

# Barton County Community College

## Transfer Program to University of Kansas

### Architecture, Civil and Environmental Engineering

Number to call at KU for advising: (785) 864-3766

Website: <http://www.engr.ku.edu/departments/>

Timely completion of prerequisite courses is imperative due to tight sequencing of major courses. Consult the KU catalog and seek KU advising early.

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

#### Requirements (all students):

#### Architectural Engineering:

#### **KU Course Requirements**

#### **Barton Equivalents**

<b>ENGLISH (2 courses)</b>				<b>Core</b>
ENGL 101 Composition	3	ENGL 1203 or 1204 Composition	3	GE21
ENGL 102 Critical Reading and Writing	3	ENGL 1206 or 1207 Composition	3	GE21

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MATH 1832 Analytical Geometry and Calculus	5	GE12
MATH 126 Calculus 2	4	MATH 1834 Analytical Geometry and Calculus 2	5	
MATH 127 Calculus 3	4	MATH 1836 Analytical Geometry and Calculus 3	3	
MATH 220 Differential Equations	3	No equivalent		
MATH 290 Elementary Linear Algebra	2	No equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	PHYS 1604 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PHYS 1606 Engineering Physics 2	5	GE3N
CHEM 130 Chemistry	5	CHEM 1806 College Chemistry I	5	GE12, GE3N

<b>COMMUNICATION</b>				<b>Core</b>
COMS 130 Public Speaking	3	COMM 1230 Public Speaking	3	GE22

#### Civil Engineering:

#### **KU Course Requirements**

#### **Barton Equivalents**

<b>ENGLISH (2 courses)</b>				<b>Core</b>
ENGL 101 Composition	3	ENGL 1203 or 1204 Composition	3	GE21
ENGL 102 Critical Reading and Writing	3	ENGL 1206 or 1207 Composition	3	GE21

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MATH 1832 Analytical Geometry and Calculus	5	GE12
MATH 126 Calculus 2	4	MATH 1834 Analytical Geometry and Calculus 2	5	
MATH 127 Calculus 3	4	MATH 1836 Analytical Geometry and Calculus 3	3	
MATH 220 Differential Equations	3	No equivalent		
MATH 290 Elementary Linear Algebra	2	No equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	PHYS 1604 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics		PHYS 1606 Engineering Physics 2		GE3N
<b>Chemistry: Students may take the 2 courses below or wait and take CHEM 150 Chemistry for Engineers at KU</b>				
CHEM 130 Foundations of Chemistry I	5	CHEM 1806 College Chemistry I	5	GE12, GE3N

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CHEM 135 Foundations of Chemistry II	5	CHEM 1808 College Chemistry II	5	GE3N
<b>Choose One:</b>				
CHEM S330 & S331 Organic Chemistry	5	CHEM 1814 Organic Chemistry 1	5	
GEOG 104 & 105 Princ Physic Geography		PHSX 1404 Physical Geography (must take lab at KU)	5	GE3N
GEOL 101 How the World Works	3	PHSC 1402 & 1403 Intro to Geology	5	GE3N

<b>COMMUNICATION</b>				<b>Core</b>
COMS 130 Public Speaking	3	COMM 1230 Public Speaking	3	GE22

<b>ECONOMICS -Choose one:</b>				<b>Core</b>
ECON 142 Princ of Microeconomics	3	ECON 1612 Prin of Microeconomics	3	GE3S
ECON 144 Princ of Macroeconomics	3	ECON 1610 Prin of Macroeconomics	3	GE3S

**Civil Engineering (Environmental Concentration):**

**KU Course Requirements**

**Barton Equivalents**

<b>ENGLISH (2 courses)</b>				<b>Core</b>
ENGL 101 Composition	3	ENGL 1203 or 1204 Composition	3	GE21
ENGL 102 Critical Reading and Writing	3	ENGL 1206 or 1207 Composition	3	GE21

<b>MATHEMATICS</b>				<b>Core</b>
MATH 125 Calculus	4	MATH 1832 Analytical Geometry and Calculus	5	GE12
MATH 126 Calculus 2	4	MATH 1834 Analytical Geometry and Calculus 2	5	
MATH 127 Calculus 3	4	MATH 1836 Analytical Geometry and Calculus 3	3	
MATH 220 Differential Equations	3	No equivalent		
MATH 290 Elementary Linear Algebra	2	No equivalent		

<b>NATURAL SCIENCES</b>				<b>Core</b>
PHSX 211 & 216 Engineering Physics	5	PHYS 1604 Engineering Physics	5	GE3N, GE11, GE12
PHSX 212 & 236 Engineering Physics	4	PHYS 1606 Engineering Physics 2	5	GE3N
<b>Choose One:</b>				
BIOL 200 Microbiology	3	LIFE 1412 Principles of Microbiology	5	GE3N
GEOL 101 How the World Works	3	PHSC 1402 & 1403 Intro to Geology	5	GE3N

