

# Kansas City Kansas Community College

## Transfer Program to University of Kansas

### B.S. Electrical Engineering & Computer Science

(Computer Engineering, Computer Science, Electrical Engineering, Information Technology (Edward Campus only) and Interdisciplinary Computing)

Number to call at KU for advising: (785) 864-4487

Website: [www.eecs.ku.edu](http://www.eecs.ku.edu)

Transfer students must have at least a 2.5 GPA and proof of competency in calculus.

### Requirements (all students):

#### Computer Engineering:

KU Course Requirements	KCKCC Equivalents			
<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4		MA 122 Calculus and Analytical Geometry	5 GE12
MATH 126 Calculus 2	4		MA 123 Calculus and Analytical Geometry 2	5
MATH 127 Calculus 3	4		MA 224 Calculus and Analytical Geometry 3	5
MATH 220 Differential Equations	3		MATH 227 Differential Equations	3
MATH 290 Elementary Linear Algebra	2		No equivalent	

<b>ECONOMICS &amp; electives</b>				<b>Core</b>
<b>Choose One:</b>				
ECON 142 Princ of Microeconomics	3		ECON 230 Economics	3 GE3S
ECON 144 Princ of Macroeconomics	3		ECON 231 Economics 2	3 GE3S
<b>Electives-12 hours total of Humanities &amp; Social Science (must be GE3H, AE41, AE42 + one extra GE3H or GE3S)</b>				

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5		NASC 245 Engineering Physics	5 GE3N, GE11, GE12

#### Computer Science:

KU Course Requirements	KCKCC Equivalents			
<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4		MA 122 Calculus and Analytical Geometry	5 GE12
MATH 126 Calculus 2	4		MA 123 Calculus and Analytical Geometry 2	5
MATH 127 Calculus 3	4		MA 224 Calculus and Analytical Geometry 3	5
MATH 290 Elementary Linear Algebra	2		No equivalent	

<b>Humanities &amp; Social Science electives</b>				<b>Core</b>
<b>Electives-12 hours total of Humanities &amp; Social Science (must include 2 GE3H and 2 GE3S)</b>				

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5		NASC 245 Engineering Physics	5 GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4		NASC 246 Engineering Physics	5 GE3N
<b>Choose One:</b>				
CHEM 130 Chemistry	5		CHEM 111 College Chm with Lab	5 GE12, GE3N
CHEM 135 Chemistry 2	5		CHEM 112 College Chm with Lab	5 GE12, GE3N
GEOG 104 & 105 Princ Physic Geography			No equivalent	GE3N
GEOL 101 How the World Works	3		NASC 185 & 186 Physical Geology	5 GE3N

#### Electrical Engineering:

**KU Course Requirements****KCKCC Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 122 Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4	MA 123 Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4	MA 224 Calculus and Analytical Geometry 3	5	
MATH 220 Differential Equations	3	MATH 227 Differential Equations	3	
MATH 290 Elementary Linear Algebra	2	No equivalent		

<b>ECONOMICS &amp; electives</b>				<b>Core</b>
<b>Choose One:</b>				
ECON 142 Princ of Microeconomics	3	ECON 202 Principles of Microeconomics	3	GE3S
ECON 144 Princ of Macroeconomics	3	ECON 201 Principles of Macroeconomics	3	GE3S
<b>Electives-12 hours total of Humanities &amp; Social Science (must be GE3H, AE41, AE42 + one extra GE3H or GE3S)</b>				

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	NASC 245 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	NASC 246 Engineering Physics	5	GE3N
CHEM 130 Chemistry	5	CHEM 111 College Chm with Lab	5	GE12, GE3N

**Information Technology:****KU Course Requirements****KCKCC Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 101 College Algebra	3	MATH 105 College Algebra	3	GE12
<b>OR</b>				
MATH 104 Precalculus Mathematics	5	MATH 108 Pre-Calculus Mathematics	5	GE12
MATH S365 Elementary Statistics	3	MATH 115 Statistics	3	GE12

