

Johnson County Community College Transfer Program to Wichita State University **College of Engineering** 2024-25 Catalog Contact for WSU: Phone: 316-978-3400 <u>www.wichita.edu/academics/</u> <u>engineering/essc/advising/</u> Home page: <u>www.wichita.edu/engineering</u>

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 pursuing the A.A. may select courses that satisfy both the A.A. degree requirements and lower division requirements for a bachelor's degree at four-year institutions. The elective hours within the A.A. allow students to complete additional general education and lower division courses required for specific majors. The A.A. degree requires completion of 60 credit hours; please see <u>ICCC A.A. degree requirements</u>. To be eligible for graduation from Wichita State University, students transferring from a two-year college must complete at least 60 credit hours of four-year college work and 45 credit hours of upper-division coursework. **Meeting with a JCCC counselor is strongly recommended for selection of appropriate courses**.

WSU Admission Requirements:

If you are a transfer student with 24 credit hours or more, you must:

- Have a minimum 2.00 cumulative GPA (on a 4.00 scale) on all previous college work.
- If you are a transfer student under age 21, with fewer than 24 credit hours, you must:
- Have a minimum 2.00 cumulative GPA (on a 4.00 scale) on all previous college work and meet the freshman requirements.

Some academic colleges at WSU have an additional higher transfer GPA requirement for admission. Visit <u>https://www.wichita.edu/admissions/undergraduate/transfertowsu/index.php</u>

WSU General Education Requirement:

- Students transferring to WSU with an AA, AFA or AS degree from JCCC will be considered to have satisfied WSU's general education curriculum.
- Students who transfer to WSU without completing AA, AFA or AS degree will have courses evaluated on a course-by-course basis toward meeting WSU requirements.
- WSU's General Education guide can be found here: <u>https://www.jccc.edu/student-resources/transfer/files/transfer-guides/wsu-gen-ed-requirements.pdf</u>
- WSU requires Specific General Education Requirements by College, click <u>here</u>. All Engineering majors, except Cybersecurity, are required to take **MATH 242**. Students in the BS in Cybersecurity program are required to take **MATH 123**.

WSU College of Engineering

- To graduate from a WSU Engineering Program, a candidate must attain 2.0 GPA in each of the following categories:
 - All college and university work attempted (cumulative GPA)
 - All work attempted at WSU (WSU GPA)
 - All work in the student's major at WSU including Engineering+ requirements
- Most engineering courses have prerequisites and/or corequisites; the prerequisite course must have been completed before the course requiring it can be taken, and the co-requisite must be completed prior to or taken concurrently with the required course sequence.
- Specific engineering courses for each major will be provided during student advising.

WSU Engineering Majors:

- Aerospace Engineering (AE)
- Applied Engineering Engineering Management (APEN-EM)
- Applied Engineering Process Automation (APEN-PA)
- Applied Engineering Sustainable and Environmental Engineering (APEN-SE)
- Biomedical Engineering (BME)
- Computer Engineering (CE)
- Computer Science (CS)
- Cybersecurity (CB)
- Electrical Engineering (EE)
- Industrial Engineering (IE)
- Mechanical Engineering (ME)
- Product Design & Manufacturing Engineering (PDME)

WSU Transfer Students Should Remember:

- WSU Transfer Policy Credit Acceptance: It is the policy of Wichita State University (WSU) to accept all credits with the exception of remedial coursework earned at a post- secondary institution accredited by one of the U.S. regional accrediting agencies. Each academic college or department within WSU determines how those credits apply toward a particular degree program. Sometimes there can be a significant difference between what transfers and what counts toward a degree, especially if the courses are vocational in nature.
- **Dual Advising:** WSU strongly suggests that potential transfer students involve their WSU advisor in program planning. Sign up for dual advising here: <u>https://www.wichita.edu/dualadvising</u>
- **Graduation Requirements:** To qualify for graduation with a WSU bachelor's degree, transfer students must meet certain requirements such as course credit hours, levels, GPA, and residency. Transfer students should visit the following page to familiarize themselves with all requirements: <u>http://catalog.wichita.edu/undergraduate/academic-information/graduation/</u>

