

Dodge City 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):

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

Computer Engineering:

KU Course Requirements

Dodge City Equivalents

MATHEMATICS				Core
MATH 125 Calculus	4	MATH 120 Analytic Geom & Calc	5	GE12
MATH 126 Calculus 2	4	MATH 221 Analytic Geom & Calc 2	5	
MATH 127 Calculus 3	4	MATH 222 Analytic Geom & Calc 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	ECON 102 Prin Of Econ : Microecon	3	GE3S
ECON 144 Princ of Macroeconomics	3	ECON 101 Prin Of Econ : Macroecon	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	PHYS 231 Engineering Physics	5	GE3N, GE11, GE12

Computer Science:

KU Course Requirements

Dodge City Equivalents

MATHEMATICS				Core
MATH 125 Calculus	4	MATH 120 Analytic Geom & Calc	5	GE12
MATH 126 Calculus 2	4	MATH 221 Analytic Geom & Calc 2	5	
MATH 127 Calculus 3	4	MATH 222 Analytic Geom & Calc 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	PHYS 231 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PHYS 233 Engineering Physics 2	5	GE3N
Choose One:				
CHEM 130 Chemistry	5	CHEM 111 or 211 College Chem	5	GE12, GE3N
CHEM 135 Chemistry 2	5	CHEM 112 or 212 College Chem 2	5	GE12, GE3N
GEOG 104 & 105 Princ Physic Geography		No equivalent		GE3N
GEOL 101 How the World Works	3	GEL 101 Intro To Geology	5	GE3N

Electrical Engineering:

KU Course Requirements**Dodge City Equivalents**

MATHEMATICS				Core
MATH 125 Calculus	4		MATH 120 Analytic Geom & Calc	5 GE12
MATH 126 Calculus 2	4		MATH 221 Analytic Geom & Calc 2	5
MATH 127 Calculus 3	4		MATH 222 Analytic Geom & Calc 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		ECON 230 Economics	3 GE3S
ECON 144 Princ of Macroeconomics	3		ECON 231 Economics 2	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		PHYS 231 Engineering Physics	5 GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4		PHYS 233 Engineering Physics 2	5 GE3N
CHEM 130 Chemistry	5		CHEM 111 or 211 College Chem	5 GE12, GE3N

Information Technology:**KU Course Requirements****Dodge City Equivalents**

MATHEMATICS				Core
MATH 101 College Algebra	3		MATH 106 College Algebra	3 GE12
OR				
MATH 104 Precalculus Mathematics	5		MATH 106 & 110 Pre-Calculus Math	5 GE12
MATH S365 Elementary Statistics	3		MATH 230 Elementary Statistics	3 GE12

ECONOMICS & electives				Core
ECON 104 Intro to Economics	3		No equivalent	GE3S
ENGL 362 Technical Writing	3		ENG 101 Technical Writing	3

NATURAL SCIENCES-Choose one				Core
PHSX 211 & 216 Engineering Physics	5		PHYS 231 Engineering Physics	5 GE3N, GE11, GE12
PHSX 114 College Physics	5		PHYS 201 General Physics & Lab	5 GE3N, GE11, GE12
CHEM 130 Chemistry	5		CHEM 111 or 211 College Chem	5 GE12, GE3N
BIOL 150 Prn Molecular/Cellular	5		BIO 111 or 102 Cellular Biology and Genetics/Princ Bio	5 GE3N

Interdisciplinary Computing-Astronomy:**KU Course Requirements****Dodge City Equivalents**

MATHEMATICS				Core
MATH 125 Calculus	4		MATH 120 Analytic Geom & Calc	5 GE12
MATH 126 Calculus 2	4		MATH 221 Analytic Geom & Calc 2	5
MATH 127 Calculus 3	4		MATH 222 Analytic Geom & Calc 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		PHYS 231 Engineering Physics	5 GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4		PHYS 233 Engineering Physics 2	5 GE3N

ASTR 191 Contemporary Astronomy	3	PHYS 110 & 112 Intro To Astronomy	5	GE3N
---------------------------------	---	-----------------------------------	---	------

