

**BARTON COUNTY COMMUNITY COLLEGE
TRANSFER PROGRAM TO THE UNIVERSITY OF KANSAS
B.S. IN PETROLEUM ENGINEERING**

Number to call at KU for advising: (785) 864-4965

Website: www.cpe.engr.ku.edu/

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

Sixty-four credit hours may be transferred to KU from community colleges. Transfer students must have at least a 2.5 GPA and proof of competency in calculus.

KU Course Requirements		Barton County Course Equivalents	
ENGLISH (9 hours)			
ENGL 101 COMPOSITION	3	ENGL 1204 ENGLISH COMPOSITION I OR ENGL 1203 ENGLISH COMPOSITION I (HNRS)	3 3
ENGL 102 CRITICAL READING & WRITING	3	ENGL 1206 ENGLISH COMPOSITION II OR	3
ADVANCED ENGLISH (ENG 203 or any advanced English course designated H)	3	Select ONE course from the following list:	
		LITR 1210 INTRO TO LITERATURE	3
		LITR 1212 THE SHORT STORY	3
		LITR 1214 THE NOVEL	3
		LITR 1215 WORLD LITERATURE	3
		LITR 1218 AMERICAN LITERATURE TO 1865	3
		LITR 1220 AMERICAN LIT 1865 TO PRESENT	3
		LITR 1226 INTRO TO POETRY	3
		LITR 1228 INTRO TO DRAMA	3
		LITR 1234 SHAKESPEARE	3

HUMANITIES AND SOCIAL SCIENCES (12 hours)

At least one course must be from Humanities and at least one course must be from Social Sciences.

At least two courses must be from the same department in either Humanities or Social Sciences.

HUMANITIES			
English		EDUC 1136 CHILDREN'S LITERATURE	3
		ENGL 1216 CREATIVE WRITING	3
		LITR 1210 INTRO TO LITERATURE	3
		LITR 1212 THE SHORT STORY	3
		LITR 1214 THE NOVEL	3
		LITR 1215 WORLD LITERATURE	3
		LITR 1217 DIR IND STUDY/LITERATURE	2-3
		LITR 1218 AMERICAN LITERATURE TO 1865	3
		LITR 1220 AMERICAN LIT 1865 TO PRESENT	3
		LITR 1226 INTRO TO POETRY	3
		LITR 1228 INTRO TO DRAMA	3
		LITR 1234 SHAKESPEARE	3
		LITR 1235 GREAT BOOKS PROGRAM	2-3
History		HIST 1400 AMERICAN HISTORY TO 1877	3
		HIST 1401 AMERICAN HISTORY 1865 TO PRES	3
		HIST 1402 AMERICAN HISTORY 1877-PRES	3
		HIST 1403 AMERICAN HISTORY TO 1865	3
		HIST 1404 AMERICAN WEST	3
		HIST 1405 HISTORY OF THE GREAT PLAINS	3
		HIST 1406 HISTORY OF KANSAS	3
		HIST 1407 PRE-SETTLEMENT PLAINS HIST	3
		HIST 1408 WESTERN CIV TO 1500	3
		HIST 1410 WESTERN CIV 1500-PRESENT	3
		HIST 1412 CONTEMPORARY EUROPE	3
		HIST 1414 19 TH CENTURY EUROPE	3
		HIST 1416 AMERICAN MILITARY HISTORY	3
		HIST 1460 MILITARY HIST/AMER REVLTN	3
		HIST 1461 MILITARY HIST/AMER CIVIL WAR	3
		HIST 1462 MILITARY HIST/1ST WORLD WAR	3
		HIST 1463 MILITARY HIST/2ND WORLD WAR	3
		HIST 1465 MILITARY HIST/VIETNAM WAR	3

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History of Art		ARTS 1200 ART APPRECIATION	3
		ARTS 1201 ART HISTORY SURVEY I	3
		ARTS 1203 ART HISTORY SURVEY II	3
		ARTS 1208 HISTORY & CRITICISM OF ART I	3
		ARTS 1221 HISTORY & CRITICISM OF ART II	3
Humanities & Western Civilization		ARTS 1207 HUMANITIES THROUGH ARTS	3
Music History		MUSI 1002 INTRO TO MUSIC	3
		MUSI 1084 JAZZ FOL ROCK MUSIC	3
Philosophy		PHIL 1602 INTRO TO PHILOSOPHY	3
		PHIL 1603 DIR IND STUDY/PHILOSOPHY	2-3
		PHIL 1604 SYSTEMATIC ETHICS	3
		PHIL 1605 REASON AND ARGUMENT	3
		PHIL 1606 HUMANITY/ETHICL DEC MAKING	3
		LIFE 1420 BIOETHICAL ISSUES	3
		BUSI 1607 BUSINESS ETHICS	3
Religious Studies		RELI 1300 BIBLICAL POETRY	3
		RELI 1301 NEW TESTAMENT LIT: GOSPELS	3
		RELI 1302 DIR IND STUDY/RELIGION	2-3
		RELI 1303 NEW TEST LIT: ACTS & EPISTLES	3
		RELI 1305 OLD TEST LIT: PENTATEUCH	3
		RELI 1307 OLD TEST LIT: WISDOM BOOKS	3
		RELI 1309 OLD TEST LIT: PROPHETS	3
Theatre & Film			
		THEA 1302 ACTING I	3
		THEA 1304 ACTING II	3
		THEA 1315 INTRO TO FILM	3
		THEA 1328 MAKE-UP FOR THE THEATRE	1-2

