

**Colby 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**

**Colby Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	5	
MATH 220 Differential Equations	3	No Equivalent		
MATH 290 Elementary Linear Algebra	2	No Equivalent		

**ECONOMICS & electives**

**Core**

<b>Choose One:</b>				
ECON 142 Princ of Microeconomics	3	EC 277 Principles Of Microeconomics	3	GE3S
ECON 144 Princ of Macroeconomics	3	EC 276 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>				

**NATURAL SCIENCES**

**Core**

PHSX 211 & 216 Engineering Physics	5	PH 208 Engineering Physics	5	GE3N, GE11, GE12
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**Computer Science:**

**KU Course Requirements**

**Colby Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	5	
MATH 290 Elementary Linear Algebra	2	No Equivalent		

**Humanities & Social Science electives**

**Core**

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

**Core**

PHSX 211 & 216 Engineering Physics	5	PH 208 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PH 228 Engineering Physics 2	5	GE3N
<b>Choose One:</b>				
CHEM 130 Chemistry	5	CH 177 Chemistry (w/lab)	5	GE12, GE3N
CHEM 135 Chemistry 2	5	CH 178 Chemistry 2 (w/lab)	5	GE12, GE3N
GEOG 104 & 105 Princ Physic Geography		No Equivalent		GE3N
GEOL 101 How the World Works	3	No Equivalent		GE3N

**Electrical Engineering:**

**KU Course Requirements****Colby Equivalents**

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	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	EC 277 Principles Of Microeconomics	3	GE3S
ECON 144 Princ of Macroeconomics	3	EC 276 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	PH 208 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PH 228 Engineering Physics 2	5	GE3N
CHEM 130 Chemistry	5	CH 177 Chemistry (w/lab)	5	GE12, GE3N

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 101 College Algebra	3	MA 178 College Algebra	3	GE12
<b>OR</b>				
MATH 104 Precalculus Mathematics	5	MA 178 AND 185 Pre-Calculus	5	GE12
MATH S365 Elementary Statistics	3	MA 205 Elements of 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	No Equivalent		

<b>NATURAL SCIENCES-Choose one</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	PH 208 Engineering Physics	5	GE3N, GE11, GE12
PHSX 114 College Physics	5	PH 207 College Physics	5	GE3N, GE11, GE12
CHEM 130 Chemistry	5	CH 177 Chemistry (w/lab)	5	GE12, GE3N
BIOL 150 Prn Molecular/Cellular	5	No Equivalent		GE3N

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	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	PH 208 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PH 228 Engineering Physics 2	5	GE3N
ASTR 191 Contemporary Astronomy	3	PH 180 Descriptive Astronomy	4	GE3N

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	5	
MATH 290 Elementary Linear Algebra	2	No Equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
CHEM 130 Chemistry	5	CH 177 Chemistry (w/lab)	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CH 178 Chemistry 2 (w/lab)	5	GE3N, GE12
BIOL 150 Prn Molecular/Cellular	5	No Equivalent		GE3N
BIOL 152 Princ of Organismal Biology	5	No Equivalent		GE3N

<b>ETHICS</b>				<b>Core</b>
PHIL 160 Intro to Ethics	3	PI 276 Introduction To Ethics	3	AE51, GE11, GE3H

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	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	CH 177 Chemistry (w/lab)	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CH 178 Chemistry 2 (w/lab)	5	GE3N, GE12
PHSX 211 & 216 Engineering Physics	5	PH 208 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PH 228 Engineering Physics 2	5	GE3N
CHEM 330 & 331 Organic Chemistry	5	CH 225 Organic Chemistry 1	5	

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

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	5	
MATH 290 Elementary Linear Algebra	2	No Equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	PH 208 Engineering Physics	5	GE3N, GE11, GE12

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

<b>MATHEMATICS</b>				<b>Core</b>
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MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	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	PH 208 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PH 228 Engineering Physics 2	5	GE3N

### Interdisciplinary Computing-Journalism:

### KU Course Requirements

### Allen Course Equivalents

MATHEMATICS				Core
MATH 125 Calculus	4	MA 220 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MA 230 Analytical Geometry & Calculus	5	
MATH 127 Calculus 3	4	MA 240 Analytical Geometry & Calculus	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		

Engineering Courses:				Core
EECS 140 Intro to Digital Logic Design	4	No equivalent		
EECS 168 Programming	4	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

