

Mathematics

University of Kansas

Johnson County Community College Transfer Program to the University of Kansas	College Undergraduate
College of Liberal Arts & Sciences	785-864-3500
Mathematics, BA & BS	collegeundergrad@ku.edu
Academic Year 2025-2026	collegeundergrad.ku.edu

Program Description

The Associate of Arts, AA (<https://catalog.jccc.edu/degree/requirements/associate-arts/>) at JCCC is a general transfer degree and partners well with the first two years of most bachelor degree programs. Students pursuing the AA may select courses that satisfy both the AA degree requirements and lower division requirements for a bachelor's degree at four-year institutions. The elective hours within the AA allow students to complete additional general education and lower division courses required for specific majors. The AA degree requires completion of 60 credit hours. Meeting with a JCCC counselor (<https://www.jccc.edu/student-resources/counseling/academic-counseling/>) is strongly recommended for selection of appropriate courses.

Admission Requirements

- Separate programs lead to the B.A. in mathematics and the B.S. in mathematics. The B.A. has fewer mathematics course requirements and more general education requirements. The B.S. requires more mathematics courses, three courses in mathematics applications, and fewer general education courses. Students wishing to attend graduate school in mathematics or to pursue a career that makes substantial use of mathematics (as an actuary, for example) should get a B.S. in mathematics. Many students majoring in mathematics are interested in a liberal arts degree; such students may want to consider the B.A. in mathematics. Students who wish to teach mathematics in high school should pursue a B.A. or B.S. in mathematics while participating in the STEMTeach program (<https://stemteach.ku.edu/>).
- Minimum total hours for graduation is 120.
- A maximum of 75 hours may be transferred to KU from community colleges. Students should be aware that 45 junior/senior credit hours (300+) are required for completion of the bachelor's degree; 30 of those hours must be at KU; and community college courses do not transfer as junior/senior hours.
- Generally, it is okay to elect CR/NC for a KU Core requirement, but students should check with their advisor. A student cannot take a class Credit/No Credit for any major requirement.
- Students transferring to KU, that complete the General Education requirements required for the Associate of Arts (AA) (<https://catalog.jccc.edu/degree/requirements/associate-arts/>), Associate of Fine Arts (AFA) (<https://catalog.jccc.edu/degree/requirements/associate-fine-arts/>) or Associate of Science (AS) (<https://catalog.jccc.edu/degree/requirements/associate-science/>) degree from JCCC will be considered to have satisfied KU's Core 34 general education curriculum.
- Students who transfer to KU, without completing the General Education requirements required for the Associate of Arts (AA) (<https://catalog.jccc.edu/degree/requirements/associate-arts/>), Associate of Fine Arts (AFA) (<https://catalog.jccc.edu/degree/requirements/associate-fine-arts/>) or Associate of Science (AS) (<https://catalog.jccc.edu/degree/requirements/associate-science/>) degree will have courses evaluated on a course-by-course basis toward meeting KU requirements. To learn more about courses that satisfy KU Core 34 Requirements (<https://catalog.ku.edu/core34/>) and KU CredTran (<https://creditransfer.ku.edu/>).
- Visit the KU Core 34 General Education guide (<https://nam12.safelinks.protection.outlook.com/?url=http%3A%2F%2Fnextcatalog.jccc.edu%2Ftransfer-guides%2Fku%2Fku-general-education&data=05%7C02%7Cskhalif2%40jccc.edu%7C506a4b607ca34eaa00fb08de158ef1c2%7C15244239dcf245e7aefd127b69fc5438%7C1%7C0%7C638971900858599422%7CUnknown%7CTWFPbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIslAIiOiJXaW4zMilslkFOljoiTWFpbClslldUljoyfQ%3D%3D%7C0%7C%7C%7C&sdata=b2O9VaVq9VFjN8MjkWQ4YCl60oq5GZXnn69Vpa2sSL0%3D&reserved=0>) for JCCC equivalents.