SOCIAL SCIENCES			
Anthropology		ANTH 1812 INTRO TO ANTHROPOLOGY	3
		ANTH 1816 CULTURAL ANTHROPOLOGY	3
		ANTH 1818 PEOPLES OF AFRICA	3
		ANTH 1820 FUTUROLOGY	3
		ANTH 1822 INDIAN OF NORTH AMER./THEIR CULTURE	3
		ANTH 1824 ARCHAEOLOGY	3
Economics		ECON 1607 INTRO TO ECONOMICS	3
		ECON 1610 PRIN OF MACROECONOMICS	3
		ECON 1612 PRIN OF MICROECONOMICS	3
Geography		ANTH 1819 WRLD & REGIONAL GEOGRAPHY	3
		PHSC 1404 PHYSICAL GEOGRAPHY	3
		PHSC 1410 CONSERVATION: NAT RESOURCE	3
Human Development & Family Life		PSYC 1014 DEVELOPMENTAL PSYCHOLOGY	3
		SOCI 1102 MARRIAGE & FAMILY	3
		SOCI 1110 JUVENILE DELINQUENCY	2-3
Political Science			
		POLS 1800 GOVERNMENT OF THE U.S.	3
		POLS 1801 INTRO TO POLITICAL SCIENCE	3
		POLS 1802 NEW POLITICS	3
		POLS 1804 INTERNATIONAL RELATIONS	3
		POLS 1805 DIR IND STUDY/GOVERNMENT	2-3
		POLS 1806 CONSTITUTIONAL DEVELOPMNT	3
		POLS 1808 SEMINAR ON ASIA	1-3
		POLS 1810 THE MID. EAST IN MOD. TIMES	1-3
		POLS 1828 STATE & LOCAL GOVERNMENT	3
		POLS 1829 TOPICS IN MUNICIPAL GOVERN	1-3
Psychology		PSYC 1000 GENERAL PSYCHOLOGY	3
		PSYC 1001 GENERAL PSYCHOLOGY HONORS	3
		PSYC 1005 CURRENT ISSUES IN PSYCH	3

		PSYC 1006 ABNORMAL PSYCHOLOGY	3
		PSYC 1008 INTRO TO SUPERVISION	3
		PSYC 1012 INTRO TO COUNSELING	3
		PSYC 1016 SOCIAL PSYCHOLOGY	3
		PSYC 1018 GROUP DYNAMICS I	3
		PSYC 1020 GROUP DYNAMICS II	3
		PSYC 1034 THEORIES OF PERSONALITY	3
		PSYC 1042 INTRO TO BEHAVIOR MODIFICTN	3
		PSYC 1045 DIR IND STUDY/PSYCHOLOGY	2-3
		SOCI 1114 HUMAN SEXUALITY	3
Sociology		SOCI 1100 INTRO TO SOCIOLOGY	3
		SOCI 1101 DIR IND STUDY/SOCIOLOGY	2-3
		SOCI 1104 CONTEMPORARY SOCIAL PRBLMS	3
		SOCI 1108 INDIVID PROJECTS IN SOCIOLOGY	2-3
		SOCI 1129 CROSS CULTURAL AWARENESS	3
		SOCI 1138 WOMEN IN SOCIETY	3
		CRIM 1600 INTRO TO CRIMINAL JUSTICE	3
		CRIM 1610 CRIMINOLOGY	3
		CRIM 1614 CRIMINAL LAW I	3
		CRIM 1618 CRIMINAL LAW II	3
		CRIM 1651 INTRO TO CORRECTIONS	3
		CRIM 1660 PRACTICAL LAW CORRECTIONS	3

MATHEMATICS (15-18 hours)			
MATH 121 CALCULUS I	5	MATH 1834 ANALYTIC GEOMETRY & CALC II	5
MATH 122 CALCULUS II	5	No Equivalent	
And one of the following options (8 hours):			
<i>Option A:</i>			
MATH 223 VECTOR CALCULUS	3	NO EQUIVALENT	
MATH 290 ELEMENTARY LINEAR ALGEBRA	2	NO EQUIVALENT	
MATH 320 ELEMENTARY DIFF. EQUATIONS	3	No Equivalent	
<i>Option B:</i>			
MATH 220 APPLIED DIFF. EQUATIONS	3	MATH 1838 Differential Equations	
MATH 290 ELEMENTARY LINEAR ALGEBRA	2	NO EQUIVALENT	
And for Petroleum Engineering:			
MATHEMATICS ELECTIVE - selected from courses numbered above MATH 124 except MATH 320			

