

Hutchinson 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

Hutchinson Equivalents

MATHEMATICS					Core
MATH 125 Calculus	4		MA 111 or 112H Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4		MA 113 or 114H Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4		MA 201 or 202H Calculus and Analytical Geometry 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		PY 201 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4		PY 202 Engineering Physics 2	5	GE3N
CHEM 130 Chemistry	5		CH 105 or 110H Chemistry	5	GE12, GE3N

Chemical Systems:

KU Course Requirements

Hutchinson Equivalents

MATHEMATICS					Core
MATH 125 Calculus	4		MA 111 or 112H Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4		MA 113 or 114H Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4		MA 201 or 202H Calculus and Analytical Geometry 3	5	
MATH 290 Elementary Linear Algebra	2		No equivalent		

NATURAL SCIENCES					Core
PHSX 211 & 216 Engineering Physics	5		PY 201 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4		PY 202 Engineering Physics 2	5	GE3N
CHEM 130 Chemistry	5		CH 105 or 110H Chemistry	5	GE12, GE3N
CHEM 135 Chemistry 2	5		CH 106 or 111H Chemistry 2	5	GE3N, GE12
CHEM S330 & S331 Organic Chemistry	5		CH 201 Organic Chemistry 1	5	

Digital Electronic Systems:

KU Course Requirements

Hutchinson Equivalents

MATHEMATICS					Core
MATH 125 Calculus	4		MA 111 or 112H Calculus and Analytical Geometry	5	GE12

MATH 126 Calculus 2	4	MA 113 or 114H Calculus and Analytical Geometry 2	5
MATH 127 Calculus 3	4	MA 201 or 202H Calculus and Analytical Geometry 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	PY 201 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics		PY 202 Engineering Physics 2		GE3N
CHEM 130 Chemistry	5	CH 105 or 110H Chemistry	5	GE12, GE3N

Electromechanical Control Systems:

KU Course Requirements

Hutchinson Equivalents

MATHEMATICS				Core
MATH 125 Calculus	4	MA 111 or 112H Calculus and Analytical Geometry	5	GE12
MATH 126 Calculus 2	4	MA 113 or 114H Calculus and Analytical Geometry 2	5	
MATH 127 Calculus 3	4	MA 201 or 202H Calculus and Analytical Geometry 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	PY 201 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PY 202 Engineering Physics 2	5	GE3N
CHEM 130 Chemistry	5	CH 105 or 110H 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

Hutchinson Equivalents

Goal 2: Communication (3 Units) –two from outcome 1 and one from outcome 2			
Outcome 1		GE21	
ENGL 101 Composition	3	EN 100 English Composition	3
		EN 101 English Composition IA	3
		EN 103H English Composition IH Honors	3
ENGL 102 Critical Reading and Writing	3	EN 102 English Composition 2	3
		EN 102H English Composition 2 Honors	3
Outcome 2		GE22	
COMS 130 Speaker-Audience Communication	3	SH 101 Public Speaking	3

Goal 3: Breadth of Knowledge (3 Units) –one from each category			
Arts & Humanities		GE3H	
CLSX 148 Greek and Roman Mythology	3	EN 121 World Mythology	3
		EN 202 British Literature	3
		EN 202H British Literature Honors	3
		EN 203 British Literature 2	3
		EN 203H British Literature 2 Honors	3
		EN 204 American Literature	3
		EN 204H American Literature Honors	3
		EN 205 American Literature 2	3
		EN 205H American Literature 2 Hnrs	3
		EN 206 Contemporary Literature	3