Interdisciplinary Computing-Biology:**KU Course Requirements****Dodge City Equivalents**

MATHEMATICS				Core
MATH 125 Calculus	4	MATH 120 Analytic Geom & Calc	5	GE12
MATH 126 Calculus 2	4	MATH 221 Analytic Geom & Calc 2	5	
MATH 127 Calculus 3	4	MATH 222 Analytic Geom & Calc 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		

NATURAL SCIENCES				Core
CHEM 130 Chemistry	5	CHEM 111 or 211 College Chem	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CHEM 112 or 212 College Chem 2	5	GE3N, GE12
BIOL 150 Prn Molecular/Cellular	5	BIO 111 or 102 Cellular Biology and Genetics/Princ Bio	5	GE3N
BIOL 152 Princ of Organismal Biology	5	BIO 211 Animal and Plant Biology	5	GE3N

ETHICS				Core
PHIL 160 Intro to Ethics	3	PHIL 202 Intro to Ethics	3	AE51, GE11, GE3H

Interdisciplinary Computing-Chemistry:**KU Course Requirements****Dodge City Equivalents**

MATHEMATICS				Core
MATH 125 Calculus	4	MATH 120 Analytic Geom & Calc	5	GE12
MATH 126 Calculus 2	4	MATH 221 Analytic Geom & Calc 2	5	
MATH 127 Calculus 3	4	MATH 222 Analytic Geom & Calc 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		
MATH 220 Differential Equations	3	No equivalent		

NATURAL SCIENCES				Core
CHEM 130 Chemistry	5	CHEM 111 or 211 College Chem	5	GE3N, GE12
CHEM 135 Chemistry 2	5	CHEM 112 or 212 College Chem 2	5	GE3N, GE12
PHSX 211 & 216 Engineering Physics	5	PHYS 231 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PHYS 233 Engineering Physics 2	5	GE3N
CHEM 330 & 331 Organic Chemistry	5	CHEM 241/242 Organic Chemistry 1	5	

Interdisciplinary Computing-Geography:**KU Course Requirements****Dodge City Equivalents**

MATHEMATICS				Core
MATH 125 Calculus	4	MATH 120 Analytic Geom & Calc	5	GE12
MATH 126 Calculus 2	4	MATH 221 Analytic Geom & Calc 2	5	
MATH 127 Calculus 3	4	MATH 222 Analytic Geom & Calc 3	5	
MATH 290 Elementary Linear Algebra	2	No equivalent		

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	PHYS 231 Engineering Physics	5	GE3N, GE11, GE12

Interdisciplinary Computing-Physics:

KU Course Requirements**Dodge City Equivalents**

MATHEMATICS				<u>Core</u>
MATH 125 Calculus	4	MATH 120 Analytic Geom & Calc	5	GE12
MATH 126 Calculus 2	4	MATH 221 Analytic Geom & Calc 2	5	
MATH 127 Calculus 3	4	MATH 222 Analytic Geom & Calc 3	5	
MATH 220 Differential Equations	3	No equivalent		
MATH 290 Elementary Linear Algebra	2	No equivalent		

NATURAL SCIENCES				<u>Core</u>
PHSX 211 & 216 Engineering Physics	5	PHYS 231 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	5	PHYS 233 Engineering Physics 2	5	GE3N

Interdisciplinary Computing-Journalism:**KU Course Requirements****Dodge City Equivalents**

MATHEMATICS				<u>Core</u>
MATH 125 Calculus	4	MATH 120 Analytic Geom & Calc	5	GE12
MATH 126 Calculus 2	4	MATH 221 Analytic Geom & Calc 2	5	
MATH 127 Calculus 3	4	MATH 222 Analytic Geom & Calc 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**Dodge City 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	
PHIL 160 Intro to Ethics	3	PHIL 202 Intro to Ethics		3
PHIL 140 Intro to Philosophy	3	PHIL 201 Intro To Philosophy		3
SOC 104 Elements of Sociology	3	SOC 101 Principles of Sociology		3
SOC 160 Social Problems/ American Values	3	SOC 201 Social Problems		3
PHSX 114 College Physics	4	PHYS 201 General Physics I		5
PHSX 211/216 General Physics	4	PHYS 231 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	ENG 102 or 150 English Composition		3
ENGL 102 Critical Reading and Writing	3	ENG 103 or 151 English Composition 2		3
Outcome 2			GE22	
COMS 130 Speaker-Audience Communication	3	SP 106 Public Speaking		3

