

# Coffeyville 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):

The only classes listed are the ones that could be taken at a 2 year College.

### Computer Engineering:

#### KU Course Requirements

#### Coffeyville Equivalents

MATHEMATICS					<u>Core</u>
MATH 125 Calculus	4		MATH 115 Calculus with Analytic Geometry	5	GE12
MATH 126 Calculus 2	4		MATH 120 Calculus with Analytic Geometry 2	5	
MATH 127 Calculus 3	4		MATH 201 Calculus with Analytic Geometry 3	5	
MATH 220 Differential Equations	3		No Equivalent		
MATH 290 Elementary Linear Algebra	2		No Equivalent		

ECONOMICS & electives					<u>Core</u>
<b>Choose One:</b>					
ECON 142 Princ of Microeconomics	3		ECON 206 Prin Of Economics (Micro)	3	GE3S
ECON 144 Princ of Macroeconomics	3		ECON 205 Prin Of Economics (Macro)	3	GE3S
<b>Electives-12 hours total of Humanities &amp; Social Science (must be GE3H, AE41, AE42 + one extra GE3H or GE3S)</b>					

NATURAL SCIENCES					<u>Core</u>
PHSX 211 & 216 Engineering Physics	5		ENGR 210 Engineering Physics	5	GE3N, GE11, GE12

### Computer Science:

#### KU Course Requirements

#### Coffeyville Equivalents

MATHEMATICS					<u>Core</u>
MATH 125 Calculus	4		MATH 115 Calculus with Analytic Geometry	5	GE12
MATH 126 Calculus 2	4		MATH 120 Calculus with Analytic Geometry 2	5	
MATH 127 Calculus 3	4		MATH 201 Calculus with Analytic Geometry 3	5	
MATH 290 Elementary Linear Algebra	2		No Equivalent		

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

NATURAL SCIENCES					<u>Core</u>
PHSX 211 & 216 Engineering Physics	5		ENGR 210 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics			ENGR 211 Engineering Physics 2	5	GE3N
<b>Choose One:</b>					
CHEM 130 Chemistry	5		CHEM 124 & 125 General Chemistry	5	GE12, GE3N
CHEM 135 Chemistry 2	5		CHEM 131 & 132 General Chemistry 2	5	GE12, GE3N
GEOG 104 & 105 Princ Physic Geography			No Equivalent		GE3N
GEOL 101 How the World Works	3		PHYS 120 Physical Geology	5	GE3N

### Electrical Engineering:

**KU Course Requirements****Coffeyville Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4		MATH 115 Calculus with Analytic Geometry	5 GE12
MATH 126 Calculus 2	4		MATH 120 Calculus with Analytic Geometry 2	5
MATH 127 Calculus 3	4		MATH 201 Calculus with Analytic Geometry 3	5
MATH 220 Differential Equations	3		No Equivalent	
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 206 Prin Of Economics (Micro)	3 GE3S
ECON 144 Princ of Macroeconomics	3		ECON 205 Prin Of Economics (Macro)	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		ENGR 210 Engineering Physics	5 GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics			ENGR 211 Engineering Physics 2	5 GE3N
CHEM 130 Chemistry	5		CHEM 103 Principles Of Chemistry	5 GE12, GE3N

**Information Technology:****KU Course Requirements****Coffeyville 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 105 AND 106 Pre-Calculus Math	5 GE12
MATH S365 Elementary Statistics	3		MATH 250 Statistics	3 GE12

<b>ECONOMICS &amp; electives</b>				<b>Core</b>
ECON 104 Intro to Economics	3		No equivalent	3 GE3S
ENGL 362 Technical Writing	3		ENGL 290 Technical Writing	3

<b>NATURAL SCIENCES-Choose one</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5		ENGR 210 Engineering Physics	5 GE3N, GE11, GE12
PHSX 114 College Physics	5		PHYS 203 General Physics	5 GE3N, GE11, GE12
CHEM 130 Chemistry	5		CHEM 103 Principles Of Chemistry	5 GE12, GE3N
BIOL 150 Pm Molecular/Cellular	5		BIOL 206 Biology I	5 GE3N