Mathematics, BA Requirements

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	Title	Hours			

KU Core 34 Requirements

Visit the KU Core 34 English (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents.

Visit the KU Core 34 Communications (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents.

Visit the KU Core 34 Math and Statistics (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents.

MATH 241	Calculus I*	5	MATH 125 & MATH 145	Calculus I and "Calculus I, Honors"	4
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Visit the KU Core 34 Natural and Physical Sciences (lab required) (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents.

Visit the KU Core 34 Core 34 Social and Behavioral Sciences (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents. (Select two courses in two different disciplines – 6 hrs. total)

Visit the KU Core 34 Arts and Humanities (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents. (Select two courses in two different disciplines – 6 hrs. total)

Visit the KU Core 34 US Culture (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents.

Visit the KU Core 34 Global Culture (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents.

Program Requirements

MATH 242	Calculus II*	5	MATH 126 & MATH 146	Calculus II and "Calculus II, Honors"	4
MATH 243	Calculus III*	5	MATH 127 & MATH 147	Calculus III and "Calculus III, Honors"	4
MATH 246	Elementary Linear Algebra*	3	MATH 290	Elementary Linear Algebra	2

Laboratory or Field Experience (BA Degree Requirement) See table below on page 3

Non-English Language (BA Degree Requirement) See table below on page 3

Laboratory or Field Experience - Variable credits. One laboratory science (at least one credit hour) is required for the B.A. degree. Courses that fulfill this requirement will contain the code "LFE" in the course description.

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
ASTR 122	Astronomy	4	ASTR 191/196	Contemporary Astronomy/Lab	
BIOL 121	Introductory Biology for Non-Majors	4	BIOL 100/102	Principles of Biology/Lab	
BIOL 135	Principles of Cell and Molecular Biology	4	BIOL 150/154	Principles of Molecular and Cellular Biology/Lab	
BIOL 150	Biology of Organisms*	5	BIOL 152/BIOL NLAB	Principles of Organismal Biology	
BIOL 230 & BIOL 231	Microbiology* and Microbiology Lab*	3	BIOL 200/203	Basic Microbiology/Lab	
EVRN 130 & EVRN 132	Environmental Science and Environmental Science Laboratory*	3	EVRN 140/160	Global Environment I: The Discovery of Environmental Change/Lab	
GEOS 140 & GEOS 141	Physical Geography and Physical Geography Lab*	3	GEOG 104/105	Introduction to Physical Geography/Lab	
PHYS 130	College Physics I*	5	PHSX 114	College Physics I	4
PHYS 220	Engineering Physics I*	5	PHSX 211/216	General Physics I/Lab	
PHYS 221	Engineering Physics II*	5	PHSX 212/236	General Physics II/Lab	
CHEM 122	Principles of Chemistry*	5	CHEM 110	Introductory Chemistry	5

CHEM 124 & CHEM 125	General Chemistry I Lecture* and General Chemistry I Lab*	4	CHEM 130 General Chemistry I
CHEM 131 & CHEM 132	General Chemistry II Lecture* and General Chemistry II Lab*	4	CHEM 135 General Chemistry II

Non-English Language – Variable credits. Students must demonstrate fourth semester proficiency in a single non-English language, or third semester proficiency in a first non-English language and first semester proficiency in a second non-English language. This requirement may be met through coursework or examination by the appropriate language department. (BA only) See the complete list of JCCC Foreign Language courses, click here. Check with JCCC Counselor for placement into appropriate courses and course offerings per semester at KU.

