3					X
HIST 330 History of East Asian Civilizations	HUM 165 Intro to Chinese Culture	3					X
PHILO 300 History of Ancient Philosophy	PHIL 154 History of Ancient Philosophy	3					
PHILO 301 History of Philosophy	PHIL 210 History of Modern Philosophy	3					
ART 395 Introduction to Digital Photography	PHOT 200 Fundamentals of Photography	3					X
POLSC 321 Kansas Politics and Government	POLS 126 State & Local Government	3					X
SOCIO 360 Social Problems	SOC 125 Social Problems	3					X
SOCIO 432 Community Organization & Leadership	SOC 240 Sociology of Community	3					
THTRE 300 Vocal Expression For Actors	THEA 131 Voice and Speech	3					
THTRE 361 Intermediate Acting	THEA 230 Acting II*	3					

* JCCC course has a prerequisite or corequisite.

It is the STUDENT'S RESPONSIBILITY to check for updates to all transfer information. This transfer guide is provided as a service and is updated as needed. Degree requirements at the four-year colleges are subject to change by those institutions. To ensure you have the most accurate up to date information about the program, it is imperative you meet with an advisor at the transfer institution.