<b>ECONOMICS &amp; electives</b>				<b>Core</b>
ECON 104 Intro to Economics	3	No equivalent		GE3S
ENGL 362 Technical Writing	3	ENGL 206 Technical Writing	3	

<b>NATURAL SCIENCES-Choose one</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	NASC 245 Engineering Physics	5	GE3N, GE11, GE12
PHSX 114 College Physics	5	NASC 231 General Physics	5	GE3N, GE11, GE12
CHEM 130 Chemistry	5	CHEM 111 College Chm with Lab	5	GE12, GE3N
BIOL 150 Prn Molecular/Cellular	5	BIOL 135 Princ of Cell and Molecular Biology	5	GE3N

**Interdisciplinary Computing-Astronomy:****KU Course Requirements****KCKCC Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 122 Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4	MA 123 Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4	MA 224 Calculus and Analytical Geometry 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		
MATH 220 Differential Equations	3	MATH 227 Differential Equations	3	

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	NASC 245 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	NASC 246 Engineering Physics	5	GE3N
ASTR 191 Contemporary Astronomy	3	NASC 107 & 108 Intro to Astronomy	4	GE3N

**Interdisciplinary Computing-Biology:****KU Course Requirements****KCKCC Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 122 Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4	MA 123 Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4	MA 224 Calculus and Analytical Geometry 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
CHEM 130 Chemistry	5	CHEM 111 College Chm with Lab	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CHEM 112 College Chm with Lab	5	GE3N, GE12
BIOL 150 Prn Molecular/Cellular	5	BIOL 135 Princ of Cell and Molecular Biology	5	GE3N
BIOL 152 Princ of Organismal Biology	5	BIOL 225 Diversity of Organisms	5	GE3N

<b>ETHICS</b>				<b>Core</b>
PHIL 160 Intro to Ethics	3	PHIL 206 Ethics	3	AE51, GE11, GE3H

**Interdisciplinary Computing-Chemistry:****KU Course Requirements****KCKCC Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 122 Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4	MA 123 Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4	MA 224 Calculus and Analytical Geometry 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		
MATH 220 Differential Equations	3	MATH 227 Differential Equations	3	

<b>NATURAL SCIENCES</b>				<b>Core</b>
CHEM 130 Chemistry	5	CHEM 111 College Chm with Lab	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CHEM 112 College Chm with Lab	5	GE3N, GE12
PHSX 211 & 216 Engineering Physics	5	NASC 245 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	NASC 246 Engineering Physics	5	GE3N
CHEM 330 & 331 Organic Chemistry	5	CHEM 211 & 213 Organic Chemistry	5	

**Interdisciplinary Computing-Geography:****KU Course Requirements****KCKCC Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 122 Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4	MA 123 Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4	MA 224 Calculus and Analytical Geometry 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	NASC 245 Engineering Physics	5	GE3N, GE11, GE12

**Interdisciplinary Computing-Physics:****KU Course Requirements****KCKCC Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
--------------------	--	--	--	-------------

MATH 125 Calculus	4	MA 122 Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4	MA 123 Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4	MA 224 Calculus and Analytical Geometry 3	5	
MATH 220 Differential Equations	3	MATH 227 Differential Equations	3	
MATH 290 Elementary Linear Algebra	2	No equivalent		

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	NASC 245 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	NASC 246 Engineering Physics	5	GE3N

**Interdisciplinary Computing-Journalism:**

**KU Course Requirements**

**KCKCC Equivalents**

MATHEMATICS				Core
MATH 125 Calculus	4	MA 122 Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4	MA 123 Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4	MA 224 Calculus and Analytical Geometry 3	5	
MATH 220 Differential Equations	3	MATH 227 Differential Equations	3	
MATH 290 Elementary Linear Algebra	2	No equivalent		

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	NASC 245 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	5	NASC 246 Engineering Physics	5	GE3N

**KU Core Curriculum (additional requirements not covered by degree requirements)**

Additional courses that satisfy the KU Core are continuously updated and available at <http://kucore.ku.edu/courses>.