NATURAL SCIENCES			
BASIC SCIENCES (18 hours) Required for both Chemical and Petroleum Engineering Students			
CHEM 184 FOUNDATIONS OF CHEMISTRY I	5	CHEM 1806 COLLEGE CHEMISTRY I	5
CHEM 188 FOUNDATIONS OF CHEMISTRY II	5	CHEM 1808 COLLEGE CHEMISTRY II OR	5
		CHEM 1808 COLLEGE CHEMISTRY II AND	3
		CHEM 1810 ELEMNTRY CHEMICL ANALYSIS	2
PHSX 211 GENERAL PHYSICS I	4	PHYS 1604 ENGINEERING PHYSICS I	5
PHSX 212 GENERAL PHYSICS II	4	PHYS 1606 ENGINEERING PHYSICS II	5
CHEM 622 FUNDMNTLS OF ORGANIC CHEM	3	NO EQUIVALENT	
GEOL 101 & 103 INTRO TO GEOLOGY & LAB	5	PHSC 1402 INTRO TO GEOLOGY	5
GEOL 331 SEDIMENT & SURFACE PROCESS	4	NO EQUIVALENT	
GEOL 535 PETROLM & SUBSURFACE GEOL	4	NO EQUIVALENT	
BASIC SCIENCE OR ENGR SCIENCE ELECTIVE	3	Select ONE course from the following list:	
		LIFE 1400 CONCEPTS OF BIOLOGY	3
		LIFE 1402 PRINCIPLES OF BIOLOGY	5
		LIFE 1404 HUMAN HEREDITY	3
		LIFE 1406 PRINCIPLES OF BOTANY	5
		LIFE 1407 ANATOMY & PHYSIOLOGY I	4
		LIFE 1408 ANATOMY & PHYSIOLOGY	5

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		LIFE 1409 ANATOMY & PHYSIOLOGY II	4
		LIFE 1410 PRINCIPLES OF ZOOLOGY	5
		LIFE 1412 PRINCIPLES OF MICROBIOLOGY	5
		LIFE 1413 ENVIRONMENTAL SCIENCE	3
		LIFE 1414 ENVIRONMENTAL SCIENCE LAB	2
		LIFE 1415 INSECTS OF KANSAS	3
		LIFE 1416 IND STUDY IN BIOLOGY SCIENCE	1-3
		LIFE 1417 LIFE SCIENCE INTERNSHIP	3
		CHEM 1801 DIR IND STUDY/CHEMISTRY	1-3
		CHEM 1802 FUNDMNTL OF GENERAL CHEM	5
		CHEM 1804 ELEMENTARY ORGANIC CHEM	5
		CHEM 1816 ORGANIC CHEMISTRY II	5
		CHEM 1818 BASIC CORROSION	1-3
		CHEM 1820 STUDIES IN CHEMISTRY	1-3
		PHSC 1400 PHYSICAL SCIENCE	5
		PHSC 1402 INTRO TO GEOLOGY	3-5
		PHSC 1404 PHYSICAL GEOGRAPHY	3
		PHSC 1408 ASTRONOMY	3
		PHSC 1410 CONSERVATION: NAT RESOURCE	3
		PHYS 1600 PHYSICS I	5
		PHYS 1602 PHYSICS II	5
		PHYS 1603 DIR IND STUDY/PHYSICS	1-3

ENGINEERING SCIENCE			
C&PE 121 INTRO TO COMPUTERS IN ENGR	3	NO EQUIVALENT	
C&PE 211 MATERIAL & ENERGY BALANCES	3	NO EQUIVALENT	
C&PE 221 BASIC ENGR THERMODYNAMICS	3	NO EQUIVALENT	
C&PE 511 MOMENTUM TRANSFER	3	NO EQUIVALENT	
C&PE 521 HEAT TRANSFER	3	NO EQUIVALENT	
C&PE 117 INTRO TO PETRO.ENGR PROF.I	1	NO EQUIVALENT	
C&PE 127 INTRO TO PETRO ENGR PROF II	1	NO EQUIVALENT	
ENGR SCIENCE ELECTIVES (10 HRS):			
C E 201 STATICS	2	PHYS 1608 STATICS	3
EECS 319 ELCTRCL CIRCUITS, DEVICES, SYST	4	NO EQUIVALENT	
C E 311 STRENGTH OF MATERIALS	4	NO EQUIVALENT	

NOTE: In order to graduate in four years, a student must have completed mathematics through differential equations prior to transferring to KU. It is the student's advantage to take CP&E 211 Material and Energy Balances at KU in the summer before the junior year. The requirements listed above are subject to annual change.