

Cowley County 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

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

Requirements (all students):

Computer Engineering:

KU Course Requirements

Cowley Equivalents

MATHEMATICS					Core
MATH 125 Calculus	4		MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4		MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4		MTH 4455 Analytical Geometry & Calculus 3	5	
MATH 220 Differential Equations	3		No equivalent		
MATH 290 Elementary Linear Algebra	2		No equivalent		

ECONOMICS & electives

Core

Choose One:					
ECON 142 Princ of Microeconomics	3		ECO 6114 Prin Of Microeconomics	3	GE3S
ECON 144 Princ of Macroeconomics	3		ECO 6113 Prin Of Macroeconomics	3	GE3S
Electives-12 hours total of Humanities & Social Science (must be GE3H, AE41, AE42 + one extra GE3H or GE3S)					

NATURAL SCIENCES

Core

PHSX 211 & 216 Engineering Physics	5		PHS 4560 Engineering Physics	5	GE3N, GE11, GE12
------------------------------------	---	--	------------------------------	---	------------------

Computer Science:

KU Course Requirements

Cowley Equivalents

MATHEMATICS					Core
MATH 125 Calculus	4		MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4		MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4		MTH 4455 Analytical Geometry & Calculus 3	5	
MATH 290 Elementary Linear Algebra	2		No equivalent		

Humanities & Social Science electives

Core

Electives-12 hours total of Humanities & Social Science (must include 2 GE3H and 2 GE3S)					
---	--	--	--	--	--

NATURAL SCIENCES

Core

PHSX 211 & 216 Engineering Physics	5		PHS 4560 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4		PHS 4561 Engineering Physics 2	5	GE3N
Choose One:					
CHEM 130 Chemistry	5		CHM 4220 Chemistry	5	GE12, GE3N
CHEM 135 Chemistry 2	5		CHM 4230 Chemistry 2	5	GE12, GE3N
GEOG 104 & 105 Princ Physic Geography			No equivalent		GE3N
GEOG 101 How the World Works	3		GEO 4311 Geology	5	GE3N

Electrical Engineering:

KU Course Requirements**Cowley Equivalents**

MATHEMATICS				Core
MATH 125 Calculus	4	MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4	MTH 4455 Analytical Geometry & Calculus 3	5	
MATH 220 Differential Equations	3	No equivalent		
MATH 290 Elementary Linear Algebra	2	No equivalent		

ECONOMICS & electives				Core
Choose One:				
ECON 142 Princ of Microeconomics	3	ECO 6114 Prin Of Microeconomics	3	GE3S
ECON 144 Princ of Macroeconomics	3	ECO 6113 Prin Of Macroeconomics	3	GE3S
Electives-12 hours total of Humanities & Social Science (must be GE3H, AE41, AE42 + one extra GE3H or GE3S)				

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	PHS 4560 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PHS 4561 Engineering Physics 2	5	GE3N
CHEM 130 Chemistry	5	CHM 4220 Chemistry	5	GE12, GE3N

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

MATHEMATICS				Core
MATH 101 College Algebra	3	MTH 4420 College Algebra	3	GE12
OR				
MATH 104 Precalculus Mathematics	5	MTH 4420 & 4425 Pre-calculus Math	5	GE12
MATH S365 Elementary Statistics	3	MTH 4423 Elementary Statistics	3	GE12

ECONOMICS & electives				Core
ECON 104 Intro to Economics	3	No equivalent		GE3S
ENGL 362 Technical Writing	3	ENG 2233 Technical Writing	3	

NATURAL SCIENCES-Choose one				Core
PHSX 211 & 216 Engineering Physics	5	PHS 4560 Engineering Physics	5	GE3N, GE11, GE12
PHSX 114 College Physics	5	PHS 4550 General Physics	5	GE3N, GE11, GE12
CHEM 130 Chemistry	5	CHM 4220 Chemistry	5	GE12, GE3N
BIOL 150 Prn Molecular/Cellular	5	BIO 4125 General Biology	5	GE3N

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

MATHEMATICS				Core
MATH 125 Calculus	4	MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4	MTH 4455 Analytical Geometry & Calculus 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		
MATH 220 Differential Equations	3	No equivalent		

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	PHS 4560 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PHS 4561 Engineering Physics 2	5	GE3N
ASTR 191 Contemporary Astronomy	3	PHS 4530 Introductory Astronomy	4	GE3N

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

MATHEMATICS				Core
MATH 125 Calculus	4	MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4	MTH 4455 Analytical Geometry & Calculus 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		

NATURAL SCIENCES				Core
CHEM 130 Chemistry	5	CHM 4220 Chemistry	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CHM 4230 Chemistry 2	5	GE3N, GE12
BIOL 150 Prn Molecular/Cellular	5	BIO 4125 General Biology	5	GE3N
BIOL 152 Princ of Organismal Biology	5	BIO 4135 General Biology 2	5	GE3N

ETHICS				Core
PHIL 160 Intro to Ethics	3	PHO 6460 Ethics	3	AE51, GE11, GE3H

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

MATHEMATICS				Core
MATH 125 Calculus	4	MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4	MTH 4455 Analytical Geometry & Calculus 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		
MATH 220 Differential Equations	3	No equivalent		

NATURAL SCIENCES				Core
CHEM 130 Chemistry	5	CHM 4220 Chemistry	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CHM 4230 Chemistry 2	5	GE3N, GE12
PHSX 211 & 216 Engineering Physics	5	PHS 4560 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PHS 4561 Engineering Physics 2	5	GE3N
CHEM 330 & 331 Organic Chemistry	5	CHM 4250 Organic Chemistry 1	5	