**KU Course Requirements**

**KCKCC Equivalents**

Goal 1: Critical Thinking and Quantitative Literacy (1 Unit from each outcome)				
Only Interdisciplinary Computing (Geography and Journalism needs to take one of these courses)				
Outcome 1		GE11		
ENGL 210 Intro to Poetry	3	ENGL 108 Intro to Poetry		3
ENGL 209 Intro to Fiction	3	ENGL 109 Intro to Fiction		3
ENGL 211 Intro to Drama	3	ENGL 212 Drama As Literature		3
HWC 204 Western Civilization	3	HIST 204 or 115 Western Civilization		3
HWC 205 Western Civilization 2	3	HIST 205 or 116 Western Civilization 2		3
COMS 230 Fundamentals of Debate	3	SPCH 160 Debate		3
PHIL 140 Intro to Philosophy	3	PHIL 103 Intro to Philosophy		3
PHIL 148 Reason and Argument	3	PHIL 105 Logic		3
SOC 160 Social Problems/American Values	3	SOSC 209 Social Problems		3
BLAW S301 Legal Aspects of Business	3	BUSN 204 Business Law		3

Goal 2: Communication (3 Units) -two from outcome 1 and one from outcome 2				
Outcome 1		GE21		
ENGL 101 Composition	3	ENGL 101 Composition		3
ENGL 102 Critical Reading and Writing	3	ENGL 102 Composition 2		3
ENGL 210 Intro to Poetry	3	ENGL 108 Intro to Poetry		3
ENGL 209 Intro to Fiction	3	ENGL 109 Intro to Fiction		3
ENGL 211 Intro to Drama	3	ENGL 212 Drama As Literature		3
Outcome 2		GE22		
COMS 130 Speaker-Audience Communication	3	SPCH 151 Public Speaking		3

Goal 3: Breadth of Knowledge (3 Units) -one from each category				
Arts & Humanities		GE3H		
ANTH 110 Intro to Archaeology	3	ANTH 105 Archaeology		3

CLSX 148 Greek and Roman Mythology	3		ENGL 135 World Mythology	3
			ENGL 105 Early World Literature	3
			ENGL 106 Modern World Literature	3
ENGL 210 Intro to Poetry	3		ENGL 108 Intro to Poetry	3
ENGL 209 Intro to Fiction	3		ENGL 109 Intro to Fiction	3
			ENGL 132 Science Fiction	3
			ENGL 221 Latino Literature and Culture	3
			ENGL 133 Women in Literature	3
			ENGL 136 Short Story	3
			ENGL 137 Bible As Lit: Old Testament	3
			ENGL 210 Early American Literature	3
			ENGL 211 Modern American Literature	3
ENGL 211 Intro to Drama	3		ENGL 212 Drama As Literature	3
			ENGL 214 African-American Literature	3
			ENGL 217 Major English Writers	3
			ENGL 218 Major English Writers 2	3
			ENGL 220 Native American Literature	3
			HIST 108 Religion in America	3
			HIST 107 Modern Europe	3
			HUMN 101 Intro To Humanities	3
			HUMN 102 Intro To Humanities 2	3
			HUMN 200 Foundtns Of Film & Theatre	3
			HIST 107 Intro to Modern Europe	3
			THTR 112 Dance History	3
ART 101 Drawing	3		FNAR 111 Drawing	3
REL 171 Religion in American Society	3		HIST 108 Religion in America	3
REL 104 Intro to Religious Studies	3		HUMN 207 Comparative Wrld Religions	3
HIST 121 Modern Latin America	3		HIST 112 Modern Latin America	3
PHIL 140 Intro to Philosophy	3		PHIL 103 Intro to Philosophy	3
THR 100 Intro to Theatre	3		THTR 101 Theatre Appreciation	3
THR 106 Intro to Acting	3		THTR 105 Introduction to Acting	3
			THTR 115 Acting I	3
HA 150 Western Art History	3		FNAR 102 Art History I	3
HA 151 Western Art History 2	3		FNAR 103 Art History 2	3
HIST 128 Hist US thrgh Civil War	3		HIST 104 United States To 1877	3
HIST 129 Hist of US After Civil War	3		HIST 105 United States Since 1877	3
<b>Social Sciences</b>			<b>GE3S</b>	
GEOG 102 Princ of Human Geography			GEOG 101 Intro to Cultural Geography	3
EPSY S305 Child Development	3		PSYC 202 Child Development	3
ANTH 108 Cultural Anthropology	3		ANTH 101 Intro Cultural Anthropology	3
COMS 244 Intr Personal Comm	3		SPCH 153 INTERPERSONAL Communications	3
ECON 142 Princ of Microeconomics	3		ECON 202 Principles of Microeconomics	3
ECON 144 Princ of Macroeconomics	3		ECON 201 Principles of Macroeconomics	3
POLS 110 Intro to US Politics	3		POSC 111 American National Govern	3
POLS 170 Intro to International Politics	3		POSC 102 International Relations	3
PSYC 104 General Psychology	3		PSYC 101 Psychology	3
SOC 104 Elements of Sociology	3		SOSC 107 Sociology	3
			PSYC 203 Human Development	3
PSYC 120 Personality	3		PSYC 204 Personality	3
ANTH 100 General Anthropology	3		ANTH 100 General Anthropology	3
			POSC 101 Intro To Political Science	3
SOC 220 Sociology of Families	3		SOSC 108 Sociology Of The Family	3
JOUR 101 Media and Society	3		JOUR 175 Intro to Mass Media	3
BLAW S301 Legal Aspects of Business			BUSN 204 Business Law	3

