

Cloud County Community College

Transfer Program to University of Kansas

B.S. Engineering Physics

(Aerospace Systems, Chemical Systems, Digital Electronic Systems, Electromechanical Control Systems)

Number to call at KU for advising: (785) 864-4626

Website: www.physics.engr.ku.edu

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

Requirements (all students):

Aerospace Systems:

KU Course Requirements

Cloud Equivalents

MATHEMATICS			Core		
MATH 125 Calculus	4		MA 120 Analytic Geometry and Calculus	5	GE12
MATH 126 Calculus 2	4		MA 121 Analytic Geometry and Calculus 2	5	
MATH 127 Calculus 3	4		MA 122 Analytic Geometry and Calculus 3	3	
MATH 290 Elementary Linear Algebra	2		No Equivalent		
MATH 220 Differential Equations	3		No Equivalent		

NATURAL SCIENCES				Core	
PHSX 211 & 216 Engineering Physics	5	SC 142 University Physics	5	GE3N, GE11, GE12	
PHSX 212 & 236 Engineering Physics	4	SC 143 University Physics 2	5	GE3N	
CHEM 130 Chemistry	5	SC 131 Chemistry	5	GE12, GE3N	

Chemical Systems:

KU Course Requirements

Cloud Equivalents

MATHEMATICS			Core		
MATH 125 Calculus	4		MA 120 Analytic Geometry and Calculus	5	GE12
MATH 126 Calculus 2	4		MA 121 Analytic Geometry and Calculus 2	5	
MATH 127 Calculus 3	4		MA 122 Analytic Geometry and Calculus 3	3	
MATH 290 Elementary Linear Algebra	2		No Equivalent		
MATH 220 Differential Equations	3		No Equivalent		

NATURAL SCIENCES				Core	
PHSX 211 & 216 Engineering Physics	5	SC 142 University Physics	5	GE3N, GE11, GE12	
PHSX 212 & 236 Engineering Physics		SC 143 University Physics 2		GE3N	
CHEM 130 Chemistry	5	SC 131 Chemistry	5	GE12, GE3N	
CHEM 135 Chemistry 2	5	SC 132 Chemistry 2	5	GE3N, GE12	
CHEM S330 & S331 Organic Chemistry	5	SC 134 Organic Chemistry 1	5		

Digital Electronic Systems:

KU Course Requirements

Cloud Equivalents

MATHEMATICS			Core		
MATH 125 Calculus	4		MA 120 Analytic Geometry and Calculus	5	GE12
MATH 126 Calculus 2	4		MA 121 Analytic Geometry and Calculus 2	5	
MATH 127 Calculus 3	4		MA 122 Analytic Geometry and Calculus 3	3	
MATH 290 Elementary Linear Algebra	2		No Equivalent		
MATH 220 Differential Equations	3		No Equivalent		

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	SC 142 University Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	SC 143 University Physics 2	5	GE3N
CHEM 130 Chemistry	5	SC 131 Chemistry	5	GE12, GE3N

Electromechanical Control Systems:

The courses listed below are **REQUIRED**. These courses **MAY** be taken to complete the **KU CORE**, but if they are not, this additional coursework is necessary to complete degree requirements. 132 hours are required for a degree.

KU Course Requirements

Cloud Equivalents

MATHEMATICS				Core
MATH 125 Calculus	4	MA 120 Analytic Geometry and Calculus	5	GE12
MATH 126 Calculus 2	4	MA 121 Analytic Geometry and Calculus 2	5	
MATH 127 Calculus 3	4	MA 122 Analytic Geometry and Calculus 3	3	
MATH 290 Elementary Linear Algebra	2	No Equivalent		
MATH 220 Differential Equations	3	No Equivalent		

NATURAL SCIENCES				Core
PHSX 211 & 216 Engineering Physics	5	SC 142 University Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	SC 143 University Physics 2	5	GE3N
CHEM 130 Chemistry	5	SC 131 Chemistry	5	GE12, 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