Goal 3: Breadth of Knowledge (3 Units) -one from each category				
Arts & Humanities			GE3H	
		ART 101 Art Appreciation		3
ART 101 Drawing I		ART 110 Drawing I		3
PHMD 101 Fundamentals of Photography	3	ART 117 Photography I		3-4
	3	ENG 206 World Literature		3
		ENG 204 English Literature		3
		ENG 205 English Literature 2		3
		ENG 209 American Literature		3
		ENG 210 American Literature		3
		RS 101 Old Testament Survey		3
HA 150 Western Art History I	3	ART 150 Survey of Art History		3

		RS 102 New Testament Survey	3
PHIL 140 Intro to Philosophy	3	PHIL 201 Intro To Philosophy	3
PHIL 160 Intro to Ethics	3	PHIL 202 Intro to Ethics	3
		ART 132 History and Criticism of Art	3
		HIST 120 World History to 1500	3
		HIST 121 World History from 1500	
HIST 128 Hist US thrgh Civil War	3	HIST 101 American History	3
HIST 129 Hist of US After Civil War	3	HIST 102 American History 2	3
HSES 244 Intro to Phys Ed and Sport Studies	3	PE 114 Intro Health, PE and Recreation	3
Social Sciences		GE3S	
COMS 244 Interpersonal Communication	3	SP 206 Interpersonal Communication	3
EPSY S305 Intro Child Behavior/Development	3	ECE 105 Child Growth & Development	3
ECON 142 Princ of Microeconomics	3	ECON 102 Prin Of Econ : Microecon	3
ECON 144 Princ of Macroeconomics	3	ECON 101 Prin Of Econ : Macroecon	3
METL 211 Intro to Jewelry/Metalsmithing	3	ART 114 Metalsmithing Jewelry	3
POLS 110 Intro to US Politics	3	GOV 101 American Natl Government	3
PSYC 104 General Psychology	3	PSY 101 General Psychology	3
JOUR 101 Media and Society	3	MC 110 Mass Media	3
SOC 104 Elements of Sociology	3	SOC 101 Principles Of Sociology	3
SOC 160 Intro to Social Problems	3	SOC 201 Social Problems	3
		SOC 202 Race & Ethnic Relations	3
ANTH 100 General Anthropology	3	ANTH 111 Anthropology	3
		PSY 102 Human Growth & Development	3
SOC 220 Sociology of Families	3	SOC 203 Sociology of Families	3
SW 220 Social Work, Social Welfare and Society	3	SW 201 AND 202 Intro to Social Work	6

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

Outcome 1		AE41	
SOC 104 Elements of Sociology	3	SOC 101 Principles Of Sociology	3
SOC 160 Intro to Social Problems	3	SOC 201 Social Problems	3
SOC 220 Sociology of Families	3	SOC 203 Sociology of Families	3
MUSC 298 Introduction to Jazz	3	MUS 225 A Study of Jazz	3
Outcome 2		AE42	
		ENG 206 World Literature	3
GEOG 100 World Regional Geography	3	GEO 101 Geography	3
SPAN 212 Intermediate Spanish	3	LANG 203 Intermediate Spanish	3
SPAN 216 Intermediate Spanish 2	3	LANG 204 Intermediate Spanish 2	3
GERM 104 Elementary German	5	LANG 120 Elementary German	3
GERM 108 Elementary German 2	5	LANG 121 Elementary German 2	3
ANTH 100 General Anthropology	3	ANTH 111 Anthropology	3
HA 150 Western Art History	3	ART 150 Survey of 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