**Goal 4: Culture and Diversity (1 Unit from each outcome)**

<b>Outcome 1</b>			<b>AE41</b>	
AAAS 106 The Black Experience in America	3		HIST 106 Black History	3
SOC 160 Social Problems/ American Values	3		SOSC 209 Social Problems	3
WGSS 101 Intro to Wmn,Gnd,Sexu Studies	3		HUMN 150 Intro to Women's Studies	3

REL 171 Religion in American Society	3		HIST 108 Religion in America	3
SOC 104 Principals of Sociology	3		SOSC 107 Sociology	3
<b>Outcome 2</b>			<b>AE42</b>	
HWC 204 Western Civilization	3		HIST 204 or 115 Western Civilization	3
HWC 205 Western Civilization 2	3		HIST 205 or 116 Western Civilization 2	3
POLS 170 Intro to International Politics	3		POSC 102 International Relations	3
GEOG 102 Princ of Human Geography	3		GEOG 101 Intro to Cultural Geography	3
ANTH 108 Cultural Anthropology	3		ANTH 101 Intro Cultural Anthropology	3
REL 104 Intro to Religious Studies	3		HUMN 207 Comparative Wrld Religions	3
			HIST 103 Modern Asia	3
			ENGL 214 African-American Literature	3
			ENGL 220 Native American Literature	3
			ANTH 106 North American Indians	3
SPAN 212 Intermediate Spanish	3		LANG 243 Spanish	3
SPAN 216 Intermediate Spanish 2	3		LANG 244 Spanish 2	3
GERM 104 Elementary German	5		LANG 121 German	5
GERM 108 Elementary German 2	5		LANG 122 German 2	5
GERM 201 Intermediate German	3		LANG 223 German 3	3
GERM 202 Intermediate German 2	3		LANG 224 German 4	3

- In order to graduate in four years, a student must transfer to KU after one year
- Pass/Fail Policy. Only courses used to fulfill English, Humanities, and Social Science requirements will be accepted with a "P" grade
- \*PHSX 211 satisfies the PHSX 210 requirement for Engineering at KU
- "S" before a number (Ex. MATH S365) indicates the course will be satisfied but will not count toward the number of Junior/Senior (upper-level) hours required for graduation
- The requirements listed above are subject to annual change
- A maximum of 64 hours of community college course work can be applied toward a KU degree
- Courses with a grade of D or below do not transfer