		EN 207 Introduction to Shakespeare	3
		EN 215 Medieval Literature	3
		EN 215H Medieval Literature	3
		AR 103 History Of American Art	3
		RE 101 New Testament Literature	3
		RE 102 Old Testament Literature	3
REL 104 Intro to Religious Studies	3	RE 106 Intro To World Religions	3
HA 261 Intro to Modern Art	3	AR 102 History of Modern Art	3
HA 150 Western Art History	3	AR 104 Art History Paleolithic to Medieval	3
ART 101 Drawing	3	AR 110 Drawing I	3
ART 132 Fundamentals of Metalsmithing/Jewelry	3	AR 126 Jewelry Design	3
PHIL 140 Intro to Philosophy	3	PL 101 Intro To Philosophy	3
PHIL 148 Reason and Argument	3	PL 103 Introductory Logic	3
PHIL 160 Intro to Ethics	3	PL 104 Ethics	3
THR 100 Intro to Theatre	3	TH 115 Theatre Appreciation	3
THR 106 Intro to Acting	3	TH 116 Introduction to Acting	3
THR 215 Approaching Design	3	TH 117 Stage Design	3
HIST 128 Hist US thrgh Civil War	3	HI 101/101H American History 1492-1865	3
HIST 129 Hist of US After Civil War	3	HI 102 /102H American History 1865 – Present	3
		HI 103 World History to 1600	3
		HI 104 World History since 1600	3
HIST 115 Europe 1789-present	3	HI 106 European History 1815-present	3
		MU 102 Introduction to Music Literature	3
		MU 208 History of Art Music of the Western World	3
HSES 244 Intro to Phys Ed and Sport Studies	3	PE 101 Intro to Physical Education	3
		SP 203 Intro to Spanish Literature	3
Social Sciences		GE3S	
METL 211 Jewelry	3	AR 205 Jewelry Design II	3
EPSY S305 Dev and Learning of Young child	3	CC 105 Infant/Toddler Development	3
GEOG 100 World Regional Geography	3	GE 101 World Geography	3
ANTH 108 Cultural Anthropology	3	SO 111 Cultural Anthropology	3
COMS 244 Intr Personal Comm	3	SH 210 Interpersonal Communication	3
ECON 142 Princ of Microeconomics	3	EC 101 or 101H Microeconomics	3
ECON 144 Princ of Macroeconomics	3	EC 100 or 100H Macroeconomics	3
POLS 110 Intro to US Politics	3	GO 100 American Government	3
POLS 170 Intro to International Politics	3	GO 102 International Relations	3
PSYC 104 General Psychology	3	PS 100 General Psychology	3
		PS 101 Human Relations	3
JOUR 101 Media and Society	3	JL 101 Intro to Mass Communication	3
SOC 104 Elements of Sociology	3	SO 100 or 100H Fundamentals Of Sociology	3
PSYC 120 Personality	3	PS 201 Psychology Of Personality	3
ANTH 100 General Anthropology	3	SO 110 General Anthropology	3
		GE 110 U.S. Regional Geography	3
SW 220 Social Work, Soc Welfare and US Society		SO 122 Intro to Social Work	3
		PS 102 Human Growth & Development	3
		SO 123 Social Welfare & Society	3

Goal 4: Culture and Diversity (1 Unit from each outcome)			
Outcome 1		AE41	
SOC 160 Intro to Social Problems	3	SO 201 Social Problems	3
SOC 104 Elements of Sociology	3	SO 100 or 100H Fundamentals Of Sociology	3
MUSC 298 Intro to Jazz	3	MU 127 Intro Jazz & Jazz/Rock	3
Outcome 2		AE42	
GEOG 100 World Regional Geography	3	GE 101 World Geography	3
ANTH 108 Cultural Anthropology	3	SO 111 Cultural Anthropology	3
SOC 130 Comparative Societies	3	SO 113 Cultural Diversity	3
HA 150 Western Art History I	3	AR 104 Art History Paleolithic to Medieval	3
SPAN 212 Intermediate Spanish	3	SP 202 Spanish Comp & Conversation	3
GERM 104 Elementary German	5	GR 102 Elementary German 2	3
GERM 108 Elementary German 2	5	GR 103 Elementary German 3	3

POLS 170 Intro to International Politics	3	GO 102 International Relations	3
REL 104 Intro to Religious Studies	3	RE 106 Intro To 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