WSU Requirement	Hrs	JCCC Equivalent	Hrs			
Math & Natural Sciences – Required for all College of Engineering majors.						
CHEM 211/2111L General Chemistry I/Lab	4/1	CHEM 124/125 General Chemistry I*/Lab*#(L)	4/1			
(except APEN-PA concentration, CB CE, CS)						
STAT 370 Elementary Statistics	3	MATH 181 Statistics*	3			
(except AE, ME)						
MATH 242 Calculus I (except CB)	5	MATH 241 Calculus I*	5			
MATH 243 Calculus II (except CB)	5	MATH 242 Calculus II*	5			
MATH 344 Calculus III (only AE, EE, ME)	5	MATH 243 Calculus III*	5			
MATH 350 Modeling Differential Equations	3	MATH 254 Differential Equations*	4			
(except APEN, CB, CS, IE)		1				
PHYS 313/315 Physics for Scientists I/Lab	4/1	PHYS 220 Engineering Physics I*(L)	5			
(except CB)						
PHYS 314 Physics for Scientists II/Lab	4/1	PHYS 221 Engineering Physics II*#(L)	5			
(except APEN-SE concentration, CB)						
Aerospace Engineering - AE						
ECON 201 Principles of Macroeconomics	3	ECON 230 Principles of Macroeconomics+^	3			
IME 222 Engineering Graphics	2	ENGR 131 Engineering Graphics I:AutoCAD*	4			
AE 223 Statics	3	ENGR 251 Statics*	3			
AE 373 Dynamics	3	ENGR 254 Dynamics*	3			
PHYS 313/315 Physics for Scientists and	4/1	PHYS 220 Engineering Physics I*+^ (L)	5			
University Physics Lab I						
Applied Engineering – APEN						
ACCT 210 Financial accounting AND	3	ACCT 121 Accounting I AND	3			
3 hours of accounting elective	3	ACCT 122 Accounting II*	3			
		(EM concentration only)				
ECON 201 Principles of Macroeconomics	3	ECON 230 Principles of Macroeconomics+^	3			
IME 222 Engineering Graphics	2	ENGR 131 Engineering Graphics I:AutoCAD*	4			
AE 223 Statics	3	ENGR 251 Statics*	3			
BIOL 370 Introductory Environmental	3	EVRN 130 Environmental Science AND	3			
Science		EVRN 131 Environmental Science Lab*(L)	1			
PHYS 313/315 Physics for Scientists and	4/1	PHYS 220 Engineering Physics I*+^(L)	5			
University Physics Lab I						
Biomedical Engineering - BME						
BIOL 210 General Biology I	4	BIOL 135 Principles of Cell and Molecular	4			
		Biology(L)				
BIOL 223 Human Anatomy and Physiology	8	BIOL 144 Human Anatomy and Physiology*(L)	5			
CHEM 211 General Chemistry I	5	CHEM 124 General Chemistry I Lecture*+^ AND	4			
		CHEM 125 General Chemistry I Lab*+^(L)	1			
CHEM 212/212L General Chemistry II/Lab	4/1	CHEM 131/132 General Chemistry II*/Lab*(L)	4/1			
AE 223 Statics	3	ENGR 251 Statics*	3			