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4		MATH 115 Calculus with Analytic Geometry	5 GE12
MATH 126 Calculus 2	4		MATH 120 Calculus with Analytic Geometry 2	5
MATH 127 Calculus 3	4		MATH 201 Calculus with Analytic Geometry 3	5
MATH 290 Elementary Linear Algebra	2		No Equivalent	
MATH 220 Differential Equations	3		No Equivalent	

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5		ENGR 210 Engineering Physics	5 GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	5		ENGR 211 Engineering Physics 2	5 GE3N
ASTR 191 Contemporary Astronomy	3		PHYS 111 Intro To Astronomy (must take lab at KU)	4 GE3N

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MATH 115 Calculus with Analytic Geometry	5	GE12
MATH 126 Calculus 2	4	MATH 120 Calculus with Analytic Geometry 2	5	
MATH 127 Calculus 3	4	MATH 201 Calculus with Analytic Geometry 3	5	
MATH 290 Elementary Linear Algebra	2	No Equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
CHEM 130 Chemistry	5	CHEM 103 Principles Of Chemistry	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CHEM 104 Principles Of Chemistry 2	5	GE3N, GE12
BIOL 150 Prn Molecular/Cellular	5	BIOL 206 Biology I	5	GE3N
BIOL 152 Princ of Organismal Biology	5	BIOL 208 Biology II	5	GE3N

<b>ETHICS</b>				<b>Core</b>
PHIL 160 Intro to Ethics	3	HUMN 180 Intro To Ethics	3	AE51, GE11, GE3H

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MATH 115 Calculus with Analytic Geometry	5	GE12
MATH 126 Calculus 2	4	MATH 120 Calculus with Analytic Geometry 2	5	
MATH 127 Calculus 3	4	MATH 201 Calculus with Analytic Geometry 3	5	
MATH 290 Elementary Linear Algebra	2	No Equivalent		
MATH 220 Differential Equations	3	No Equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
CHEM 130 Chemistry	5	CHEM 103 Principles Of Chemistry	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CHEM 104 Principles Of Chemistry 2	5	GE3N, GE12
PHSX 211 & 216 Engineering Physics	5	ENGR 210 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	ENGR 211 Engineering Physics 2	5	GE3N
CHEM 330 & 331 Organic Chemistry	5	CHEM 201 Organic Chemistry 1	5	

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MATH 115 Calculus with Analytic Geometry	5	GE12
MATH 126 Calculus 2	4	MATH 120 Calculus with Analytic Geometry 2	5	
MATH 127 Calculus 3	4	MATH 201 Calculus with Analytic Geometry 3	5	
MATH 290 Elementary Linear Algebra	2	No Equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	ENGR 210 Engineering Physics	5	GE3N, GE11, GE12

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

<b>MATHEMATICS</b>				<b>Core</b>
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MATH 125 Calculus	4	MATH 115 Calculus with Analytic Geometry	5	GE12
MATH 126 Calculus 2	4	MATH 120 Calculus with Analytic Geometry 2	5	
MATH 127 Calculus 3	4	MATH 201 Calculus with Analytic Geometry 3	5	
MATH 220 Differential Equations	3	No Equivalent		
MATH 290 Elementary Linear Algebra	2	No Equivalent		

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	ENGR 210 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	ENGR 211 Engineering Physics 2	5	GE3N

**Interdisciplinary Computing-Journalism:**

**KU Course Requirements**

**Coffeyville Equivalents**

MATHEMATICS				Core
MATH 125 Calculus	4	MATH 115 Calculus with Analytic Geometry	5	GE12
MATH 126 Calculus 2	4	MATH 120 Calculus with Analytic Geometry 2	5	
MATH 127 Calculus 3	4	MATH 201 Calculus with Analytic Geometry 3	5	
MATH 290 Elementary Linear Algebra	2	No Equivalent		

**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**

**Coffeyville 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 209 Intro to Fiction	3	ENGL 210 Fiction & Prose		3
PHIL 140 Intro to Philosophy	3	HUMN 104 Intro To Philosophy		3
PHIL 148 Reason and Argument	3	HUMN 218 Logic and Critical Thinking		3
PHIL 160 Ethics	3	HUMN 180 Intro to Ethics		3
SOC 104 Elements of Sociology	3	SOCI 101 Intro to Sociology		3
SOC 160 Social Problems/American Values	3	SOCI 201 American Social Problems		3
PHSX 114 College Physics	4	PHYS 203 College Physics I		5
PHSX 211/216 General Physics I	4	ENGR 210 Engineering Physics I		5