Cloud Equivalents

Goal 2: Communication (3 Units) -two from outcome 1 and one from outcome 2				
Outcome 1			GE21	
ENGL 101 Composition	3	CM 101 English Composition		3
ENGL 102 Critical Reading and Writing	3	CM 102 English Composition 2		3
Outcome 2			GE22	
COMS 130 Speaker-Audience Communication	3	CM 115 Public Speaking		3

Goal 3: Breadth of Knowledge (3 Units) -one from each category				
Arts & Humanities			GE3H	
REL 171 Religion in American Society	3	RE 103 Religion in Contemporary American		3
REL 104 Intro to Religious Studies	3	RE 104 World Religions		3
		CM 122 American Literature		3
		CM 123 American Literature 2		3
		CM 124 World Lit and Human Experience		3
		CM 126 Bible as Literature		3
		CM 127 The Short Story		3
		AR 100 Art Appreciation		3
ART 101 Drawing	3	AR 130 Drawing		3
		MU 100 Music Appreciation		3
		MU 101 American Music		3
		HU 201 Humanities		3
		HU 202 Humanities II		3
PHIL 140 Intro to Philosophy	3	PH 100 Intro to Philosophy		3
PHIL 148 Reason and Argument	3	PH 101 Intro to Critical Thinking		3
THR 100 Intro to Theatre	3	CM 140 Theater Appreciation		3
THR 106 Intro to Acting	3	CM 141 Intro to Performance		3
HIST 128 Hist US through Civil War	3	SS 122 U.S. History		3
HIST 129 Hist of US After Civil War	3	SS 123 U.S. History 2		3

HSES 244 Intro to Physical Ed and Sports Studies	3	PE 130 Intro to Physical Education	3
Social Sciences		GE3S	
METL 211 Jewelry	3	AR 117 Jewelry and Metalsmithing	3
COMS 244 Interpersonal Communication Theory	3	CM 240 Interpersonal Communication	3
ANTH 108 Cultural Anthropology	3	SS 125 Intro Cultural Anthropology	3
ECON 142 Princ of Microeconomics	3	EC 102 Economics (Micro)	3
ECON 144 Princ of Macroeconomics	3	EC 101 Economics (Macro)	3
POLS 110 Intro to US Politics	3	SS 140 U.S. Government: National	3
POLS 170 Intro to International Politics	3	SS 150 Intro International Relations	3
PSYC 104 General Psychology	3	SS 101 Intro to Psychology	3
SOC 104 Elements of Sociology	3	SS 130 Intro to Sociology	3
		SS 113 Human Relations	3
WGSS 101 Intro to Women, Gender, and Sexuality	3	SS 108 Women in American Society	3
EPSY S305 Dev and Learning of the Child	3	HE 150 Early Childhood Development	3
EPSY S305 Dev and Learning of the Child	3	SS 127 Child Psychology	3

Goal 4: Culture and Diversity (One Unit from each outcome)			
Outcome 1		AE41	
REL 171 Religion in American Society	3	RE 103 Religion in Contemporary America	3
SOC 104 Elements of Sociology	3	SS 130 Intro to Sociology	3
WGSS 101 Intro to Women, Gender, and Sexuality	3	SS 108 Women in American Society	3
Outcome 2		AE42	
GEOG 100 World Geography	3	GE 101 World Geography	3
REL 104 Intro to Religious Studies	3	RE 104 World Religions	3
ANTH 108 Cultural Anthropology	3	SS 125 Intro Cultural Anthropology	3
SPAN 212 Intermediate Spanish	3	FL 200 Spanish 3	3
GERM 104 Elementary German	5	FL 113 German I	5
GERM 108 Elementary German 2	5	FL 114 German 2	5
		MU 102 World Music	3
POLS 170 Intro to International Politics	3	SS 150 Intro International Relations	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