Course Code Code	Course Title Title	Course Hours	Transfer Code Hours	Transfer Title	Transfer Hours
FL 120	Elementary German I	5	GERM 104	Elementary German I	5
FL 121	Elementary German II*	5	GERM 108	Elementary German II	5
FL 130	Elementary Spanish I	5	SPAN 104	Elementary Spanish I	5
FL 131	Elementary Spanish II*	5	SPAN 108	Elementary Spanish II	5
FL 140	Elementary French I	5	FREN 110	Elementary French I	5
FL 141	Elementary French II*	5	FREN 120	Elementary French II	5
FL 165	Elementary Chinese I	5	CHIN 104	Elementary Chinese I	5
FL 166	Elementary Chinese II*	5	CHIN 108	Elementary Chinese II	5
FL 170	Elementary Japanese I	5	JPN 104	Elementary Japanese I	5
FL 171	Elementary Japanese II*	5	JPN 108	Elementary Japanese II	5
FL 182	Intermediate Japanese I*	5	JPN 204	Intermediate Japanese I	5
FL 183	Intermediate Japanese II*	5	JPN 208	Intermediate Japanese II	5
FL 220	Intermediate German I*	3	GERM 201	Intermediate German I	3
FL 221	Intermediate German II*	3	GERM 202	Intermediate German II	3
FL 230	Intermediate Spanish I*	3	SPAN 212 Intermediate Spanish I		
FL 231	Intermediate Spanish II*	3	SPAN 216 Intermediate Spanish II		
FL 240	Intermediate French I*	3	FREN 230 Intermediate French I		
FL 241	Intermediate French II*	3	FREN 240 Intermediate French II		
FL 265	Intermediate Chinese I*	3	No KU equivalent but counts as CHIN U Intermediate Chinese		
FL 266	Intermediate Chinese II*	3	CHIN 204 Intermediate Chinese I		

Mathematics, BS Requirements

Course Code Code	Course Title Title	Course Hours	Transfer Code Hours	Transfer Title	Transfer Hours
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Visit the KU Core 34 Communications (https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/) for JCCC equivalents.					
Visit the KU Core 34 Math and Statistics (https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/) for JCCC equivalents.					
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Visit the KU Core 34 US Culture (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents. ^{Institutionally Designated}

Visit the KU Core 34 Global Culture (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents. ^{Institutionally Designated}

Program Requirements

MATH 242	Calculus II*	5	MATH 126	Calculus II	
MATH 243	Calculus III*	5	MATH 127	Calculus III	
MATH 246	Elementary Linear Algebra*	3	MATH 290	Elementary Linear Algebra	2

Select one of the following:

CS 200	Concepts of Programming Algorithms Using C++*	4	EECS 268	Programming II	4
CS 202	Concepts of Programming Algorithms using Python*	4	EECS 168 & EECS 268	Programming I and Programming II	4
CS 205	Concepts of Programming Algorithms using Java*	4	EECS 268	Programming II	4

STEMTeach Requirements

This program is designed to be completed along with an approved BS or BA degree to fulfill the requirements necessary for the STEMTeach KU Certificate in your desired area of licensure. The program is also designed to fulfill the course requirements necessary to gain state licensure eligibility to become a secondary teacher in Kansas, but completion of the program does not guarantee the student's licensure. Please consult with your major advisor for further information about meeting your degree/major requirements.

- 2.75 KU + Transfer Cumulative GPA
- 2.5 Content GPA

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
MATH 241	Calculus I*	5	MATH 125	Calculus I	
MATH 242	Calculus II*	5	MATH 126	Calculus II	
MATH 243	Calculus III*	5	MATH 127	Calculus III	



MATH 246	Elementary Linear Algebra*	3	MATH 290 Elementary Linear Algebra
MATH 254	Differential Equations*	4	MATH 220 Applied Differential Equations

* JCCC course has a prerequisite or corequisite.

^ This course is a Required major course and is also part of Core 34: Systemwide General Education. If this course is not taken to fulfill the Core 34:SGE requirement, it must be taken in place of elective hours. NOTE: KU assumes students will have the equivalent of MATH 101 College Algebra (MATH 171 College Algebra at JCCC) completed prior to transfer. This course is also a pre-req for several math courses.

Last Approved Tue Oct 28 21:28:34 2025