WSU Requirement	Hrs	JCCC Equivalent	Hrs
Computer Engineering - CE			
CS 211 Introduction to Programming	4	CS 200 Concepts of Programming Algorithms	4
		Using C++* AND	
		CS 202 Concepts of Programming Algorithms	
		using Python*	
CS 311 Object-Oriented Programming	4	CS 235 Object-Oriented Programming Using C++*	4
CS 400 Data Structures	4	CS 250 Basic Data Structures Using C++*	4
PHYS 314/316 Physics for Scientists and	4/1	PHYS 221 Engineering Physics II*+^(L)	5
University Physics Lab II			
Computer Science - CS			
CS 211 Introduction to Programming	4	CS 200 Concepts of Programming Algorithms	4
		Using C++* AND	
		CS 202 Concepts of Programming Algorithms	
		using Python*	
CS 311 Object-Oriented Programming	4	CS 235 Object-Oriented Programming Using C++*	4
CS 400 Data Structures	4	CS 250 Basic Data Structures Using C++*	4
PHIL 105 Critical Reasoning	3	PHIL 124 Logic & Critical Thinking	3
PHYS 314/316 Physics for Scientists and	4/1	PHYS 221 Engineering Physics II*+^(L)	5
University Physics Lab II			
Cybersecurity - CB	-		
AC 222 Applied Computing Fundamentals	3	CSS 120 Computer User Support Skills* OR	3
		IT 120 CompTIA A+ Core 2 OR	
		IT 206 Network Security Fundamentals*	
AC 201 Introductory Design Project AND	1	CSS 290 Computer Support Specialist Internship*	2
AC 301 Junior Project	1		
ECON 201 Principles of Macroeconomics	3	ECON 230 Principles of Macroeconomics+^	3
AC 321 Applied Comp & Networks II	3	IT 202 IT Scripting*	3
MATH 123 College Trigonometry	3	MATH 172 Trigonometry*	3
PHIL 105 Critical Reasoning	3	PHIL 124 Logic & Critical Thinking	3
PHYS 213 General College Physics I	5	PHYS 130 College Physics I*+^(L)	5
PSY 111 General Psychology	3	PSYC 130 Introduction to Psychology+^	3
PSY 323 Social Psychology	3	PSYC 220 Social Psychology*	3
Electrical Engineering - EE			
CHEM 211 General Chemistry I	5	CHEM 124 General Chemistry I Lecture*+^ AND	4
		CHEM 125 General Chemistry I Lab*+^(L)	1
CS 211 Introduction to Programming	4	CS 200 Concepts of Programming Algorithms	4
		Using C++* AND	
		CS 202 Concepts of Programming Algorithms	
		using Python*	

WSU Requirement	Hrs	JCCC Equivalent	Hrs		
Industrial Engineering - IE					
CHEM 211 General Chemistry I	5	CHEM 124 General Chemistry I Lecture*+^ AND	4		
		CHEM 125 General Chemistry I Lab*+^(L)	1		
CS 211 Introduction to Programming	4	CS 200 Concepts of Programming Algorithms	4		
		Using C++* AND			
		CS 202 Concepts of Programming Algorithms			
		using Python*			
IME 222 Engineering Graphics	2	ENGR 131 Engineering Graphics I:AutoCAD*	4		
Mechanical Engineering - ME					
CHEM 211 General Chemistry I	5	CHEM 124 General Chemistry I Lecture*+^ AND	4		
		CHEM 125 General Chemistry I Lab*+^(L)	1		
IME 222 Engineering Graphics	2	ENGR 131 Engineering Graphics I:AutoCAD*	4		
AE 223 Statics	3	ENGR 251 Statics*	3		
AE 373 Dynamics	3	ENGR 254 Dynamics*	3		
Product Design & Manufacturing Engineering - PDME					
IME 222 Engineering Graphics	2	ENGR 131 Engineering Graphics I:AutoCAD*	4		
AE 223 Statics	3	ENGR 251 Statics*	3		
PHYS 313/315 Physics for Scientists and	4/1	PHYS 220 Engineering Physics I*+^(L)	5		
University Physics Lab I^					

* JCCC course has a prerequisite or corequisite.

+This course fulfills both General Education and program requirements simultaneously.

#APEN-EM concentration - choose one: CHEM 124 OR PHYS 221.

[^]General Education course approve by KBOR as a requirement for the degree program even if the student has already completed the General Education program.

(L) Course meets JCCC Lab Science requirement and carries the lab attribute for WSU.

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.