### Colby 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 211 Intro to Drama	3		DR 208/EN 208 Intro To Dramatic Literature	3
PHIL 140 Intro to Philosophy	3		PI 101 Introduction To Philosophy	3
PHIL 148 Reason and Argument	3		PI 200 Philosophical Thought and Logic	3
PHIL 160 Ethics	3		PHIL 276 Intro to Ethics	3
SOC 101 Elements of Sociology	3		SO 101 Intro to Sociology	3
SOC 160 Social Problems/American Values	3		SO 186 Social Problems	3
HIST 115 Fr Rev-Presnt Europe	3		HI 122 Modern European History	3
PHSX 114 College Physics I	4		PH 207 College Physics	5
PHSX 211/216 General Physics I	4		PH 208 Engineering Physics I	5

Goal 2: Communication (3 Units) -two from outcome 1 and one outcome 2				
Outcome 1			GE21	
ENGL 101 Composition	3		EN 176 English Composition	3
ENGL 102 Critical Reading and Writing	3		EN 177 English Composition 2	3
ENGL 211 Intro to Drama	3		DR 208/EN 208 Intro To Dramatic Literature	3
Outcome 2			GE22	
COMS 130 Speaker-Audience Communication	3		SP 101 Fundamentals Of Oral Com	3
COMS 130 Speaker-Audience Communication	3		SP 176 Public Speaking	3

Goal 3: Breadth of Knowledge (3 Units) -one from each category				
Arts & Humanities			GE3H	
			AR 175 Art Appreciation	3
ART 101 Drawing I	3		AR 103 Drawing I	3
REL 104 Intro to Religious Studies	3		RE 104 World Religions	3
			LI 176 World Literature	3

		EN 202 American Literature	3
		EN 203 American Literature 2	3
		EN 211 American Frontier Literature	3
		EN 215 American Short Story	3
		EN 217 Bible as Literature	3
		RE 104 World Religions	3
ENGL 211 Intro to Drama	3	DR 208/EN 208 Intro To Dramatic Lit	3
PHIL 140 Intro to Philosophy	3	PI 101 Introduction To Philosophy	3
PHIL 148 Reason and Argument	3	PI 200 Philosophical Thought and Logic	3
PHIL 160 Ethics	3	PI 276 Intro to Ethics	3
THR 100 Intro to Theatre	3	DR 120 Theatre Appreciation	3
HA 150 Western Art History	3	AR 176 Art History	3
HIST 128 Hist US through Civil War	3	HI 176 American History To 1865	3
HIST 129 Hist of US After Civil War	3	HI 177 American History 1865 To Pres	3
HIST 115 Europe 1789-present	3	HI 122 Contemporary European History	3
		HI 140 History of Classical Cultures	3
		HI 104 World Civilization I	3
		HI 204 World Civilization II	3
HSES 244 History and Foundations of Physical Education	3	PE 198 History and Fdns of PE	3
<b>Social Sciences</b>		<b>GE3S</b>	
EPSY S305 Development and Learning of the Child	3	PS 280 Child Development	3
ANTH 108 Cultural Anthropology	3	AN 177 Cultural Anthropology	3
COMS 244 Intr Personal Comm	3	SP 106 Interpersonal Communications	3
ECON 142 Princ of Microeconomics	3	EC 277 Principles Of Microeconomics	3
ECON 144 Princ of Macroeconomics	3	EC 276 Principles Of Macroeconomics	3
JOUR 101 Media and Society	3	JO 165 Intro to Mass Media	3
POLS 110 Intro to US Politics	3	PO 176 American Government	3
PSYC 104 General Psychology	3	PS 176 General Psychology	3
SOC 104 Elements of Sociology	3	SO 176 Intro To Sociology	3
		PS 276 Developmental Psychology	3
SOC 220 Sociology of Families	3	SO 182 Sociology Of Families	3
		BU 177 Human Relations	3
WGSS 101 Intro to Women, Gender and Sexuality Studies	3	SO 135 Women's Studies	3

<b>Goal 4: Culture and Diversity (One Unit from each outcome)</b>			
<b>Outcome 1</b>		<b>AE41</b>	
SOC 104 Elements of Sociology	3	SO 176 Intro To Sociology	3
SOC 160 Social Problems and American Values	3	SO 186 Social Problems	3
SOC 220 Sociology of Families	3	SO 182 Sociology of Families	3
WGSS 101 Intro to Women, Gender and Sexuality St	3	SO 185 Women's Studies	3
<b>Outcome 2</b>		<b>AE42</b>	
		AR 101 Art Survey	3
HA 150 Western Art History I	3	AR 176 Art History I	3
REL 104 Intro to Religious Studies	3	RE 104 World Religions	3
GEOG 100 World Regional Geography	3	GE 176 World Regional Geography	3
ANTH 108 Cultural Anthropology	3	AN 177 Cultural Anthropology	3
		AN 176 Native American Cultures	3
		LI 176 World Literature	3
		RE 104 World Religions	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