

Cowley 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

Cowley Equivalents

MATHEMATICS					<u>Core</u>
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					<u>Core</u>
PHSX 211 & 216 Engineering Physics	5		PHYS 220 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4		PHYS 221 Engineering Physics 2	5	GE3N
CHEM 130 Chemistry	5		CHM 4220 Chemistry	5	GE12, GE3N

Chemical Systems:

KU Course Requirements

Cowley Equivalents

MATHEMATICS					<u>Core</u>
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					<u>Core</u>
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
CHEM 135 Chemistry 2	5		CHM 4230 Chemistry 2	5	GE3N, GE12
CHEM S330 & S331 Organic Chemistry	5		CHM 4250 Organic Chemistry 1	5	

Digital Electronic Systems:

KU Course Requirements

Cowley Equivalents

MATHEMATICS					<u>Core</u>
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					<u>Core</u>
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

Electromechanical Control Systems:**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
CHEM 130 Chemistry	5	CHM 4220 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**Cowley Equivalents**

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