Johnson County Community College
Transfer Program to University of Central Missouri
College of Health, Science, and Technology
Cybersecurity, B.S.
2024-2025 Catalog

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The Associate of Arts degree (A.A.) 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. (See the UCM General Education Program guide 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 refer to the tables in the UCM General Education Program guide 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. Please refer to the UCM General Education Program guide for details.

NOTE: The UCM General Education guide can be found at: https://www.jccc.edu/student-resources/transfer/files/transfer-guides/ucmo-general-ed.pdf

Courses taken at two-year colleges are not applicable toward UCM Upper-Level Requirement. Students are advised to meet with a UCM advisor before taking additional hours at JCCC.

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 up to date information about the program, it is imperative you meet with an advisor at the transfer institution.

GENERAL EDUCATION REQUIREMENTS FOR THIS DEGREE

UCM Course	Hrs	JCCC Equivalents	Hrs
MATH 1111 College Algebra **OR**	3	MATH 171 College Algebra* **OR**	3
MATH 1150 Pre-Calculus Mathematics **OR**	5	MATH 173 Precalculus* **OR**	5
MATH 1131 Applied Calculus **OR**	3	MATH 231 Business & Applied Calculus I* **OR**	3
MATH 1151 Calculus I	5	MATH 241 Calculus I*	5
ACST 1300 Basic Statistics+	3	MATH 181 Statistics*	3
COMM 1000 Public Speaking	3	COMS 121 Public Speaking	3

 +Course requires a grade of "C" or better.

CYBERSECURITY MAJOR REQUIREMENTS (45 hours)

A grade of "C" or better is required in all major coursework.

UCM Course	Hrs	JCCC Equivalents	Hrs
CS 1030 Python Programming I	3	CIS 142 Beginning Programming using Python	4
		OR CS 134 Programming Fundamentals	4
		OR IT 202 IT Scripting*	3
CS 2400 Discrete Structures	3	CS 210 Discrete Structures I*	3
CYBR 1800 Introduction to Cybersecurity	3	IT 175 Cybersecurity Fundamentals*	3
CYBR 1500 Command Line Environments	3	IT 230 Linux Fundamentals	3
CYBR 4850 Computer & Network Forensics	3	IT 238 Digital Forensics*	3
CYBR 4840 Ethical Hacking	3	IT 239 Ethical Hacking*	3
Additional requirements for this major have no equivalent at JCCC.			

Choose one of the following areas: (13-15 hours)
(Cyber Operations OR Secure Software Development)

CYBER OPERATIONS			
UCM Course	Hrs	JCCC Equivalents	Hrs
NET 1060 Introduction to Networks	3	IT 141 Introduction to Networks	3
NET 1061 Switching, Routing, and Wireless Essentials	3	IT 150 Switching, Routing, and Wireless Essentials*	3
NET 3068 Network Security I	3	IT 206 Network Security Fundamentals*	3
NET 2060 Enterprise Networking, Security, and Automation	3	IT 204 Enterprise Networking, Security and Automation*	3

SECURE SOFTWARE DEVELOPMENT

UCM Course	Hrs	JCCC Equivalents	Hrs
CS 1100 Computer Programming I	3	CS 200 Concepts of Programming Algorithms Using C++* **OR** CS 201 Concepts of Programming Algorithms using C#* **OR** CS 205 Concepts of Programming Algorithms using Java*	4
CS 1110 Computer Programming II	3	CS 236 Object-Oriented Programming Using C#**	4
CS 2300 Data Structures	3	CS 255 Basic Data Structures Using Java*	4
SE 3910 Software Engineering	3	No equivalent	
SE 4950 Secure Software Engineering	3	No equivalent	

CYBERSECURITY ELECTIVES (6-12 hours) Please note courses taken to satisfy the Cyber Operations option or Secure Software Development option do not satisfy Elective hours.

UCM Course	Hrs	JCCC Equivalents	Hrs
CS 3500 C and UNIX Environment	3	CIS 204 UNIX Scripting and Utilities*	3
CS 4110 Mobile App. Prog. with Android	3	CIS 208 Mobile Application Development*	4
CS 4120 Advanced Applications Programming in Java	3	CIS 240 Advanced Topics in Java*	4
CS 4600 Database Theory & Applications	3	CIS 260 Database Management*	4
CS 4130 Server Side Web Programming	3	CIS 275 Web-Enabled Database Programming*	4
CS 1100 Computer Programming I	3	CS 200 Concepts of Programming Algorithms Using C++* **OR** CS 201 Concepts of Programming Algorithms using C#* **OR** CS 205 Concepts of Programming Algorithms using Java*	4
CS 1110 Computer Programming II	3	CS 236 Object-Oriented Programming Using C#**	4
CS 3110 Applications Programming in C# and .NET	3	CS 236 Object-Oriented Programming Using C#**	4
CS 2300 Data Structures	3	CS 255 Basic Data Structures Using Java*	4
NET 3068 Network Security I	3	IT 206 Network Security Fundamentals*	3
NET 1060 Introduction to Networks	3	IT 141 Introduction to Networks	3
NET 1061 Switching, Routing and Wireless Essentials	3	IT 150 Switching, Routing, and Wireless Essentials*	3
NET 2060 Enterprise Networking, Security, and Automation	3	IT 204 Enterprise Networking, Security and Automation*	3
CS 4610 Introduction to Cloud Computing	3	IT 223 Azure Administration*	3
NET 2061 Cisco CyberOps Associate	3	IT 257 Cybersecurity Operations*	3
CS 4020 Internship	3	IT 271 Information Technology Internship I* **OR** IT 272 Information Tech. Internship II*	3

* JCCC Course has a prerequisite or corequisite.   ** CS 236 transfers to UCM as CS 1110 OR CS 3110.