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

MATHEMATICS				Core
MATH 125 Calculus	4	MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4	MTH 4455 Analytical Geometry & Calculus 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	PHS 4560 Engineering Physics	5	GE3N, GE11, GE12

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

MATHEMATICS				Core
--------------------	--	--	--	-------------

MATH 125 Calculus	4	MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4	MTH 4455 Analytical Geometry & Calculus 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	PHS 4560 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PHS 4561 Engineering Physics 2	5	GE3N

Interdisciplinary Computing-Journalism:

KU Course Requirements

Cowley Equivalents

MATHEMATICS				Core
MATH 125 Calculus	4	MTH 4435 Analytical Geometry & Calculus	5	GE12
MATH 126 Calculus 2	4	MTH 4440 Analytical Geometry & Calculus 2	5	
MATH 127 Calculus 3	4	MTH 4455 Analytical Geometry & Calculus 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

Cowley 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		LIT 2565 Dramatic Literature	3
PHIL 140 Intro to Philosophy	3		PHO 6447 Intro To Philosophy	3
PHIL 160 Ethics	3		PHO 6460 Ethics	3
PHSX 114 College Physics I	4		PHS 4550 General Physics	5
PHSX 211/216 General Physics I	4		PHS 4560 Engineering Physics	5
SOC 160 Social Problems/American Values	3		SOC 6816 Social Problems	3
SOC 104 Elements of Sociology	3		SOC 63811 Principles of Sociology	3

Goal 2: Communication (3 Units) -two from outcome 1 and one from outcome 2				
Outcome 1			GE21	
ENGL 101 Composition	3		ENG 2211 Composition	3
ENGL 102 Critical Reading and Writing	3		ENG 2212 Composition 2	3
ENGL 211 Intro to Drama	3		LIT 2565 Dramatic Literature	3
Outcome 2			GE22	
COMS 130 Speaker-Audience Communication	3		COM 2711 Speech	3

Goal 3: Breadth of Knowledge (3 Units) -one from each category				
Arts & Humanities			GE3H	
ANTH 110 Intro to Archaeology	3		ANT 6920 Intro To Archaeology	3
	3		LIT 2531 African-American Literature	3
			LIT 2550 American Literature	3
			LIT 2551 American Literature 2	3
			LIT 2560 English Literature	3
			LIT 2561 English Literature 2	3
			LIT 2563 Gender/Genre Literature	3
			LIT 2567 Native American Literature	3
ENGL 211 Intro to Drama	3		LIT 2565 Dramatic Literature	3
REL 104 Intro to Religions	3		REL 6430 Comparative Religions	3
			REL 6432 Survey Of The Old Testament	3

			REL 6434 Survey Of The New Testament	3
PHIL 140 Intro to Philosophy	3		PHO 6447 Intro To Philosophy	3
PHIL 160 Ethics	3		PHO 6460 Ethics	3
THR 100 Intro to Theatre	3		THE 2730 Theatre Appreciation	3
THR 106 Intro to Acting	3		THE 2735 Acting	3
REL 104 Intro to Religious Studies	3		REL 6430 Comparative Religions	3
HA 150 Western Art History	3		ART 2141 Art History	3
HIST 128 Hist US thrgh Civil War	3		HIS 6411 U.S. History To 1877	3
HIST 129 Hist of US After Civil War	3		HIS 6412 U.S. History Since 1865	3
			HIS 6420 World History	3
			HIS 6421 World History 2	3
HSES 244 Intro to Physical Ed and Sport Science	3		HPE 6311 Intro to Physical Education	3
Social Sciences			GE3S	
EPSY S305 Child Development	3		CHC 5711 Orient Child Care Fld	3
GEOG 102 Princ of Human Geography	3		GEG 6120 Principles Of Geography	3
ANTH 108 Cultural Anthropology	3		ANT 6911 Cultural Anthropology	3
			ANT 6912 Intro Linguistic Anthropology	3
COMS 244 Intr Personal Comm	3		COM 2725 Interpersonal Comm	3
ECON 142 Princ of Microeconomics	3		ECO 6114 Prin Of Microeconomics	3
ECON 144 Princ of Macroeconomics	3		ECO 6113 Prin Of Macroeconomics	3
POLS 110 Intro to US Politics	3		POL 6611 American National Govern	3
PSYC 104 General Psychology	3		PSY 6711 General Psychology	3
SOC 104 Elements of Sociology	3		SOC 6811 Principles Of Sociology	3
			PSY 6712 Developmental Psychology	3
JOUR 101 Media and Society	3		MCM 2411 Mass Media and Society	3

Goal 4: Culture and Diversity (One Unit from each outcome)				
Outcome 1			AE41	
SOC 104 Elements of Sociology	3		SOC 6811 Principles Of Sociology	3
SOC 160 Social Problems and American Values	3		SOC 6916 Social Problems	3
Outcome 2			AE42	
ANTH 108 Intro to Cultural Anthropology	3		ANT 6911 Cultural Anthropology	3
GEOG 102 Princ of Human Geography	3		GEG 6120 Principles Of Geography	3
REL 104 Intro to Religious Studies	3		REL 6430 Comparative Religions	3
			REL 6430 Comparative Religions	3
			LIT 2567 Native American Literature	3
			LIT 2531 African-American Literature	3
HA 150 Western Art History I	3		ART 2141 Art History	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