<b>COMMUNICATION</b>				<b>Core</b>
COMS 130 Public Speaking	3	COMM 1230 Public Speaking	3	GE22

**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**

**Barton County Equivalents**

<b>Goal 3: Breadth of Knowledge (3 Units) -one from each category</b>				
<b>Arts &amp; Humanities (Not needed for Arch. Eng.)</b>			<b>GE3H</b>	
	3	ARTS 1200 Art Appreciation		3
REL 104 Intro to Religious Studies	3	RELI 1311 World Religions		3
HA 150 Western Art - Ancient to Medieval	3	ARTS 1201 Survey of Art History		3
ART 101 Drawing I	3	ARTS 1214 Drawing I		3
		HIST 1400 American History to 1877		3
HIST 128 Hist of US through Civil War	3	HIST 1401 American History 1865-present		3
HIST 129 Hist of US after Civil War	3	HIST 1402 American History 1877-present		3
		HIST 1403 American History to 1865		3

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		HIST 1416 American Military History	3
		HIST 1450 Hist of World Civilization to 1500	3
		HIST 1452 Hist of World civilization 1500-present	3
		LITR 1212 The Short Story	3
		LITR 1414 The Novel	3
		LITR 1215 World Literature	3
ENGL 211 Introduction to Drama	3	LITR 1228 Introduction to Drama	3
		LITR 1234 Shakespeare	3
PHIL 140 Introduction to Philosophy	3	PHIL 1602 Introduction to Philosophy	3
PHIL 160 Ethics	3	PHIL 1604 Introduction to Ethics	3
PHIL 148 Reason and Argument	3	PHIL 1605 Reason and Argument	3
		RELI 1311 World Religions	3
THR 100 Introduction to Theater	3	THEA 1300 Introduction to Theater	3
THR 106 Acting I	3	THEA 1302 Acting I	3
<b>Social Sciences (Not needed for Civil Engineering)</b>		<b>GE3S</b>	
ANTH 100 General Anthropology	3	ANTH 2812 Intro to Anthropology	3
ANTH 108 Intro to Cultural Anthropology	3	ANTH 1816 Cultural Anthropology	3
EPSY S305 Preschool Child	3	CHLD 1505 Child Development	3
COMS 244 Intro Interpersonal Communications	3	COMM 1200 Interpersonal Communications	3
		COMM 1220 Organizational Communications	3
ECON 104 Introductory Economics	3	ECON 1607 Intro to Economics	3
ECON 142 Prin of Microeconomics	3	ECON 1612 Prin of Microeconomics	3
ECON 144 Prin of Macroeconomics ECON 142	3	ECON 1610 Prin of Macroeconomics	3
		HIST 1425 Women and the American Experience	3
POLS 110 Intro to US Politics	3	POLS 1800 Government of the United States	3
		POLS 1801 Introduction to Political Science	3
POLS 170 Intro to International Relations	3	POLS 1804 International Relations	3
PSYC 104 General Psychology	3	PSYC 1000 General Psychology	3
		PSYC 1014 Developmental Psychology	3
PSYC 120 Personality	3	PSYC 1034 Theories of Personality	3
SOC 104 Elements of Sociology	3	SOCI 1100 Introduction to Sociology	3
		CHLD 1505 Preschool Child	3

<b>Goal 4: Culture and Diversity (One Unit from each outcome)</b>			
<b>Outcome 1</b>		<b>AE41</b>	
SOC 104 Elements of Sociology	3	SOCI 1100 Introduction to Sociology	3
SOC 160 Social Problems and American Values	3	SOCI 1104 Contemporary Social Problems	3
<b>Outcome 2 (Not needed for Arch. Eng.)</b>		<b>AE42</b>	
ANTH 100 General Anthropology	3	ANTH 2812 Intro to Anthropology	3
ANTH 108 Intro to Cultural Anthropology	3	ANTH 1816 Cultural Anthropology	3
REL 104 Intro to Religious Studies	3	RELI 1311 World Religions	3
GEOG 100 World Regional Geography	3	ANTH/GEOG 1819 World and Regional Geography	3
HA 150 Western Art: Ancient to Medieval	3	ARTS 1201 Art History Survey I	3
HWC 204 Western Civilization I	3	HIST 1409 Hist and Phil of West Culture to 1500	3
HWC 205 Western Civilization 2	3	HIST 1411 Hist and Phil of West Culture 1500-present	3
GERM 104 Elementary German	5	LANG 1900 Elementary German	5
GERM 108 Elementary German II	5	LANG 1902 Elementary German 2	5
GERM 201 Intermediate German I	3	LANG 1904 Intermediate German	3
GERM 202 Intermediate German II	3	LANG 1905 Intermediate German 2	3
SPAN 212 Intermediate Spanish	3	LANG 1912 Intermediate Spanish	3
		LITR 1215 World Literature	3
POLS 170 International Relations	3	POLS 1804 International Relations	3
		POLS 1810 the Middle East in Modern Times	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

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- \*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