

Actuarial Science and Statistics, BS

University Central Missouri

Johnson County Community College Transfer Program to the University Central Missouri	Phoebe McLaughlin, Ph.D.
	660-543-4554
Actuarial Science and Statistics, BS	pmclaughlin@ucmo.edu
Academic Year 2025-2026	https://www.ucmo.edu/academics/programs/majors/chst/mathematics-actuarial-sci-and-statistics/statistics/actuarial-science-and-statistics-option-2-statistics-bs/index.php

Program Description

The Associate of Arts degree (A.A.) (<https://catalog.jccc.edu/degreerequirements/associate-arts/>) at JCCC is a general transfer degree and partners well with the first two years of most bachelor degree programs. Students who transfer to UCM with an Associate of Arts degree are considered to have met all 42 hours of UCM's General Education requirements, with the exception of Major/Minor-Required General Education courses and the Constitution Requirement. Visit the UCM General Education Program guide (<https://www.jccc.edu/student-resources/transfer/files/transfer-guides/ucmo-general-ed.pdf>) for details. The elective hours within the A.A. allow students to complete additional general education and lower division courses required for specific majors/minors.

Students who transfer to UCM without a degree (or a degree other than an AA) will have all coursework evaluated on a course-by-course basis. JCCC students not completing the AA degree should visit the UCM General Education Program guide (<https://www.jccc.edu/student-resources/academic-counseling/transfer/files/transfer-guides/ucmo-general-ed.pdf>) for course equivalents and also the UCM catalog for any specific or additional General Education requirements for their UCM program of study.

NOTE: Courses taken to fulfill General Education requirements may not be taken on the pass/fail basis.

Students should be cognizant of UCM's Upper-Level Course Requirement and Residence Requirement, especially if enrolling in more than 60 hours at JCCC. Visit the UCM General (<https://www.jccc.edu/student-resources/academic-counseling/transfer/files/transfer-guides/ucmo-general-ed.pdf>) Education Program guide (<https://www.jccc.edu/student-resources/academic-counseling/transfer/files/transfer-guides/ucmo-general-ed.pdf>) for details.

The Actuarial Science and Statistics, BS degree requires a minimum of 120 credit hours. This degree offers two options: Actuarial Science option or Statistics option.

It is the STUDENT'S RESPONSIBILITY to check for updates to all transfer information. This transfer guide is provided as a service and is updated as needed. Degree requirements at the four-year colleges are subject to change by those institutions. To ensure you have the most accurate information about the program, you must meet with an advisor at the transfer institution.

Program Requirements

GENERAL EDUCATION REQUIREMENTS with JCCC Equivalents - All students must complete a minimum of 42 credit hours in general education. The following general education courses are required by this major.

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	Title	Hours			
Select one of the following:					
COMS 121	Public Speaking	3	COMM 1000	Public Speaking	3
COMS 125	Personal Communication	3	COMM 1000	Public Speaking GE	

ECON 230	Principles of Macroeconomics	3	ECON 1010	Principles of Macroeconomics	3
ECON 231	Principles of Microeconomics	3	ECON 1011	Principles of Microeconomics	3
MATH 241	Calculus I*	5	MATH 1151	Calculus I	5

ACTUARIAL SCIENCE AND STATISTICS CORE REQUIREMENTS (44 hours) with JCCC Equivalents

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	Title	Hours	Hours		
Select one of the following:					
CS 200	Concepts of Programming Algorithms Using C++*	4	CS 1100	Computer Programming I	
CS 205	Concepts of Programming Algorithms using Java*	4	CS 1100	Computer Programming I	
CS 134	Programming Fundamentals	4	CS 1030	Python Programming I	
IT 202	IT Scripting*	3	CS 1030	Python Programming I	
CS 210	Discrete Structures I*	3	CS 2400	Discrete Structures	
MATH 2410	Discrete Mathematics <small>No equivalent</small>				
MATH 242	Calculus II*	5	MATH 1152	Calculus II	5
MATH 243	Calculus III*	5	MATH 2153	Calculus III	

ACTUARIAL SCIENCE OPTION REQUIREMENTS (33 hours) with JCCC Equivalent

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	Title	Hours	Hours		
CS 202	Concepts of Programming Algorithms using Python*	4	CS 2030	Python Programming II	

ACTUARIAL SCIENCE OPTION ELECTIVES (9 hours) with JCCC Equivalents

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	Title	Hours	Hours		
ACCT 121	Accounting I	3	ACCT 1101	Foundation/Financial Reporting	3
ACCT 122	Accounting II*	3	ACCT 1101	Foundations of Financial Reporting	
ACCT 222	Managerial Accounting*	3	ACCT 2102	Principles of Managerial Acct.	3
MATH 246	Elementary Linear Algebra*	3	MATH 3710	Linear Algebra	
MATH 254	Differential Equations*	4	MATH 3151	Differential Equations	3

STATISTICS OPTION REQUIREMENTS (27 hours) with JCCC Equivalents

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	Title	Hours	Hours		
CS 236	Object-Oriented Programming Using C#*	4	CS 1110	Computer Programming II	

Select one of the following:



CS 252	Basic Data Structures Using Python*	4	CS 2300 Data Structures
CS 255	Basic Data Structures Using Java*	4	CS 2300 Data Structures
MATH 246	Elementary Linear Algebra*	3	MATH 3710 Linear Algebra

STATISTICS OPTION ELECTIVES (9 hours) with JCCC Equivalents

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
CS 202	Concepts of Programming Algorithms using Python*	4	CS 2030 Python Programming II		
CIS 260	Database Management*	4	CS 4600 Database Theory and Applications		
MATH 254	Differential Equations*	4	MATH 3151	Differential Equations	3

* JCCC course has a prerequisite or corequisite.

Last Approved 12/31/1969, 6:00:00 PM