Goal 2: Communication (3 Units) -two from outcome 1 and one from outcome 2				
Outcome 1		GE21		
ENGL 101 Composition	3	ENGL 101 English Composition		3
ENGL 102 Critical Reading and Writing	3	ENGL 102 English Composition 2		3
ENGL 209 Intro to Fiction	3	ENGL 210 Fiction & Prose		3
Outcome 2		GE22		
COMS 130 Speaker-Audience Communication	3	SPCH 111 Public Speaking		3
COMS 131 Speaker-Audience Communication	3	SPCH 121 Public Speaking: Honors		3

Goal 3: Breadth of Knowledge (3 Units) -one from each category				
Arts & Humanities		GE3H		
ENGL 209 Intro to Fiction	3	ENGL 210 Fiction & Prose		3
		ENGL 203 Major English Writers		3
		ENGL 204 American Literature		3
		ENGL 205 Old Testament Literature		3
		ENGL 206 New Testament Literature		3
REL 104 Intro to Religious Studies	3	HUMN 208 Comparative Religions		3
		ENGL 209 Poetry & Drama		3
		ENGL 200 Native American Literature		3
		ENGL 220 African American Literature		3

HA 150 Western Art History I	3	ARTS 140 Art History & Appreciation	3
HA 151 Western Art History II	3	ARTS 141 Art History & Appreciation 2	3
ART 101 Drawing I	3	ARTS 147 Drawing I	3
THR 100 Introduction to the Theater	3	THTR 160 Theater Appreciation	3
THR 100 Introduction to the Theater	3	THTR 175 Intro To Theatre: Honors	3
PHIL 140 Intro to Philosophy	3	HUMN 104 Intro To Philosophy	3
PHIL 148 Reason and Argument	3	HUMN 218 Logic and Critical Thinking	3
PHIL 160 Ethics	3	HUMN 180 Intro To Ethics	3
THR 106 Intro to Acting	3	THTR 164 Fundamentals of Acting	3
HIST 128 Hist US thrgh Civil War	3	HIST 102 Early United States History	3
HIST 129 Hist of US After Civil War	3	HIST 103 Recent United States History	3
HSES 244 Intro to Physical Ed	3	HPER 103 Intro to Health/PE/Recreation	3
<b>Social Sciences</b>		<b>GE3S</b>	
ECON 142 Princ of Microeconomics	3	ECON 206 Prin Of Economics (Micro)	3
ECON 144 Princ of Macroeconomics	3	ECON 205 Prin Of Economics (Macro)	3
POLS 110 Intro to US Politics	3	GOVN 104 United States Government	3
POLS 170 International Politics	3	GOVN 107 International Relations	3
PSYC 104 General Psychology	3	PSYC 101 General Psychology	3
SOC 104 Elements of Sociology	3	SOCI 101 Intro To Sociology	3
		PSYC 102 Developmental Psychology	3
EPSY S305 Dev and Learning of Early Childhood	3	FACS 117 Early Childhood Development	3
COMS 244 Interpersonal Communication	3	SPCH 211 Interpersonal and Group Communication	3

#### Goal 4: Culture and Diversity (One Unit from each outcome)

<b>Outcome 1</b>		<b>AE41</b>	
SOC 104 Elements of Sociology	3	SOCI 101 Intro To Sociology	3
SOC 160 social Problems and American Values	3	SOCI 201 American Social Problems	3
<b>Outcome 2</b>		<b>AE42</b>	
GEOG 100 World Regional Geography	3	GEOG 120 World Geography	3
POLS 170 International Politics	3	GOVN 107 International Relations	3
REL 104 Intro to Religious Studies	3	HUMN 208 Comparative Religions	3
		ENGL 200 Native American Literature	3
		ENGL 220 African-American Literature	3
SPAN 212 Intermediate Spanish	3	FLNG 203 Spanish 3	3
SPAN 216 Intermediate Spanish 2	3	FLNG 204 Spanish 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